

NOTICE TO BIDDERS

Pursuant to Article XV Sections 73-75 of the Delaware Charter, sealed proposals will be received by the City of Delaware, Ohio, City Hall, One South Sandusky Street, Delaware, Ohio 43015, until 10:00am, on October 20, 2015, at the City Manager's Office and opened immediately, for the following:

Contract
Water/ Waste Water Treatment Chemicals

Bid Number –19-15

in accordance with the specifications prepared by and/or for the City of Delaware and on file in the office of the Assistant City Manager.

Information concerning the bids and other Contract Documents may be examined at:

City of Delaware, Ohio
City Manager's Office
City Hall
Delaware, Ohio 43015

Each bid must be accompanied by a Bid Guaranty meeting the requirements 153.54 to 153.57 of the Ohio Revised Code. Bids shall be sealed and addressed to:

City of Delaware, Ohio
City Manager's Office
City Hall
One South Sandusky Street
Delaware, Ohio 43015

Prospective bidders may address inquiries to Jacqueline M. Walker, Assistant City Manager, (740) 203-1025.

No bidder may withdraw his/her bid within sixty (60) days after the actual date of the opening thereof. The City of Delaware reserves the right to reject any or all bids, to waive any informalities and to award the bid or bids to the lowest responsive and responsible bidder as deemed to be in the best interest of the City, as determined by the City Manager.

City of Delaware, Ohio
R. Thomas Homan
City Manager

Advertise on the City of Delaware's website until October 20, 2015.

INSTRUCTIONS AND CONDITIONS
FOR SUBMITTING BIDS

IMPORTANT: All questions regarding this project must be emailed to Jackie Walker (jwalker@delawareohio.net) no later than noon local time on October 16, 2015. Any addenda will be posted to the City's website (www.delawareohio.net) no later than the close of business on October 16, 2015. It is the bidder's sole responsibility to check the website at the appointed day and time for any information regarding this bid.

1. Sealed bids with both bid number and opening date recorded on the outside of the envelope shall be submitted to the City Manager's Office prior to the date and hour of the bid opening. Each bid package shall contain a duplicate in the envelope. If an addendum to the Bid Documents is issued within ninety-six (96) hours of the scheduled bid opening, excluding Saturdays, Sundays and legal holidays, the bid opening date will be extended by one week with no further advertising. Any bid submitted with insufficient postage will be rejected.

A bidder will place the represented company's name and address on the bid envelope. All bids should be submitted to:

City of Delaware, Ohio
City Manager's Office
One South Sandusky Street
Delaware, Ohio 43015

2. The bidder should take care to check each bid carefully. Once the bids are opened, all bid offers are firm. It is a condition of any award, under this notice and any resulting bid, that bidders shall deliver at prices quoted, unless the bid is withdrawn in accordance with the following paragraph.
3. No bid may be withdrawn for a period of sixty (60) days after the date of opening. If not accepted within such a period, a bid may be withdrawn without prejudice anytime thereafter, except, a bidder for a contract with the City of Delaware may withdraw a bid from consideration if the price bid was substantially lower than other bids submitted in good faith and the reason for the price bid was a clerical mistake as opposed to a judgmental mistake and was actually due to an unintentional and arithmetical error or an unintentional omission of a substantial quantity of work, labor or material made directly in compliance of the bid. Notice of a Claim of Right to Withdraw the bid must be filed no later than two business days after the date of opening with the City of Delaware.
4. Upon signing a contract, a bidder must submit a contract bond. If a bidder fails to submit a contract bond, the City has the right to dismiss the award, accept another or re-bid the contract.
5. It is the responsibility of each bidder to examine all Bid Documents. Should any requirement in the Bid Documents appear to a bidder to be in conflict or unclear, a written request for

clarification should be addressed to the Purchasing Agent at the City of Delaware, One S. Sandusky Street, Delaware, Ohio 43015 as soon as discovered, prior to the opening date. The Purchasing Agent shall reply to all such inquiries. Verbal interpretations will not be honored and must not be relied upon. In case of a discrepancy or violation of the Ohio Revised Code or the Delaware City Codified Ordinances, in the Bid Documents, an addendum will be issued to clarify the matter. The Purchasing Agent will forward a copy of same to all individuals holding Bid Documents. It is the responsibility of each individual holding Bid Documents to confirm with the Purchasing Agent that they have received all addenda.

6. The City reserves the right to waive any informalities or irregularities. In accordance with Section 9.312 of the Ohio Revised Code, The City will award the contracts hereunder to the lowest and best bid as determined by the City. The City reserves the right to reject any and all bids and to award the contract hereunder to any remaining bidder.
7. A bidder is required to furnish all information requested in the Bid Documents. Additional sheets may be attached to the original Bid Documents, but they must have the bidder's name and the bid number. Bidders shall give brand names and types offered whenever possible.
8. Manufacturer's names, trade names, brand names or catalog numbers listed in the Bid Documents are used for reference only as a description and to establish acceptable quality levels. Items determined by the City to be of equal or better quality will also be considered. Alternates will only be accepted and considered after the award to primary specifications is made.
9. The City is exempt from taxation. Federal transportation and excise taxes as well as state excise taxes shall not be included in bid prices. Tax exemption certificates will be furnished upon request.
10. Bidders may offer cash discounts for prompt payment of invoices, but their discounts will not be used in determining the final net prices bid. The City may take advantage of such discounts, if offered.
11. Any contract resulting from the Notice To Bidders is binding on the successful bidder ("vendor"). If the vendor fails to meet bid and contract requirements, the entity has the right to cancel the contract and purchase replacement articles or services in the open market. Costs and expenses in excess of the contract price necessitated by such replacement purchases shall be reimbursed to the City. The City has the right to insist on future compliance with the Bid Requirements.
12. Contracts shall be awarded to the lowest most responsive and responsible bid.
13. Any contract resulting from an acceptance of this Notice To Bidders shall require full compliance with Title VI of the Civil Rights Act of 1964 as amended March 1972, Presidential Executive Order, 11246, Governor's Executive Order January 27, 1972, and Section 125.081 and 125.11 Ohio Revised Code.

14. If no bid is submitted, the Notice To Bidders should be marked and returned to the City of Delaware. Include on the bid form or by attachment the reasons for not bidding.
15. Challenges or appeals on a bid award must be directed to the City Manager's Office, City Hall, One South Sandusky Street, Delaware, Ohio 43015.
16. Merchandise shall be delivered Prepaid F.O.B. Destination unless otherwise specified in the Notice To Bidders.
17. All property must be properly protected in transit and delivered promptly for indoor delivery.
18. Invoices should be mailed to the address of the destination of delivery.
19. Along with the bid, each bidder must submit a letter certifying that their organization is covered by Worker's Compensation. Upon award, the successful vendor shall submit proof of such coverage.
20. It is the intent to award the contract to the lowest responsive and responsible bidder meeting or exceeding the requirements specified herein as more fully explained in the Bid Requirements.
21. The vendor shall defend, indemnify and hold harmless the City from any and all liabilities, claims and actions arising from the performance of this contract.
22. The contract and any modifications, amendments or alterations shall be governed, construed and enforced by and under the laws of the State of Ohio.
23. The Bid Documents consist of the Notice To Bidders, the Instructions and Conditions for Submitting Bids, the Bid Requirements, including the General Conditions and the Technical Specifications, the Bid Form, the Noncollusion Affidavit, Delinquent Personal Property Tax Affidavit, Bid Guaranty and Contract Bond and any addenda. The Bid Documents form the agreement between the City of Delaware, the vendor, and each is incorporated by reference into each other and is fully part of the contract as if attached thereto or fully rewritten therein and each shall remain in effect during the life of the contract.
24. The Bid Documents constitute the entire agreement between the City and the vendor and supersede any prior agreements or understandings, written or oral.
25. If any term or provision of the contract between the City and the vendor or the application thereof to any person or circumstance, is finally determined, including any appeals, to be invalid or unenforceable by a court of competent jurisdiction, the remainder of said agreement, or the application of such term or provisions to other persons or circumstances, shall not be affected thereby and each term and provision of the contract between the City and vendor shall be valid and enforced to the fullest extent permitted by law.

26. Time is of the essence to each and every portion of this contract.
27. The awarded bid shall be available to other local governmental entities (i.e. municipalities, townships) wishing to purchase off of the City's bid, during the bid's original period.

FORM OF BID PROPOSAL

- NOTE 1. The wording in this bid shall be retained throughout, without changes, alterations, or additions. Any change in the wording may cause the Bid Proposal to be rejected as not complying with the law.
- NOTE 2. The Form of Bid Proposal shall be accompanied by a BID GUARANTY meeting the requirements of Sections 153.54 to 153.57 of the Ohio Revised Code. Noncompliance with requirements pertaining to the BID GUARANTY will cause a Bid Proposal to be rejected as not complying with the law.
- NOTE 3. The bidder shall take care in preparing the Bid Proposal and be sure to sign the Proposal.

PROPOSAL

SUBMITTED BY: _____
_____ 20 _____

To the City of Delaware, Department of Administrative Services, One South Sandusky Street, Delaware, Ohio 43015. Having read the Specifications entitled:

Water/ Waste Water Treatment Chemicals
City Of Delaware
Delaware, Ohio

and having also received, read and taken into account Addenda Numbers:

and having inspected the site and the conditions affecting and governing the performance of said project, the undersigned hereby proposes to furnish all material and to perform all labor as specified and described in the said Specifications for the following sums:

BID: Bid includes delivery and labor:

Chemical	Price	Estimate
Liquid Chlorine	\$ ___ per ton	33 tons
Sodium Hydroxide	\$ ___ per ton	98 tons
Liquid Ferric Chloride Solution	\$ ___ per gal.	170,000 gallons
Emulsion Polymer	\$ ___ per lb.	30,000 lbs
Sodium Hydroxide (Caustic Soda)	\$ ___ per lb.	50,000 lbs.
Liquid Aluminium Chlorohydrate	\$ ___ per ton	90-120 tons
Liquid Sodium Permanganate	\$ ___ per gallon	1500 gallons
Anti scalant for NF Membrane	\$ ___ per drum	32 drums
Hydrofluosilicic Acid	\$ ___ per tote	6 totes
Carus 8600 Blended Corrosion Inhibitor	\$ ___ per gallon	3500 gallons
Liquid Sodium Hypochlorite	\$ ___ per gallon	11,000 gallons
Liquid Sodium Bisulfite	\$ ___ per ton	30.5 tons
Citric Acid	\$ ___ per ton	1.8 tons

NOTE "A" EXECUTION OF DUTIES

Bids submitted under this Bid Proposal are acknowledged by the City of Delaware to be conditioned that the Vendor not be prevented from executing the duties contained within due to disruptions affecting sources of supply or the normal progress of work. The City of Delaware is not responsible to the Vendor for delays. The City will not be held liable for the Contractor's failure to complete the contract within the time limits. The City has the right to award to more than one contractor, at its discretion. The estimated amounts above are estimates only and not a guarantee of purchase of material.

NOTE "B"-BID GUARANTY

Each bidder must submit with the Form of Bid Proposal one of the following Bid Guaranties meeting the requirements of Sections 153.54 to 153.57 of the Ohio Revised Code.

a) Bidder is cautioned that the Bid Guaranty required by Section 153.54(B) Ohio revised Code is to be submitted on the City of Delaware Form of Bid Guaranty and Contract Bond, and that the Bond is to be signed by both the Surety (Sureties) and the bidder. Name and address of endorsers shall also be typed immediately below the signatures. IF THE AMOUNT IS LEFT BLANK, THE PENAL SUM OF THE BID GUARANTY AND CONTRACT BOND WILL BE THE FULL AMOUNT OF THE PRINCIPAL'S BASE BID PLUS ALTERNATIVES, STATED IN DOLLARS AND CENTS. A PERCENTAGE IS NOT ACCEPTABLE. IN ACCORDANCE WITH SECTION 5729.20 OF THE OHIO REVISED CODE, THE BID GUARANTY AND CONTRACT BOND MUST BE SIGNED BY AN OHIO RESIDENT AGENT IF THE BOND IS ISSUED BY AN OUT-OF-STATE AGENT.

b) In lieu of the Bid Guaranty and Contract Bond required above, the bidder may submit the Bid Guaranty in the form of a Certified Check, Cashier's Check or a Letter of Credit pursuant to Chapter 1305 of the Ohio Revised Code which shall be equal to ten percent(10%) of the total Bid. The Bid Guaranty shall be payable to the City of Delaware.

NOTE "C"-EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION:

The Pre-Bid conditions are predicated on the Governor's Executive Order of January 27, 1972, and Final Order of November 30, 1973, relating to Equal Opportunity in the State of Ohio.

A responsive bidder must sign the certification clause provided on the preprinted bid envelope, adopting the goals and timetables set out in Appendix "A" in the State EEO Bid conditions and the "specific affirmative action steps" set out in Appendix "B" as its affirmative action program for the project. The bidder must sign the EEO certification clause prior to opening the bids.

A bidder must also comply by securing approval of its own affirmative action plan from the State EEO Coordinator prior to the opening of bids. The affirmative action plan must respond to Part IV, Section 401-C of the Governor's Executive Order. If submitting a previously approved affirmative action plan for this project, check box on the pre-printed certification envelope.

Noncompliance with the foregoing requirements will cause the bid to be rejected, as non-responsive with the Final Order and Gubernatorial Executive Order.

If you require further clarification of this matter, it is requested that you contact the Equal Opportunity Coordinator at (614)466-8380.

NOTE"D"-PROFESSIONAL REFERENCES

The bidder will supply the City of Delaware with five specific locations in Central Ohio which have been serviced by the company during the last five years. Include the dates in which the service was performed, and the name and phone number of a contact person:

- a) _____
- b) _____
- c) _____
- d) _____
- e) _____

NOTE"E"-COMPANY INFORMATION

The bidder will supplement the proposal by supplying the following information for use in the preparation of the Contract.

NAMES OF INDIVIDUAL MEMBERS OF THE FIRM: _____

NAME OF COMPANY/CORPORATION: _____

NAME OF PRESIDENT: _____

CORPORATION IS ORGANIZED UNDER THE LAWS OF: _____

CORPORATION ADDRESS: _____

CORPORATION PHONE: _____

FEDERAL TAX I.D. NUMBER: _____

EXECUTION OF PROPOSAL

NOTE: Failure to sign proposal may result in rejection of bid.

THIS PROPOSAL SUBMITTED BY:

(NAME OF CONTRACTOR)
By: _____ DATE: _____

(SIGNATURE OF CONTRACTOR OR
AUTHORIZED REPRESENTATIVE)

BID GUARANTY AND CONTRACT BOND
(Section 153.571 Ohio Revised Code)

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned

(Name and Address)

as Principal and _____

(Name of Surety)

Surety, are hereby held and firmly bound unto the City of Delaware, hereinafter called Obligee, in the penal sum of the dollar amount of the bid submitted by the Principal to the obligee on

_____ to undertake the project known as

_____, the City of Delaware, City Hall, Delaware, Ohio 43015.

The penal sum referred to herein shall be the dollar amount of the Principal's bid to the Obligee, incorporating any additive alternate proposals made by the Principal on the date referred to above to the Obligee which are accepted by the Obligee. In no case shall the penal sum exceed the amount of:

_____ Dollars

\$ _____

(IF THE ABOVE LINE IS LEFT BLANK, THE PENAL SUM WILL BE THE FULL AMOUNT OF THE PRINCIPAL'S BID, INCLUDING ADD ALTERNATES. ALTERNATIVELY, IF COMPLETED, THE AMOUNT STATED MUST NOT BE LESS THAN THE FULL AMOUNT OF THE BID, INCLUDING ADD ALTERNATES, IN DOLLARS AND CENTS. A PERCENTAGE IS NOT ACCEPTABLE) For the payment of the penal sum well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH THAT whereas the above name Principal has submitted a bid on the above reference project;

NOW, THEREFORE, if the Obligee accepts the bid of the Principal and the Principal fails to enter into a proper contract in accordance with the bid, plans, details, specifications and bills of material and in the event the Principal pays to the Obligee the difference not to exceed ten percent of the penalty hereof between the amounts specified in the bid and such larger amount which the Obligee may in good faith contract with the next lowest and best bidder to perform the work covered by the bid or in the event the Obligee does not award the contract with the next lowest and best bidder to perform the work covered by the bid or in the event the Obligee does not award the contract with next lowest and best bidder and resubmits the project for bidding, the Principal will pay the Obligee the difference not to exceed ten percent of the penalty hereof between the amount specified in the bid or the costs, in connection with the resubmission or printing new contract documents, required advertising and printing and mailing notices to prospective bidders, whichever is less, then this obligation shall be void, otherwise to remaining full force and effect; if the Obligee accepts the bid of the Principal within ten days after the awarding of the contract enters into a proper contract in accordance with the bid, plans, details, specifications and bills of material which said contract is made apart of this bond the same as through set forth herein; and

IF THE SAID PRINCIPAL shall well and faithfully perform each and every condition of such contract and indemnify the Obligee against all damage suffered by failure to perform such contract according to the provisions

thereof and in accordance with the plans, details, specifications and bills of material therefore; shall pay all lawful claims for subcontractors, material men and laborers, for work performed and materials furnished in the carrying forward, performing or completing of said contract; we agreeing and assenting that this undertaking shall be for the benefit of any materialmen or laborer having a just claim, as well as for the Obligee herein; then this obligation shall be void ,otherwise the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation herein stated.

THE SAID Surety hereby stipulates and agrees that no modifications, omissions or additions in or to the terms of said contract or in to the plans and specifications therefore shall in anyway affect the obligations of said Surety on this bond and it does hereby waive notice of any such modifications, omissions or additions to the terms of the contract or the plans and specifications.

SIGNED AND SEALED This _____ day of _____,200__

Principal:

By: _____

Title: _____

Surety: _____

Surety Company Address:

By: _____
(ATTORNEY-IN-FACT) (CITY) (STATE) (ZIP CODE)

SURETY AGENT'S ADDRESS

_____ AGENCY NAME

_____ STREET

_____ CITY, STATE, ZIP CODE

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

NOTE: Certification must be filled out and signed. Failure to comply may invalidate your bid.

_____ hereby adopts the goals and timetable
Name of Contractor
set out in Appendix "A" of the state EEO Bid Conditions and the "Specific Affirmative
Action Steps" set out in Appendix "B" as its Affirmative Action Program for this project.

_____ agrees to comply with all applicable
Name of Contractor
requirements of the State EEO Bid Conditions and to incorporate this Certification in all
subcontracts on this project regardless of tier.

_____ Date Signature of Contractor or Authorized Representative

Please indicate if you are submitting your company's own Affirmative Action Plan _____

NONCOLLUSION AFFIDAVIT

The Bidder is required to execute and submit with the Bid, the Noncollusion Affidavit.

State of Ohio

County of Delaware

Bid Name and Number _____

Contractor _____ b
eing first duly sworn, deposes and says that he is _____ (sole owner, a
partner, president, secretary, etc.) of _____

_____, the party making the foregoing Bid; that such Bid is not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization or corporation; that such Bid is genuine and not collusive or sham; that said Bidder has not directly or indirectly colluded, conspired, connived or agreed with any Bidder or anyone else to put in a sham Bid or that anyone shall refrain from bidding; that said Bidder has not in any manner, directly or indirectly, sought by agreement, communication or conference with anyone to fix the Bid price of said Bidder or of any Bidder, or to fix any overhead, profit or cost element of such Bid price, or that of any other Bidder, or to secure any advantage against the City of Delaware awarding the contract or anyone interested in the proposed contract; that all statements contained in such Bid are true; and further, that said Bidder has not, directly or indirectly, submitted the Bid price or any other breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid and will not pay any fee in connection therewith, to any corporation, partnership, company, association, organization, Bid depository, or to any member or agent thereof, or to any individual except to a person or persons as having a partnership or other financial interest with said Bidder in his general business.

Signed:

Subscribed and sworn before me this _____ day of _____ 19 _____

Seal of Notary

NONCOLLUSION AFFIDAVIT

The Bidder is required to execute and submit with the Bid, the Noncollusion Affidavit.

State of Ohio

County of Delaware

Bid Name and Number _____

Contractor _____ being first duly sworn, deposes and says that he is _____ (sole owner, a partner, president, secretary, etc.) of _____

_____, the party making the foregoing Bid; that such Bid is not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization or corporation; that such Bid is genuine and not collusive or sham; that said Bidder has not directly or indirectly colluded, conspired, connived or agreed with any Bidder or anyone else to put in a sham Bid or that anyone shall refrain from bidding; that said Bidder has not in any manner, directly or indirectly, sought by agreement, communication or conference with anyone to fix the Bid price of said Bidder or of any Bidder, or to fix any overhead, profit or cost element of such Bid price, or that of any other Bidder, or to secure any advantage against the City of Delaware awarding the contract or anyone interested in the proposed contract; that all statements contained in such Bid are true; and further, that said Bidder has not, directly or indirectly, submitted the Bid price or any other breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid and will not pay any fee in connection therewith, to any corporation, partnership, company, association, organization, Bid depository, or to any member or agent thereof, or to any individual except to a person or persons as having a partnership or other financial interest with said Bidder in his general business.

Signed:

Subscribed and sworn before me this _____ day of _____ 20____

Seal of Notary

STATE OF OHIO AUDITOR FINDING FOR RECOVERY AFFIDAVIT

State of Ohio

County of Delaware

Bid Name and Number _____

Contractor _____

being first duly sworn, deposes and says that he is _____
of _____, the party making the foregoing Bid, hereby affirms
under oath, pursuant to Section 9.24 of the Ohio Revised Code, that at the time the Bid
was submitted, my company (was) (was not) charged with an auditor finding for recovery
in the State of Ohio.

Signed:

Subscribed and sworn before me this _____ day of _____ 20_____

Seal of Notary

BID REQUIREMENTS
SECTION 1

GENERAL CONDITIONS

1. CONTRACT AWARD: The intention of the Invitation to Bid is to obtain competitive bids for:

Chemical Bid

In accordance with Section 9.312 of the Ohio Revised Code, the City of Delaware reserves the right to evaluate all bids submitted and to accept the lowest and best bid as determined at the discretion of the City of Delaware. Bidders are advised that along with cost, the ability to satisfy the requirements, specifications, and the intent set by the City of Delaware shall be of primary consideration in the award of the contract as will any applicable preferences.

2. BID NUMBER: A Bid Number is assigned to every bid distributed. This Bid Number may be found on the Notice to Bidders.
3. TERMS OF PAYMENT: Invoices shall be rendered in duplicate to the City of Delaware, One South Sandusky Street, Finance Department, Delaware, Ohio 43015.
4. DELIVERY: The Vendor shall furnish and deliver at the Vendor's expense to the City location where instructed.
5. INSURANCE COVERAGE: The Contractor is responsible for maintaining the level and type of insurance coverage in all locations when working under the direction of this contract. **The Contractor shall obtain and maintain during the life of the contract such full insurance coverage wherein the City of Delaware is named as an additional insured,** and shall protect himself, the City of Delaware and any Subcontractor performing work covered by the contract from claims from property damage, product liability and personal injury, including accidental death which may arise from operations be performed by the Contractor or by any Subcontractor or by anyone directly employed by either of those parties. These policies shall contain the following special provisions: "The Company agrees that ten (10) days prior to cancellation or reduction of the insurance afforded by this policy, with respect to the contract involved, written notification shall be mailed to the City of Delaware, Municipal Building, 1 South Sandusky Street, Delaware, Ohio 43015. Certificates of Insurance indicating the availability of the described coverage will be filed with the City of Delaware within five (5) business days from the award of the contract. The amounts of the insurance shall be as follows:
 - a. Public Liability Insurance for bodily injuries, including accidental death, in the amount of not less than \$1,000,000 for each accident or occurrence and \$1,000,000 aggregate, and
 - b. Property Damage Insurance in the amount not less than \$1,000,000 for each accident or occurrence and \$1,000,000 aggregate.

The successful contractor, vendor, etc... must submit their insurance certificate naming the City of Delaware as an additional insured on ISO Form CG 2010 (11/85 edition). All other forms will be rejected.

6. SUBCONTRACTORS: Since the contract is made pursuant to the bid proposal submitted by the Contractor and in reliance upon the Contractor's qualification and responsibility, the Contractor shall not sublet nor shall any Subcontractor commence performance of any part of the work included in this contract without the previous written consent of the City of Delaware. The City of Delaware reserves the right to pre-approve any Subcontractor's qualifications and their reliability to perform the work as intended. Subletting portions of this contract does not relieve the Primary Contractor or its Surety from any of their responsibilities of this contract.
7. QUALIFICATIONS OF BIDDER: The City of Delaware reserves the right to require proof of qualifications from any vendor and to investigate any and all references. The City of Delaware will determine competency of the vendor based on the information collected.
8. PERFORMANCE REQUIREMENTS: The delivery of any material, or the performance of any labor hereunder which does not in all respects adhere to the Specifications will be rejected and the Contractor notified by the City of Delaware. If the Contractor fails to immediately correct the situation, the City of Delaware will purchase the materials or services required in the open market. The Contractor will be responsible for reimbursing the City of Delaware for any incurred excess costs.
9. INCIDENTAL DAMAGES: The Vendor shall be held liable for any incidental damages suffered by the City of Delaware as a result of Vendor's breach including expenses reasonably incurred in the inspection, receipt, transportation, care and custody of goods rightfully rejected, any commercially reasonable charges, expenses or commissions in connection with effecting cover and any reasonable expense incident to the delay or breach.
10. PATENT OR COPYRIGHT INFRINGEMENT: The Vendor shall protect, defend and save harmless the City of Delaware, its members, agents and employees against all suits at law or in equity and from all damages, claims, or demands for actual or alleged infringement of any patent or copyright by reason of the use of the materials supplied by the Vendor.
11. COMPLETENESS OF INFORMATION: The City of Delaware reserves the right to seek or require verification, validation or clarification of any Bidder's data and information presented in any bid.
12. WARRANTY: No payment, no provision in the Bid Documents, and no acceptance by the City of Delaware shall relieve the Vendor of liability for any warranties, expressed or implied.

CITY OF DELAWARE WATER TREATMENT FACILITY AND WASTEWATER TREATMENT FACILITY CHEMICAL SPECIFICATIONS

GENERAL NOTE: All chemicals shall be approved by the Ohio Environmental Protection Agency (OEPA), National Sanitation Foundation (NSF) and be listed on the OEPA Approved Chemical list. **All chemicals proposed to be furnished that are not included on the approved list will be rejected.**

Material Safety Data Sheets (MSDS) shall be provided for each chemical bid. **Failure to provide this document with the bid will cause the bid to be rejected.**

Contract period will be for 12 months beginning at the start of each calendar year.

A typical chemical analysis of the chemical being bid shall be included with each bid. This analysis shall provide the necessary information to enable a comparison of the proposed chemical versus the enclosed specification. **Failure to provide this analysis with the bid will cause the bid to be rejected.**

The supplier will be responsible for any chemical spills and plugged lines that occur during the unloading of the chemical. Any chemical spill must be cleaned up and properly disposed of by the supplier in a satisfactory manner prior to leaving the treatment facility.

The City of Delaware shall not be liable for any injuries or damages that may occur during the chemical unloading process.

All chemicals will be delivered F.O.B. and unloaded at the Delaware Water Treatment Facility, 3080 U.S. Route 23 North, or the Upper Olentangy Water Reclamation Center at 225 Cherry St. Delaware, Ohio 43015. **Delivery days and hours are Monday through Friday, 8:00 A.M. To 5 P.M...**

All invoices shall be submitted to: same address as deliveries.

Bids must contain toll-free telephone numbers for placement of orders. These may be either 800 toll-free numbers or collect call numbers.

The prices bid shall remain firm during the periods of the contract and shall include all labor, equipment, and transportation costs delivered FOB. No fuel surcharges or other transportation costs may be added during the contract period.

Failure to comply with any of the items in the WATER & WASTEWATER TREATMENT CHEMICAL SPECIFICATIONS can result in the termination of the contract.

ITEM 1: LIQUID CHLORINE - 33 tons, more or less – Bid by ton

Bid is for Water Plant Facility only!

The liquid chlorine provided shall:

1. Meet American Water Works (AWWA) Standard B307 most current revision.
2. Be 99.5 percent pure by volume as obtained from vaporized liquid chlorine and suitable for the treatment of potable water.
3. Have all cylinders, fusible plugs and valves reconditioned in accordance with the latest edition of "Container Procedures at Chlorine Packaging Plants" as written by the Chlorine Institute.
4. Be shipped by truck in 2,000 pound (ton) cylinders.

The City of Delaware shall not be charged for cylinder deposits.

All deliveries will be received at the **Water Treatment Facility** on the days specified and during the Water Treatment Facility hours mentioned in the GENERAL NOTE.

The delivery vehicle must be an open vehicle properly equipped to safely unload the chlorine cylinders from the side of the truck using the facility's overhead crane. **Rolling the cylinders to a rear hydraulic tailgate for unloading purposes will not be permitted.**

Payment will be based on the weight slips provided from a certified scale furnished with each load.

The chemical bid should also include all delivery cost and no additional delivery fees will be accepted.

**ITEM #2 - Sodium Hydroxide 25% (Caustic Soda) – 98 DRY TONS - MORE OR LESS. -
BID BY DRY TON**

Bid is for Water Plant Facility only!

The caustic soda shall:

1. Meet AWWA standard #B501 – This standard pertains to sodium hydroxide for use in the treatment of municipal water supplies.
2. The sodium hydroxide supplied shall contain no soluble material or organic substances in quantities capable of producing deleterious or injurious effects on the health of those consuming water that has been treated properly with the sodium hydroxide.
3. The liquid sodium hydroxide shall be shipped in properly cleaned tank trucks and shall not contain any substances that might impair the usefulness of the material in treating raw water for eventual human consumption.
4. Payment will be based on the weight slips provided from a certified scale furnished with each load.
5. The delivery vehicle must be equipped with a pneumatic or pumping system and the necessary hoses to unload the material into the bulk storage vessel located at the water treatment facility.
6. All treatment facility unloading lines must be air purged after the material is unloaded and properly capped.

The chemical bid should also include all delivery cost and no additional delivery fees will be accepted.

The bulk tanks are Type I (XLPE) or Type 2 (HDLPE). There is (2) tanks that have a capacity of 4300 gallons each.

Item #3 – Liquid Ferric Chloride Solution – Approximately 170,000 Gallons, more or less - Bid by \$/lb. of FeCl3 content of the solution to be provided. `

Bid is for Wastewater Treatment Plant only!

The liquid Ferric Chloride (FeCL3) provided shall meet:

1. Technical Specifications:

Concentration: 37% by weight minimum, corresponding to 12.7% by weight ferric iron

Free Hydrochloric Acid: 3-5% by weight maximum

<u>Trace Metals</u>	<u>Max. Conc. (ppm)</u>
Arsenic	1.0
Beryllium	0.04
Mercury	0.05
Selenium	3.0
Cadmium	0.5
Chromium	100.
Lead	3
Nickel	40
Silver	1
Copper	60
Zinc	20

In addition there shall be no detectable amounts of any insecticide, pesticide, polychlorinated biphenyl (PCB), hexachlorobenzene or radionuclides in the delivered ferric chloride solution.

The material shall be free of any foreign element or compounds that may Negatively affect the treatment plant operations or contaminate residuals For use in landfills or land application.

2. Delivery: Evidence that the delivered ferric chloride meets the above specifications must be included with each shipment. Must show weight percent ferric chloride.

The material shall be delivered in a tank truck with a maximum volume of 4,000 gallons and of a suitable condition for the hauling of this material.

The delivery vehicle must be equipped with an unloading system and the necessary hoses to unload the material into the bulk storage vessel located at the Wastewater Treatment Plant.

All treatment facility unloading lines must be air purged after the material is unloaded and properly capped

Payment will be based on weight slips provided from a certified scale furnished with each bulk load showing net weight of the contents

ITEM 4: EMULSION POLYMER – 30,000 lbs. more or less - Bid by lb.

Bid is for Wastewater Treatment Plant only!

The emulsion polymer provided shall:

1. The primary use of the emulsion polymer will be thickening of waste activated sludge and primary sludge.
2. All shipments and billing for this product shall be sent to the Upper Olentangy Water Reclamation Center: 225 Cherry St, Delaware OH 43015. All shipments must be shipped F.O.B. destination.
3. All polymer bids must be on a per pound basis. A minimum order will be 4 / 55 gallon drums or individual totes. The City of Delaware shall not be charged for drum deposits.
4. The polymer bid must be of a good quality, brand name product. Low quality products and "Bid lines" are discouraged on this bid and will consequently be rejected.
5. The quality of the product will be determined by City Plant Personnel from in-plant polymer performance tests and jar tests as described below.
6. Bidders are welcome to perform jar testing at the Upper Olentangy Water Reclamation Center. All performance testing must be performed and results obtained before the bid opening. Arrangements can be made by calling Brad Stanton at 740-203-1901. All expenses incurred for travel and testing will be the bidder's responsibility.
7. The bidder must submit with their bid: product specification sheets including the weight per gallon of the product being bid and the Material Safety Data Sheets.
8. Bids will be accepted for no more than two (2) polymers per bidder. The best bid will be determined by the cost per pound and the in-plant polymer performance tests (test procedures are attached).

IN-PLANT POLYMER PERFORMANCE TEST PROCEDURES

1. All bidders: Welcome to arrange for performance testing before the bid opening date. Scheduling will be on a first come-first served basis. Please call Brad Stanton 740-203-1901 for an appointment.
2. Not more than two (2) polymers may be tested.
3. The in-plant test shall be for a minimum of 20 minutes and a maximum of two (2) hours. Testing will be done on an Ash brook gravity belt thickener & Belt Filter Press.
4. All adjustments to the equipment will be made by plant personal at the direction of the bidder.
5. Samples will be collected by plant personal at the direction of the bidder. A maximum of four (4) samples per polymer may be taken. Samples will be analyzed by plant personal.
6. Parameters to be considered in the polymer performance evaluation are:
 - a. Percent total solids on the input and output.
 - b. Gallons of sludge feed per minute
 - c. Polymer usage per dry ton of cake or thickened sludge
 - d. Belt speed.
 - e. Solids capture (feed/output/wash-water discharge).

ITEM #5 – Sodium Hydroxide 25% (Caustic Soda) – BID BY POUND – Approximately 50,000 lbs. annually

Bid is for Wastewater Treatment Plant only!

The caustic soda shall:

1. Meet AWWA standard #B501-08.
2. The liquid sodium hydroxide shall be shipped in properly cleaned trucks.
3. The delivery vehicle must be equipped with a pumping system and the necessary hoses to unload the material into a bulk storage vessel located at the wastewater treatment facility.
4. All treatment facility unloading lines must be air purged after the material is unloaded and properly capped.

ITEM #6 – Sodium Hypochlorite 13% (Bleach) – BID BY GALLON – Approximately 5000 gallons annually

Bid is for Wastewater Treatment Plant only!

The Bleach shall:

1. Meet AWWA standard B300-92.
2. The liquid sodium hypochlorite shall be shipped in properly cleaned trucks.
3. The delivery vehicle must be equipped with a pumping system and the necessary hoses to unload the material into a bulk vessel located at the wastewater treatment facility.
4. All treatment facility unloading lines must be air purged after the material is unloaded and properly capped.

Item # 7: Liquid Aluminum Chlorohydrate (ACH) – 90 to 120 tons more or less- Bid by the wet ton. Bid is for Water Plant Facility only!

The liquid ACH will be used for coagulation of raw water and the amount used will be based on the raw water quality and thus varies from year to year.

Liquid Aluminum Chlorohydrate (ACH) solutions are clear amber to colorless, and are free of any visible foreign matter or settlement. This liquid aluminum chlorohydrate supplied shall contain no soluble mineral or organic substances in quantities capable of producing delirious effects upon the health of those consuming the water or otherwise render the water unfit for the public use when it is treated properly with the aluminum chlorohydrate (ACH).

The liquid Aluminum Chlorohydrate (ACH) shall meet the following guidelines:

The entire amount of approximately 40 to 50 tons of ACH shall meet the latest standards of the National Standards Institute / National Sanitation Foundation (ANSI/NSF) Standard 60, and meet the American Water Works Association (AWWA) Standard # AWWA – B-408-10 except as specified herein.

23.5 % strength as Al_2O_3 (active material 4.59 moles/kg).

Specific Gravity of no less than 1.3.

pH not to exceed 6.0 nor be less than 2.0.

Shipping Information:

Shipments shall be made by a bulk carrier in quantities of three (3) to four (4) thousand gallons but no more than four (4) thousand gallons in a delivery.

The bulk tanks are Type 1 (XLPE) or Type 2 (HDLPE). There is (2) tanks that have a capacity of 4000 gallons each.

The product shipping weight should be verified by certified scales and noted on delivery ticket.

The tank trucks must be suitable for the hauling of this material and shall not contain any substances that may impair the usefulness of the material in treating of the raw water for eventual human consumption. Delivery hours are 8am to 5pm Monday thru Friday (holidays excluded), or possible emergency delivery of the product.

All treatment facility unloading lines must be air purged after the material is unloaded

and properly capped.

The City of Delaware is not responsible for surcharges, such as fuel price increases.

The delivery vehicle must be equipped with the necessary; hoses, fittings, or air pump to delivery product into approved treatment facility storage tanks.

The chemical bid should also include all delivery cost and no additional delivery fees will be accepted.

Jar Testing Prior to the award of the Bid

Prior to the award of the bid, the successful bidder shall be required to perform a series of jar tests at the City of Delaware Water Treatment Facility demonstrating the product performs as expected on the City of Delaware's raw water in the presence of the Plant Superintendent and / or his representative to demonstrate the performance of the said product.

The supplier may also be asked to furnish the City of Delaware with at least two (2) ounces of the product being used for independent jar tests for water quality verification.

Information Needed Prior to Awarding the Bid

The successful bidder shall furnish a complete chemical analysis of the ACH along with the product data sheet, MSDS sheet and a list of water plants that use the supplier's ACH along with their current contact name and phone number.

Item # 8: Liquid Sodium Permanganate – 1500 Gallons- More or less. This is bid by the gallon. Bid is for Water Plant Facility only!

The liquid sodium permanganate will be used seasonally to help control taste and odors and is a dark purple liquid.

The liquid sodium permanganate supplied shall contain no soluble mineral or organic substances in quantities capable of producing delirious effects upon the health of those consuming the water or otherwise render the water unfit for the public use when it is treated properly with the liquid sodium permanganate.

The liquid sodium permanganate shall meet the following guidelines:

The entire amount of liquid sodium permanganate shall meet the latest standards of the National Standards Institute / National Sanitation Foundation (ANSI/NSF) Standard 60 and shall conform to the AWWA standard B603, Standards for Permanganates, of the latest version.

Strength: 20%, 0.001% stability. Specific Gravity 1.37. Insolubles: 0.005% pH: 5.0 to 8.0.

Should be manufactured in the USA

Shipping Information:

Shipment shall be made by a bulk carrier. We plan on only having (1) delivery for the season, but this would be dictated/ or dependent by the overall surface water quality for the need to control taste or odors in the warmer months of the year.

The bulk tank is Type I (XLPE) or Type 2 (HDLPE) and has a capacity of 2000 gallons.

The tank truck must be suitable for the hauling of this material and shall not contain any substances that may impair the usefulness of the material in treating of the water with this liquid sodium permanganate for eventual human consumption.

Delivery hours are 8am to 5pm Monday thru Friday (holidays excluded).

All treatment facility unloading lines must be air purged after the material is unloaded and properly capped. The City of Delaware is not responsible for surcharges, such as fuel price increases. The chemical bid should also include all delivery cost and no additional delivery fees will be accepted. The delivery vehicle must be equipped with the necessary; hoses, fittings, or air pump for delivery of product into approved treatment facility storage tanks.

Item # 9: Antiscalant for NF Membrane treatment skids- 32 (55 gal drums) more or less- This is bid by the Gallon. Bid is for Water Plant Facility only!

The antiscalant will be used to prevent the formation and growth of alkaline earth carbonate and sulfate scales, disperse suspended solids and colloids, and stabilize metallic ions on the NF membrane treatment skids.

Antiscalant shall eliminate acid feed for scale control by inhibiting the precipitation of calcium carbonate up to an LSI of + 2.5 and calcium sulfate up to 1.8 times super saturation.

The entire amount of approximately (32) 55 gal drums shall meet the latest standards of the National Standards Institute / National Sanitation Foundation (ANSI/NSF) Standard 60.

The entire amount of approximately (32) 55 gal drums must be free of visible suspended matter and shall contain no mineral or organic substances in quantities capable of producing delirious or injurious effects on the health of those consuming the water that has been treated with the antiscalant.

PROFESSIONAL WATER TECHNOLOGIES – Spectraguard- ONLY

Shipping Information:

Antiscalant should be delivered in 55 gallon plastic drums in lots of 2 to 6 drums on notice of the needs of City of Delaware.

Drums must be delivered on a delivery truck equipped with a hydraulic tailgate.

The truck must also have a drum cart. The carrier will need to use this drum cart to take the antiscalant to the proper holding area.

Delivery hours are 8am to 5pm Monday thru Friday (holidays excluded), or possible emergency delivery of the product.

The City of Delaware is not responsible for surcharges, such as fuel price increases. The chemical bid should also include all delivery cost and no additional delivery fees will be accepted.

The City of Delaware is also not to be charged for drum deposits.

Item # 10: HYDROFLUOSILICIC ACID 25% 6 -12 (339 gal TOTES) more or less- bid by the price of the tote.

Bid is for Water Plant Facility only!

The hydrofluosilicic acid shall:

1. Meet American Water Works Standard B 703 most recent revisions
2. The entire amount of approximately (6) 339 gal totes shall meet the latest standards of the National Standards Institute / National Sanitation Foundation (ANSI/NSF) Standard 60.
3. The entire amount of approximately (6) 339 gal totes must be clean and free of visible suspended matter and shall contain no mineral or organic substances in quantities capable of producing delirious or injurious effects on the health of those consuming the water that has been treated with the hydroflousilicic acid.
4. The supplier shall transfer the entire amount of product held in theses (6) 339 gallon totes to the (2) 500 gallon bulk storage tanks located in the basement of the Membrane Treatment building.
5. The supplier is responsible for clean-up of any leakage or spills resulting from the delivery / transfer of this product to bulk storage tanks.
6. The City of Delaware is not responsible for surcharges, such as fuel price increases, or deposits.
7. Strength 25%, +/- 1%.
8. Specific Gravity:1.234 @ 25%
9. Solubility in Water: Complete.
10. pH (1% solution): 1.2
11. The supplier must be able to furnish a certified test report of the quality of the material of each shipment.

The bulk tanks are Type I (XLPE) or Type 2 (HDLPE).

The chemical bid should also include all delivery cost and no additional delivery fees will be accepted.

Item # 11 : Carus 8600 Blended Corrosion Inhibitor – 3500 Gallons per year more or less. This is Bid by the pound. Bid is for Water Plant Facility only!

The Carus 8600 blended Ortho/ Poly phosphate will be used for control of corrosion and is a clear liquid.

The Carus 8600 blended Ortho/ Poly phosphate supplied shall contain no soluble mineral or organic substances in quantities capable of producing delirious effects upon the health of those consuming the water or otherwise render the water unfit for the public use when it is treated properly with the blended phosphate.

The Carus 8600 liquid blended phosphate shall meet the following guidelines:

The entire amount of Carus 8600 shall meet the latest standards of the National Standards Institute / National Sanitation Foundation (ANSI/NSF) Standard 60.

Weight= 11.4 lbs. / gallon, Specific Gravity 1.37.

Total Active= 33%

Ortho Active= 23.1%

1% solution pH 5.8.

Manufacturer: **Carus**

Shipping Information:

Shipment shall be made by a bulk carrier in shipment of approximately 1500 gallons of product at a time. The tank has a capacity of 2000 gallons.

The tank truck must be suitable for the hauling of this material and shall not contain any substances that may impair the usefulness of the material in treating of the water with this liquid blended phosphate solution for eventual human consumption.

Delivery hours are 8am to 5pm Monday thru Friday (holidays excluded).

All treatment facility unloading lines must be air purged after the material is unloaded and properly capped. The City of Delaware is not responsible for surcharges, such as fuel price increases. The chemical bid should also include all delivery cost and no additional delivery fees will be accepted.

The delivery vehicle must be equipped with the necessary; hoses, fittings, or air pump for delivery of product into approved treatment facility storage tanks.

Item # 12: Liquid Sodium Hypochlorite (12.5% Strength) – 11,000 Gallons- More or less. This is bid by the gallon. Bid is for Water Plant Facility only!

The liquid sodium hypochlorite will be used for cleaning the UF membrane filtration filters elements.

The bulk tank is Type 2(HDLPE) or Type III (HDXLPEMDPE).

The liquid sodium hypochlorite supplied shall contain no soluble mineral or organic substances in quantities capable of producing delirious effects upon the health of those consuming the water or otherwise render the water unfit for the public use when it is treated properly with the liquid sodium hypochlorite.

The liquid sodium hypochlorite shall meet the following guidelines and properties below:

The entire amount of liquid sodium hypochlorite shall meet the latest standards of the National Standards Institute / National Sanitation Foundation (ANSI/NSF) Standard 60 and shall conform to the AWWA standard B300.

Properties:

NaOCL - % weight 12.5 minimum	Bromate mg/l Less than 20
NaOH – less than 12 gm/liter	Fe, mg/l Less than 0.5
Available Cl ₂ , % weight – 12.0 minimum	Chlorate mg/l Less than 2000
Available Cl ₂ , % volume – 15.0 minimum	Cu, mg/l Less than 0.5
Available Cl ₂ , grams /liter 150 minimum	Ni, mg/l Less than 0.5
Specific Gravity - 1.223 (approx.)	Zn, mg/l 0.15 maximum
Density, 20degreesC lb. /gal - 10.2 (approx.)	
pH: 11.2 to 11.4.	

Shipping Information:

Shipment shall be made by a bulk carrier or totes. The shipment amount will be approximately 1000 gallons at a time that will fill the 2,500 gallon tank.

The tank truck must be suitable for the hauling of this material and shall not contain any substances that may impair the usefulness of the material in treating of the water with this product for eventual human consumption.

Hours for delivery 8am to 5pm Monday thru Friday (holidays excluded).

All treatment facility unloading lines must be air purged after the material is unloaded and properly capped. The City of Delaware is not responsible for surcharges, such as fuel price increases. The delivery vehicle must be equipped with the necessary; hoses, fittings, or air pump for delivery of the product into the approved treatment facility storage tanks.

The chemical bid should also include all delivery cost and no additional delivery fees will be accepted.

**Item # 13: Liquid Sodium Bisulfite (38% Strength) – 30.5 Wet Tons - More or less.
This is bid by the pound. Bid is for Water Plant Facility only!**

The liquid sodium bisulfite will be used for de-chlorinating water prior to the water entering the NF membrane filtration skids.

The liquid sodium bisulfite supplied shall contain no soluble mineral or organic substances in quantities capable of producing delirious effects upon the health of those consuming the water or otherwise render the water unfit for the public use when it is treated properly with the liquid sodium bisulfite.

The liquid sodium bisulfite shall meet the following guidelines:

The entire amount of liquid sodium bisulfite shall meet the latest standards of the National Standards Institute / National Sanitation Foundation (ANSI/NSF) Standard 60. .

Concentration: 38% - 42%

Specific Gravity 1.32

Density: 10.93 – 11.43

Sodium Sulfate: <3.5%.

pH: 3.6 to 4.6

Iron: <15 ppm.

Shipping Information:

Shipment shall be made by a bulk carrier in shipments of **2500 to 3000** gallons or less.

The bulk tanks are Type I (XLPE) or Type 2 (HDLPE). We have (2) 2000 gallon tanks for a capacity of 4000 gallons total.

The tank truck must be suitable for the hauling of this material and shall not contain any substances that may impair the usefulness of the material in treating of the water with this product for eventual human consumption.

Hours for delivery 8am to 5pm Monday thru Friday (holidays excluded).

All treatment facility unloading lines must be air purged after the material is unloaded and properly capped. The City of Delaware is not responsible for surcharges, such as fuel price increases. The chemical bid should also include all delivery cost and no additional delivery fees will be accepted.

The delivery vehicle must be equipped with the necessary; hoses, fittings, or air pump for delivery of the product into the approved treatment facility storage tanks.

Item # 14 Citric Acid (50 % Strength) – 1.8 Wet Tons - More or less. This is bid by the pound. Bid is for Water Plant Facility only!

The liquid citric acid will be used for daily CIP cleans for the UF membrane filtration skids.

The liquid citric acid supplied shall contain no soluble mineral or organic substances in quantities capable of producing delirious effects upon the health of those consuming the water or otherwise render the water unfit for the public use when it is treated properly with the liquid citric acid.

The liquid citric acid shall meet the following guidelines:

The entire amount of liquid citric acid shall meet the latest standards of the National Standards Institute / National Sanitation Foundation (ANSI/NSF) Standard 60.

Must be approved by Toray Membranes and H2O Innovation

Strength: 50%, +/- 1%.

Specific Gravity 1.24

Molecular Weight: 192.13

Solubility in Water: Complete.

pH: 2.5

Shipping Information:

Shipment shall be made by a bulk carrier.

The bulk tanks are Type I (XLPE) or Type 2 (HDLPE). We have (1) tank with a capacity of 2500 gallons.

The tank truck must be suitable for the hauling of this material and shall not contain any substances that may impair the usefulness of the material in treating of the water with this product for eventual human consumption.

Hours for delivery 8am to 5pm Monday thru Friday (holidays excluded).

All treatment facility unloading lines must be air purged after the material is unloaded and properly capped. The City of Delaware is not responsible for surcharges, such as fuel price increases. The chemical bid should also include all delivery cost and no additional delivery fees will be accepted.

The delivery vehicle must be equipped with the necessary; hoses, fittings, or air pump for delivery of the product into the approved treatment facility storage tanks.