



Working Together for a
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SPECIFICATION PACKAGE

for

PURCHASE OF LIQUID ORTHO- POLYPHOSPHATE FOR CORROSION CONTROL

Bid Opening Date/Time

Tuesday, July 24, 2012 @ 2:00 p.m. local time
City of Grand Island, City Hall
100 East 1st Street, P.O. Box 1968
Grand Island, NE 68802-1968

Contact

City of Grand Island – Utilities Department
Platte Generating Station
308/385-5495

Date issued: July 9, 2012

**ADVERTISEMENT TO BIDDERS
FOR
PURCHASE OF LIQUID ORTHO-POLYPHOSPHATE FOR CORROSION CONTROL
FOR
CITY OF GRAND ISLAND, NEBRASKA**

Sealed bids will be received at the office of the City Clerk, P.O. Box 1968, Grand Island, Nebraska 68802, until Tuesday, July 24, 2012 at 2:00 p.m. local time for PURCHASE OF LIQUID ORTHO-POLYPHOSPHATE FOR CORROSION CONTROL, FOB in the City of Grand Island solution storage tank, freight prepaid. Bids will be publicly opened at this time in the Grand Island City Hall Council Conference Room #1 located on 1st floor of City Hall. Submit an original and three copies. Bid proposal package is also available on-line at www.grand-island.com under Business-Bid Calendar. Bids received after the specified time will be returned unopened to sender.

Specifications are on file at Platte Generating Station, 308-385-5495. Bids shall be submitted on forms included in the bid package, which will be furnished by the City.

The successful bidder will be required to comply with fair labor standards as required by Nebraska R.R.S.73-102 and comply with Nebraska R.R.S. 48-657 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. Successful bidder shall maintain a drug free workplace policy.

Each bidder shall submit with the bid a certified check, a cashiers check, or bid bond payable to the City Treasurer in an amount no less than five percent (5%) of the Total Estimated Project Cost which shall guarantee good faith on the part of the bidder and the entering into a contract within fourteen (14) days at the Unit Price Bid if accepted by the City. **Your certified check, cashier's check or bid bond must be submitted in a separate envelope attached to the outside of the envelope containing the bid. Each envelope must be clearly marked indicating its contents. Failure to submit the necessary qualifying information in clearly marked and separate envelopes will result in your bid not being opened or considered.** Surety companies authorized to do business in the State of Nebraska must issue bid bonds.

Bids will be evaluated by the City on the basis of the Unit Cost of Treatment provided by the Bidder on the Bid Form, technical compliance with specifications and solution performance requirements, input from references provided by the Bidder, and documented performance of the proposed solution in similar applications.

The City reserves the right to reject any or all bids, to waive irregularities therein, and to accept whichever bid is in the best interest of the City from both price and technical perspectives.

No bidder may withdraw his bid for a period of thirty (30) days after date of bid opening.

RaNae Edwards, City Clerk

**Advertised
Grand Island Independent**

**PURCHASE OF LIQUID ORTHO-POLYPHOSPHATE FOR CORROSION CONTROL
2012 - BID FORM**

Proposed Dosage

Dosage of Dry Active Ingredients: 2 mg of Dry Active Ingredients/L of Solution (based on available water quality data)

Solution Injection Rate: 4 gallons of solution/million gallons of raw water (Attach calculations if dosage rate differs for specified product and note exception with explanation on a separate sheet)

Bid Price

Unit Price Bid: \$_____ per gallon of solution delivered to and placed into the existing City of Grand Island solution tank, including sales tax of 7%. No adjustment will be made in the "Unit Price Bid" if the actual quantity ordered varies from the estimated quantity needed.

Unit Cost of Treatment: \$_____ per million gallons of raw water ("4" times "Unit Price Bid")

Total Estimated Project Cost \$_____ ("Unit Cost of Treatment" times 4,500)

Bidder's Certification

The undersigned bidder hereby certifies that the Solution quoted above will control corrosion to reduce and maintain copper and lead concentrations at or below regulatory action levels, and will sequester manganese to eliminate discoloration of the water due to manganese, based on all available raw water quality data. If higher Solution Injection Rates are required to comply with regulatory requirements, the Bidder agrees to provide additional solution at no cost to the City of Grand Island, unless a higher solution injection rate is required as a result of changes in raw water quality.

(Date)

Bidder Company Name

_____ City State Zip Code
Company Address

(Signature)

_____ Telephone Number Fax Number

NOTE: Any exceptions to specifications must be fully explained on a separate sheet attached to bid.

CHECKLIST FOR BID SUBMISSION

FOR

PURCHASE OF LIQUID ORTHO-POLYPHOSPHATE FOR CORROSION CONTROL

Bids must be received by the City Clerk before 2:00 p.m. on Tuesday, July 24, 2012.

The following items must be completed for your bid to be considered.

- A signed original and three copies of the bidding documents.
- A reference list of at least three projects of similar scope and complexity. These references shall consist of customers who currently are using, or recently have used, the solution as named on the Bid Form that is being proposed by Bidder on a continuous basis for a minimum of 3 years.
- A summary of the experience of the service supervisor proposed for this project.
- Firm unit pricing in case adjustments are necessary, and breakout of sales tax pricing.
- A detailed description of the solution proposed.
- Acknowledgment of Addenda Number(s) _____.
- Bidders must complete and sign the Bid Data Form provided in these Documents. All blank spaces must be filled in. Bidders shall acknowledge receipt of any Addenda information on the Bid Data Form.
- A certified check, cashiers check or bid bond in a separate envelope attached to the **outside of the envelope containing the bid**. Each envelope must be clearly marked indicating its contents. Failure to submit the necessary qualifying information in clearly marked and separate envelopes will result in your bid not being opened.

Please check off each item as completed.

Company

Signature

Telephone No. _____

Fax No. _____

INSTRUCTIONS TO BIDDERS

1. GENERAL INFORMATION.

The following instructions outline the procedure for preparing and submitting Bids. Bidders must fulfill all requirements as specified in these Documents.

2. TYPE OF BID.

Bidders shall be required to submit prices for all items listed in the Bid Data Form.

3. PREPARATION OF BIDS.

Bidders shall use only the Bid Data Form provided in these Documents. All blank spaces in the Bid Data Form, must be filled in, preferably in BLACK ink, in both words and figures where required. No changes shall be made in the phraseology of the forms. Written amounts shall govern in case of discrepancy between the amounts stated in writing and the amounts stated in figures.

Prices stated shall be f.o.b. with freight and full insurance paid by Bidder, to the job site located in Grand Island.

The Bidder shall acknowledge receipt of all addenda in the Bid Data Form. Bids received without acknowledgement or without the Addendum enclosed will be considered informal.

4. SUBMISSION OF BIDS.

All Bids must be submitted intact not later than the time prescribed, at the place, and in the manner set forth in the ADVERTISEMENT FOR BIDS. Bids must be made on the Bid Data Form provided here in. Each Bid must be submitted intact in a sealed envelope, so marked as to indicate its contents without being opened, and delivered in person or addressed and mailed in conformance with the instructions in the ADVERTISEMENT FOR BIDS.

5. BID SECURITY.

Bids must be accompanied by cash, a certified check, or cashier's check drawn on a bank which is insured by the Federal Deposit Insurance Corporation, or a bid bond issued by a Surety authorized to issue such bonds in the state where the Work is located, in the amount of 5 percent of the bid amount payable to OWNER. This bid security shall be given as a guarantee that the Bidder will not withdraw his Bid for a period of 30 days after bid opening.

The Attorney-in-Fact that executes this bond in behalf of the Surety must attach a notarized copy of his power of attorney as evidence of his authority to bind the Surety on the date of execution of the bond. Where State Statute requires, certification by a resident agent shall also be provided.

6. RETURN OF BID SECURITY.

Within 15 days after the award, the OWNER will return the bid securities to all Bidders whose Bids are not to be further considered in awarding the contract. All other retained bid securities will be held until the Contract has been finally executed, after which all bid securities, other than Bidders' bonds

and guarantees which have been fortified, will be returned to the respective Bidders whose Bids they accompanied.

7. BASIS OF AWARD

The award will be made by the OWNER on the basis of the Bid from the lowest responsive, responsible Bidder which, in the OWNER's sole and absolute judgment will best serve the interest of the OWNER. All Bids will be considered on the following basis:

Conformance with the terms of the Bid Documents.

Bid price per gallon.

Suitability to project requirements.

Delivery cost and time.

Responsibility and qualification of Bidder.

The OWNER reserves the right to reject all Bids, or any Bid not in conformance with the intent of the Bid Documents, and to waive any informalities and irregularities in said Bids.

8. TIME OF COMPLETION.

The time of completion of the Work to be performed under this Contract is the essence of the Contract. The time allowed for the completion of the Work is stated in the Bid Data Form.

9. GRATUITIES AND KICKBACKS

City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefor. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

10. FISCAL YEAR

The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

REQUEST FOR BIDS - GENERAL SPECIFICATIONS

The Bid shall be in accordance with the following and with the all attached BID DATA and DETAILED SPECIFICATIONS.

All prices are to be furnished and installed FOB, Grand Island, Nebraska. **All prices shall be firm, and shall include all sales and use taxes as lawfully assessed under laws and regulations of the State of Nebraska.** * If bidder fails to include sales tax in their bid price or takes exception to including sales tax in their bid price, the City will add a 7.0% figure to the bid price for evaluation purposes; however, the City will only pay actual sales tax due.

Bids shall include the following on the **outside** of the mailing envelope: **"PURCHASE OF LIQUID ORTHO-POLYPHOSPHATE FOR CORROSION CONTROL"**. All sealed bids are due no later than **Tuesday, July 24, 2012, at 2:00 p.m. local time**. Submit **an original and three copies** of the bid to:

Mailing Address:	City Clerk City Hall P. O. Box 1968 Grand Island, NE 68802	Street Address:	City Clerk City Hall 100 E. First Street Grand Island, NE 68801
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Bids will be opened at this time in the City Hall Council Conference Room #1 located on 1st floor of City Hall. Any bid received after the specified date will not be considered. No verbal bid will be considered.

Bids will be evaluated by the City on the basis of the Unit Cost of Treatment provided by the Bidder on the Bid Form, technical compliance with specifications and solution performance requirements, input from references provided by the Bidder, and documented performance of the proposed solution in similar applications.

The City reserves the right to reject any or all bids, to waive irregularities therein, and to accept whichever bid is in the best interest of the City from both price and technical perspectives.

The successful bidder will be required to comply with fair labor standards as required by Nebraska R.R.S.73-102 and comply with Nebraska R.R.S. 48-657 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. Contractor shall maintain a drug free workplace policy.

All solution delivered must be new. Prior to approving the invoice for payment, the City reserves the right to thoroughly inspect and test the solution to confirm compliance with specifications. Any material which does not meet the City's requirements will be returned at vendor's expense for correction. The invoice will be paid after approval at the next regularly scheduled Council meeting and occurring after departmental approval of invoice; the City Council typically meets the second and fourth Tuesday of each month. Invoices must be received well in advance of Council date to allow evaluation and processing time.

Each bidder shall submit with the bid a certified check, a cashiers check, or bid bond payable to the City Treasurer in an amount no less than five percent (5%) of the bid price which shall guarantee good faith on the part of the bidder and the entering into a contract within fourteen (14) days at the Unit Price Bid if accepted by the City. Certified checks, cashiers checks, and bid bonds will be returned to bidders after a contract is signed with the successful bidders. **Your certified check, cashier's check or bid bond must be submitted in a separate envelope attached to the outside of the envelope containing the bid. Each envelope must be clearly marked indicating its contents. Failure to submit the necessary qualifying information in clearly marked and separate envelopes will result in your bid not being opened or considered.** Bid bonds must be issued by surety companies authorized to do business in the State of Nebraska.

All bids shall be valid for at least thirty (30) working days after the bid deadline for evaluation purposes.

All bids must be on the bid form and must be signed and dated to be accepted. Please contact Emily Muth at 308-385-5495, for questions concerning this specification.

DETAILED SPECIFICATIONS

BACKGROUND. The City of Grand Island (City), Nebraska began a corrosion control study for the City's water supply and distribution system in 1994. The project was placed on hold in 1995 by the City while the Nebraska Health and Human Services Department (NHHS) evaluated implementation of the Lead and Copper Rule (LCR) in the State of Nebraska. The City was issued an Administrative Order on March 24, 1998, requiring compliance with the LCR, including the preparation of a Corrosion Control Study. The following implementation schedule has been imposed by NHHS for LCR compliance:

- Submit recommended Optimum Corrosion Control Treatment (OCCT) to the Nebraska Health and Human Services (NHHS) by January 1, 2002
- NHHS will designate the OCCT by June 2002
- Equipment installation for the OCCT by April 2003

The recommended OCCT was submitted to NHHS in December 2001 in a report titled *City of Grand Island Corrosion Control Study* (CH2MHILL, December 2001), hereafter referenced as the *Corrosion Control Study*. The recommended OCCT is to inject a liquid ortho-polyphosphate solution (hereafter referred to as "solution") into the water distribution system. As discussed in the *Corrosion Control Study*, the solution shall be designed to sequester manganese and to minimize pipeline corrosion, thereby reducing concentrations of lead and copper in the drinking water. In a letter to the City dated April 12, 2002, NHHS concurred with the recommended OCCT subject to final approval after submittal and review of final design documents. Specifically, the solution shall ensure that concentrations of lead and copper in the drinking water are below regulatory action levels and maintain a phosphate residual of 1 mg/l as PO₄. The action level for copper is 1.3 mg/l and the action level for lead is 0.015 mg/l.

The City obtains their drinking water from 21 water supply wells on an island in the Platte River south of the City. Water from these wells is pumped into a common underground collection basin. Water in the collection basin then is pumped into the various distribution reservoirs (water storage tanks) via two separate discharge mains using pumps in the wellfield pump station. Water quality data were obtained from the 21 water supply wells that were in operation in 2007. The average combined water quality data from all 21 wells are as follows:

pH	7.70
Temperature (°C)	12.45
Hardness	287.4 mg/l (assumed to be Total Hardness as CaCO ₃)
Calcium	228.6 mg/l
Conductivity	856.1 mmhos

Alkalinity	197.2 mg/l
Sulfate	215.7 mg/l
Chloride	31.4 mg/l
Manganese	0.03 mg/l
Copper	0.01 mg/l
Iron	0.05 mg/l
Nitrate	0.64 mg/l
Fluoride	0.63 mg/l
Silica	14.49 mg/l

Between July 1992 and July 2000, the City conducted a lead and copper drinking water quality sampling and analysis program at 92 residences. The action level for lead was exceeded four times in these water quality samples. However, concentrations of copper exceeded the copper action level in over 10 per cent of the samples.

Additional detailed water quality data will be provided to prospective Bidders upon receipt of a written request.

SCOPE OF WORK. The Contractor shall provide a liquid ortho-polyphosphate solution (solution) in accordance with all specifications and requirements defined herein and in all other purchase order documents. A single solution shall be provided that will control lead and copper concentrations, and eliminate discoloration due to manganese, in the City drinking water supply and remove existing scales and tubercles from inside the existing distribution system piping.

Delivery shall be made to the City wellfield pump station and include pumping the solution into the existing City solution storage tank. Deliveries shall be in 4,000-gallon truck loads within ten (10) calendar days after receipt by the Bidder of an order from the City via facsimile or e-mail to be followed by an original signed hardcopy order. Bidder shall submit a certification with each truck load that the solution delivered complies with all requirements of these specification and solution characteristics listed on the Bid Form by the Bidder.

The Contractor shall have a representative on-site during startup to ensure that the injection system is properly calibrated and to train facility operators in proper use and monitoring of solution injection. The Contractor also shall visit the site at least four (4) times after startup when requested by the City.

The Contractor shall provide all required solution for a period of **one year** beginning **August 1, 2012**. It is estimated that approximately 4,500,000,000 (4.5 billion) gallons of raw water will need to be treated per year. This estimated annual quantity may be expected to vary by approximately plus or minus 25 percent.

The actual quantity of solution required and purchased will be based solely on the actual quantity of water treated during the contract period.

Solution Specifications

Bidder shall provide a liquid ortho-polyphosphate solution with the following characteristics:

1. The corrosion control film provided by the solution shall be a monomolecular non-building coating. Solution shall be an effective corrosion control agent such that lead and copper concentrations in the distribution system will be maintained below regulatory action levels and manganese shall be sequestered so as to eliminate discoloration of water caused by manganese. The solution also shall remove existing scale and tubercles.
2. Corrosion control shall **NOT** be provided by the mechanism of calcium or metallic phosphate formation.
3. Solution shall have 20 mg/l of free chlorine when loaded into the truck. Bidder shall provide test results and certification for each load to demonstrate compliance with this requirement.
4. The solution shall be "food safe" and shall be approved by the National Sanitation Foundation (NSF).
5. Solution shall not require pH adjustment of the raw water to provide effective corrosion control. Solution shall provide effective corrosion control for raw water with pH from 5.0 to 11.0.
6. The proposed solution shall comply with the following specifications:

- Poly/Ortho Ratio 7:3
- Minimum pounds per gallon 11.4
- Able to dilute with water Infinite/no separation
- Freeze/Thaw Shall be stable after 3 freeze/thaw cycles
- Stability of Liquid Product 32 to 375 degrees F (0 to 190 Degrees C)
- Scale/corrosion removal in use Complete

- Contaminant Metal Limits:

Antimony	< 1 mg/L	Lead	< 0.03 mg/L
Arsenic	< 1 mg/L	Mercury	< 1 mg/L
Beryllium	< 1 mg/L	Potassium	< 10 mg/L
Cadmium	< 1 mg/L	Selenium	< 1 mg/L
Chlorides	< 10 mg/L	Silicates	< 10 mg/L
Chromium	< 1 mg/L	Sulfates	< 10 mg/L
Copper	< 0.5 mg/L	Thallium	< 1 mg/L
Fluorides	< 20 mg/L	Zinc	< 1 mg/L

Bid Submittal Requirements

Bid Form. All Bidders shall submit the Bid Form provided with these specifications. All blanks, information requested, and calculations required on the Bid Form shall be completed by the Bidder. The Bid Form shall be signed by an officer of the Bidder's company or the Bid Form shall be accompanied by an authorization from the Board of Directors for the person to sign the Bid Form and thereby obligate the Bidder to comply with all terms and conditions of these Detailed Specifications, and the City of Grand Island General Specifications.

References. Bidder shall submit three (3) references of customers who currently are using, or recently have used, the solution as named on the Bid Form that is being proposed by Bidder. Each referenced customer shall have used the proposed product on a continuous basis for a minimum of three years. The following information shall be provided for each reference:

- Customer name (water system owner).
- Name, title, address, and telephone number of a customer representative who is familiar with the technical aspects and results of using the proposed solution.
- Description of the customer's application, including:
 - Background water quality
 - Purpose for using the solution (for example: copper and lead reduction, sequestering manganese, removal of scale/tubercles, etc.).
 - Customer's average daily water usage.
 - Original estimated gallons of solution required per million gallons of water.
 - Gallons of solution currently being used per million gallons of water.
 - Effect of solution in the following areas.
 - Metals in the distribution system.
 - Calcium and scale deposits.
 - Lead and copper concentrations in the drinking water immediately after initial injection and over time.
 - Manganese discoloration in the drinking water immediately after initial injection and over time.
 - Chlorine residuals in the distribution system.
 - Biofilm (HPC) growth.

- Water flow rates in the distribution system.
- Storage tank mixing requirements, including above or below and specific solution temperature.

The above information related to technical performance of the proposed solution shall be documented with field or laboratory test data where applicable and available. If data/information is not available or applicable for any of the above questions for any particular reference, please make a statement to that effect.

Sample. Bidder shall make available, upon request, a one gallon sample of the proposed solution prior to bid award.

Certification. The Bidder shall submit a copy of the certification that the proposed solution has been approved by the NSF.

Specifications of Proposed Solution. Bidder shall provide the following information specifically related to the solution proposed by Bidder:

- Commercial Name of Solution (and subtitle or number, if appropriate)
- Appearance
- Quantity of Active Dry Chemical Per Gallon
- Color
- Odor
- Percent Phosphate
- Percent Sodium
- Percent Polyphosphate
- Percent Orthophosphate
- Specific Gravity of Solution
- Sequestering Equivalency
- Raw Water Operating pH range
- pH neat
- Other characteristics or data the Bidder wishes to submit in support of the proposed solution.

MINIMUM INSURANCE REQUIREMENTS
CITY OF GRAND ISLAND, NEBRASKA

The successful bidder shall obtain insurance from companies authorized to do business in Nebraska of such types and in such amounts as may be necessary to protect the bidder and the interests of the City against hazards or risks of loss as hereinafter specified. This insurance shall cover all aspects of the Bidder's operations and completed operations. Failure to maintain adequate coverage shall not relieve bidder of any contractual responsibility or obligation. Minimum insurance coverage shall be the amounts stated herein or the amounts required by applicable law, whichever are greater.

1. WORKERS COMPENSATION AND EMPLOYER'S LIABILITY

This insurance shall protect the Bidder against all claims under applicable State workers compensation laws. This insurance shall provide coverage in every state in which work for this project might be conducted. The liability limits shall not be less than the following:

Workers Compensation	Statutory Limits
Employers Liability	\$100,000 each accident
	\$100,000 each employee
	\$500,000 policy limit

2. BUSINESS AUTOMOBILE LIABILITY

This insurance shall be written in comprehensive form and shall protect the Bidder, Bidder's employees, or subcontractors from claims due to the ownership, maintenance, or use of a motor vehicle. The liability limits shall be not less than the following:

Bodily Injury & Property Damage	\$ 500,000 Combined Single Limit
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3. COMPREHENSIVE GENERAL LIABILITY

The comprehensive general liability coverage shall contain no exclusion relative to explosion, collapse, or underground property. The liability limits shall be not less than the following:

Bodily Injury & Property Damage	\$ 500,000 each occurrence
	\$1,000,000 aggregate

4. UMBRELLA LIABILITY INSURANCE

This insurance shall protect the Bidder against claims in excess of the limits provided under employer's liability, comprehensive automobile liability, and commercial general liability policies. The umbrella policy shall follow the form of the primary insurance, including the application of the primary limits. The liability limits shall not be less than the following:

Bodily Injury & Property Damage	\$1,000,000 each occurrence
	\$1,000,000 general aggregate

5. ADDITIONAL REQUIREMENTS

The City may require insurance covering a Bidder or subcontractor more or less than the standard requirements set forth herein depending upon the character and extent of the work to be performed by such Bidder or subcontractor.

Insurance as herein required shall be maintained in force until the City releases the Bidder of all obligations under the Contract.

The Bidder shall provide and carry any additional insurance as may be required by special provisions of these specifications.

6. CERTIFICATE OF INSURANCE

Satisfactory certificates of insurance shall be filed with the City prior to starting any work on this Contract. **The certificates shall show the City as an additional insured on all coverage except Workers Compensation. The certificate shall state that thirty (30) days written notice shall be given to the City before any policy is cancelled (strike the "endeavor to" wording often shown on certificate forms). If the bidder cannot have the "endeavor to" language stricken, the bidder may elect to provide a new certificate of insurance every 30 days during the contract. Bidder shall immediately notify the City if there is any reduction of coverage because of revised limits or claims paid which affect the aggregate of any policy.**