

**AMENDMENT TO AGREEMENT
CITY OF LINCOLN
ANNUAL REQUIREMENTS FOR ODOR AND CORROSION CONTROL SERVICES
BID NO. 11-046
THIRD AND FINAL RENEWAL**

This Amendment is hereby entered into on this 28th day of MARCH, 2014 by and between US Peroxide LLC, 500 Bishop Street NW, Suite C3, Atlanta, GA 30318 (hereinafter "Contractor") and City of Lincoln (hereinafter "City"), for the purpose of amending an Agreement dated April 29, 2011, under E. O. No. 084019, (the "Agreement"), for the **Annual Requirements for Odor and Corrosion Control Services at Lincoln Wastewater Treatment Facility, Bid No. 11-046**, which is made a part hereof by this reference.

WHEREAS, the original term of the Agreement is April 29, 2011 through April 28, 2012, with the option to renew for three (3) additional one (1) year terms upon written mutual consent of both parties; and

WHEREAS, the Agreement was amended by the City to renew the agreement for an additional one year period from April 29, 2012 through April 28, 2013,

WHEREAS, the Agreement was amended by the City to renew the agreement for an additional one year period from April 29, 2013 through April 28, 2014,

WHEREAS, the parties wish to renew the agreement for an additional one (1) year term beginning April 29, 2014 through April 28, 2015; and

WHEREAS, the estimated expenditures for City Departments for the term of this renewal shall not exceed \$425,000.00 without prior approval by the City of Lincoln.

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants stated herein the parties agree as follows:

- 1) The term of the Agreement shall be from April 29, 2014 through April 28, 2015.
- 2) The estimated expenditures for City Departments for the term of this renewal shall not exceed \$425,000.00 without prior approval by the City of Lincoln.
- 3) All other terms of the Agreement, not in conflict with this Amendment, shall remain in full force and effect.

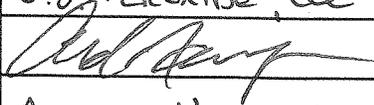
The Parties do hereby agree to all the terms and conditions of this Amendment. This Amendment shall be binding upon the parties, their heirs, administrators, executors, legal and personal representatives, successors, and assigns.

IN WITNESS WHEREOF, the Parties do hereby execute this Amendment.

Official City Use Only

Dated this <u>21st</u> day of <u>April</u> 2014  _____ Chris Beutler, Mayor
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Supplier, please fill in the date and following information and mail back to our office; a faxed copy is not acceptable.

Company Name: (Please Print)	U.S. PEROXIDE, LLC
By: (Please Sign)	
By: (Please Print)	ANDREW NANGANO
Title: (Please Print)	ASSISTANT SECRETARY
Company Address: (Please Print)	900 CIRCLE 75 PARKWAY, SUITE 1330 ATLANTA GA 30339
Company Phone & Fax: (Please Print))	PHONE (404) 352-6070 FAX (404) 352-6077
E-Mail Address: (Please Print)	anangano@h2o2.com
Date: (Please Print)	03/28/2014
Contact Person For: "Orders or Service" (Please Print)	RICARDO JOSEPH
Phone Number: (Please Print)	(404) 352-6070

**AMENDMENT TO AGREEMENT
CITY OF LINCOLN
ANNUAL REQUIREMENTS FOR ODOR AND CORROSION CONTROL
SERVICES AT LINCOLN WASTEWATER TREATMENT FACILITY
BID NO. 11-046
SECOND RENEWAL**

This Amendment is hereby entered into on this _____ day of _____, 2013 by and between **US Peroxide LLC, 500 Bishop Street NW, Suite C3, Atlanta, GA 30318** (hereinafter "Contractor") and **City of Lincoln** (hereinafter "City"), for the purpose of amending an Agreement dated **April 29, 2011**, under E. O. No. **084019**, (the "Agreement"), for **The Annual Requirements for Odor and Corrosion Control Services at Lincoln Wastewater Treatment Facility, Bid No. 11-046**, which is made a part hereof by this reference.

WHEREAS, the original term of the Agreement is **April 29, 2011 thru April 28, 2012**, with the option to renew for three (3) additional **one (1) year terms** upon written mutual consent of both parties; and

WHEREAS, the parties wish to extend the agreement for an additional one (1) year term beginning **April 29, 2013 thru April 28, 2014**; and

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants stated herein the parties agree as follows:

- 1) The term of the Agreement shall be from **April 29, 2013 thru April 28, 2014**.
- 2) All other terms of the Agreement, not in conflict with this Amendment, shall remain in full force and effect.

The Parties do hereby agree to all the terms and conditions of this Amendment. This Amendment shall be binding upon the parties, their heirs, administrators, executors, legal and personal representatives, successors, and assigns.

IN WITNESS WHEREOF, the Parties do hereby execute this Amendment.

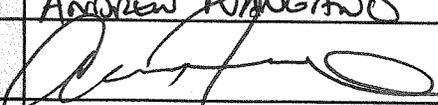
Official City Use Only

Dated this 14th day
of April 2013


Chris Beutler, Mayor

Supplier, please fill in the date and following information and mail back to our office; a faxed copy is not acceptable.

Executed this 28th day of March, 2013

Company Name: (PLEASE PRINT)	U.S. Peroxide, LLC
By: (PLEASE PRINT)	Andrew Arangano
By: (PLEASE SIGN)	
Title:	ASSISTANT SECRETARY
Company Address: (PLEASE PRINT)	900 Circle 75 Atlanta #1336 Atlanta GA 30339
Company Phone & Fax: (PLEASE PRINT)	Ph (404) 352-6070 Fax (404) 352-6077
E-Mail Address: (PLEASE PRINT)	arangano@h2o2.com

**AMENDMENT TO BID NO. 11-046
FOR THE ANNUAL REQUIREMENTS FOR ODOR AND CORROSION CONTROL
SERVICES AT LINCOLN WASTEWATER TREATMENT FACILITY
AGREEMENT FOR CITY FIRST RENEWAL**

This Amendment is hereby entered into on this 7 day of May, 2012 by and between US Peroxide LLC, 500 Bishop Street NW, Suite C3, Atlanta, GA 30318 (hereinafter "Contractor") and City of Lincoln (hereinafter "City"), for the purpose of amending an Agreement dated April 29, 2011, under E. O. No. 084019, (the "Agreement"), for The Annual Requirements for Odor and Corrosion Control Services at Lincoln Wastewater Treatment Facility, Bid No. 11-046, which is made a part hereof by this reference.

WHEREAS, the original term of the Agreement is April 29, 2011 thru April 28, 2012, with the option to extend for three (3) additional one (1) year periods upon written mutual consent of both parties; and

WHEREAS, the parties wish to extend the agreement for an additional one (1) year term beginning April 29, 2012 thru April 28, 2013; and

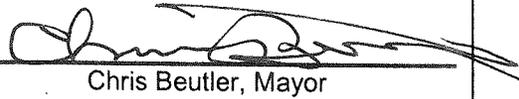
NOW, THEREFORE, IN CONSIDERATION of the mutual covenants stated herein the parties agree as follows:

- 1) The term of the Agreement shall be from April 29, 2012 thru April 28, 2013.
- 2) All other terms of the Agreement, not in conflict with this Amendment, shall remain in full force and effect.

The Parties do hereby agree to all the terms and conditions of this Amendment. This Amendment shall be binding upon the parties, their heirs, administrators, executors, legal and personal representatives, successors, and assigns.

IN WITNESS WHEREOF, the Parties do hereby execute this Amendment.

Official City Use Only

Dated this <u>7th</u> day
of <u>May</u> 2012
 _____ Chris Beutler, Mayor

Supplier, please fill in the date and following information and mail back to our office; a faxed copy is not acceptable.

Executed this 12th day of April, 2012

Company Name: (PLEASE PRINT)	U.S. PEROXIDE, LLC
By: (PLEASE PRINT)	ANDREW J. NAWLAND
By: (PLEASE SIGN)	
Title:	ASST. SECRETARY U.S. PEROXIDE, LLC
Company Address: (PLEASE PRINT)	900 CIRCLE 75 PARKWAY ATLANTA GA 30339
Company Phone & Fax: (PLEASE PRINT)	PHONE (404) 352-6070 FAX (404) 352-6077
E-Mail Address: (PLEASE PRINT)	anawland@h2o2.com

84019

11030064

CONTRACT DOCUMENTS

**CITY OF LINCOLN
NEBRASKA**

**ANNUAL REQUIREMENTS
FOR
Odor and Corrosion Control Services at
Lincoln Wastewater Treatment Facility
Bid No. 11-046**

**US Peroxide LLC
500 Bishop Street NW, Suite C3
Atlanta, GA 30318
404-352-6070**

**CITY OF LINCOLN
CONTRACT AGREEMENT**

THIS CONTRACT, made and entered into this _____ day of _____ 2011, by and between US Peroxide LLC, 500 Bishop Street NW, Suite C3, Atlanta, GA 30318, hereinafter called "Contractor", and the City of Lincoln, Nebraska, a municipal corporation, hereinafter called "City".

WHEREAS, the City has caused to be prepared, in accordance with law, Specifications, Plans, and other Contract Documents for the Work herein described, and has approved and adopted said documents and has caused to be published an advertisement for and in connection with said Work, to-wit:

For providing Annual Requirements for Odor and Corrosion Control Services at Lincoln Wastewater Treatment Facility, Bid No. 11-046 and,

WHEREAS, the Contractor, in response to such advertisement, has submitted to the City, in the manner and at the time specified, a sealed Proposal/Supplier Response in accordance with the terms of said advertisement; and,

WHEREAS, the City, in the manner prescribed by law has publicly opened, read aloud, examined, and canvassed the Proposals/Supplier Responses submitted in response to such advertisement, and as a result of such canvass has determined and declared the Contractor to be the lowest responsible bidder for the said Work for the sum or sums named in the Contractor's Proposal/Supplier Responses, a copy thereof being attached to and made a part of this Contract;

NOW, THEREFORE, in consideration of the sums to be paid to the Contractor and the mutual covenants herein contained, the Contractor and the City has agreed and hereby agree as follows:

1. The Contractor agrees to (a) furnish all tools, equipment, supplies, superintendence, transportation, and other accessories, services, and facilities; (b) furnish all materials, supplies, and equipment specified to be incorporated into and form a permanent part of the complete work; (c) provide and perform all necessary labor in a substantial and workmanlike manner and in accordance with the provisions of the Contract Documents; and (d) execute and complete all Work included in and covered by the City's award of this Contract to the Contractor, such award being based on the acceptance by the City of the Contractor's Proposal, or part thereof, as follows:

Agreement to full proposal (Lines 1 & 2. Line 3 is total of lines 1 and 2).

2. The City agrees to pay to the Contractor for the performance of the Work embraced in this Contract, the Contractor agrees to accept as full compensation therefore, the following sums and prices for all Work covered by and included in the Contract award and designated above, payment thereof to be made in the manner provided by the City:

City will pay for products/service, according to the Line Item pricing as listed in Contractors Proposal/Supplier Response, a copy thereof being attached to and made a part of this Contract. The City shall order on an as needed basis for the duration of the contract.

3. Equal Employment Opportunity. In connection with the carrying out of this project, the contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry, disability, age or marital status. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, ancestry, disability, age or marital status. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other compensation; and selection for training, including apprenticeship.

4. E-Verify. In accordance with Neb. Rev. Stat. 4-108 through 4-114, the contractor agrees to register with and use a federal immigration verification system, to determine the work eligibility status of new employees performing services within the state of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324 a, otherwise known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of a newly hired employee pursuant to the Immigration Reform and Control Act of 1986. The Contractor shall not discriminate against any employee or applicant for employment to be employed in the performance of this section pursuant to the requirements of state law and 8 U.S.C.A 1324b. The contractor shall require any subcontractor to comply with the provisions of this section.
5. Guarantee: A performance and payment bond in the full amount of the contract shall be required for all construction contracts. These bonds shall remain in effect during the guarantee period as stated in the specifications. Once the project is completed, the Contractor may submit a maintenance bond in place of the performance bond.
6. Termination. This Contract may be terminated by the following:
 - 6.1) Termination for Convenience. Either party may terminate this Contract upon thirty (30) days written notice to the other party for any reason without penalty.
 - 6.2) Termination for Cause. The City may terminate the Contract for cause if the Contractor:
 - 6.2.1) Refuses or fails to supply the proper labor, materials and equipment necessary to provide services and/or commodities.
 - 6.2.2) Disregards Federal, State or local laws, ordinances, regulations, resolutions or orders.
 - 6.2.3) Otherwise commits a substantial breach or default of any provision of the Contract Document. In the event of a substantial breach or default the City will provide the Contractor written notice of said breach or default and allow the Contractor ten (10) days from the date of the written notice to cure such breach or default. If said breach or default is not cured within ten (10) days from the date of notice, then the contract shall terminate.
7. Independent Contractor. It is the express intent of the parties that this contract shall not create an employer-employee relationship. Employees of the Contractor shall not be deemed to be employees of the City and employees of the City shall not be deemed to be employees of the Contractor. The Contractor and the City shall be responsible to their respective employees for all salary and benefits. Neither the Contractor's employees nor the City's employees shall be entitled to any salary, wages, or benefits from the other party, including but not limited to overtime, vacation, retirement benefits, workers' compensation, sick leave or injury leave. Contractor shall also be responsible for maintaining workers' compensation insurance, unemployment insurance for its employees, and for payment of all federal, state, local and any other payroll taxes with respect to its employees' compensation.
8. Contract Term. This Contract shall be effective upon execution by both parties. The term of the Contract shall be a one (1) year term with the option to renew for three (3) additional one (1) year periods.
9. The Contract Documents comprise the Contract, and consist of the following:
 1. Instructions to Bidders
 2. Insurance Requirements
 3. Accepted Proposal/Response
 4. Contract Agreement
 5. Bonds
 6. Specifications
 7. Employee Classification Act, Executive Order 83319
 8. Employee Classification Act Affidavit
 9. Sales Tax Exemption Form 13

These Contract Agreements, together with the other Contract Documents herein above mentioned, form this Contract, and they are as fully a part of the Contract as if hereto attached or herein repeated.

The Contractor and the City hereby agree that all the terms and conditions of this Contract shall be binding upon themselves, and their heirs, administrators, executors, legal and personal representatives, successors, and assigns.

IN WITNESS WHEREOF, the Contractor and the City do hereby execute this contract.

EXECUTION BY THE CITY OF LINCOLN, NEBRASKA

ATTEST:

City Clerk

Jan E. Rost



CITY OF LINCOLN, NEBRASKA

Mayor

Chris Burt

Approved by Executive No. 84019

dated APR 29 2011

EXECUTION BY CONTRACTOR

IF A CORPORATION:

ATTEST:

Secretary

[Signature]

(SEAL)

U.S. Peroxide LLC.

Name of Corporation

500 Bishop St NW Suite C3 Atlanta GA 30318

(Address)

By:

Duty Authorized Official

Man - Gen Mktg: Bob Sw

Legal Title of Official

IF OTHER TYPE OF ORGANIZATION:

Name of Organization

Type of Organization

(Address)

By:

Member

By:

Member

IF AN INDIVIDUAL:

Name

Address

Signature

City of Lincoln/Lancaster County (Lincoln Purchasing) Supplier Response

Bid Information		Contact Information		Ship to Information	
Bid Creator	Sharon R. Mulder Assistant Purchasing Agent	Address	Purchasing 440 S. 8th St. Lincoln, NE 68508	Address	Theresa St. WW Treatment Plant 2400 Theresa St. Lincoln, NE 68521
Email	smulder@lincoln.ne.gov	Contact	Sharon R. Mulder Assistant Purchasing Agent	Contact	Randy Wilson
Phone	(402) 441-7410		Purchasing	Department	Building
Fax	(402) 441-6513		Department		
Bid Number	11-046		Building		
Title	Odor and Corrosion Control Services at Wastewater Treatment Facility		Suite 200	Floor/Room	Telephone
Bid Type	Bid	Floor/Room		Fax	
Issue Date	02/18/2011	Telephone	(402) 441-7428	Email	
Close Date	3/4/2011 12:00:00 PM CST	Fax	(402) 441-6513		
Need by Date		Email	smulder@lincoln.ne.gov		

Supplier Information

Company US Peroxide LLC
 Address 500 Bishop Street NW, Suite C3
 Atlanta, GA 30318
 Contact Andrew Nangano
 Department
 Building
 Floor/Room
 Telephone 1 (404) 3526070
 Fax 1 (404) 3526077
 Email anangano@h2o2.com
 Submitted 3/4/2011 8:35:23 AM CST
 Total \$461,440.00

Signature _____

Supplier Notes

Bid Notes

Any bid that does not included the license to practice PRI-SC will not be accepted.

Bid Messages

Please review the following and respond where necessary

#	Name	Note	Response
1	Instructions to Bidders	I acknowledge reading and understanding the Instructions to Bidders.	Yes

2	Insurance Requirements	I acknowledge reading and understanding the Insurance Requirements.	Yes
3	Contact	Name of person submitting this bid:	Andrew Nangano
4	Specifications	I acknowledge reading and understanding the specifications.	Yes
5	Bid Bond Submission - City	I acknowledge and understand that my bid will not be considered unless a bid bond or certified check in the sum of five percent (5%) of the total amount of the bid is made payable to the order of the City Treasurer as a guarantee of good faith prior to the bid opening. The bid security may be scanned and attached to the 'Response Attachments' section of your response or faxed to the Purchasing Office (402)441-6513. The original bond/check must then be received in the Purchasing Office, 440 S. 8th Street, Ste. 200, Lincoln, NE 68508 within three (3) days of bid closing. YOU MUST INDICATE YOUR METHOD OF BID BOND SUBMISSION IN BOX TO RIGHT!	I have scanned and attached my bid bond.
6	Performance/Payment Bonds	I acknowledge that a Performance Bond and a Payment Bond each in the amount of 100% of the Contract amount will be required with the signed contract upon award of this job.	Yes
7	Employee Class Act EO	I acknowledge reading and understanding the Employee Classification Act, Executive Order 83319.	Yes
8	Employee Class Act Affidavit	I acknowledge if awarded the contract I will abide by the law, notarize and attach the Employee Classification Act Affidavit to my contract.	Yes
9	Electronic Signature	Please check here for your electronic signature.	Yes

Line Items

#	Qty	UOM	Description	Response
1	1	Response Below in Item Attributes	Provide Ferrous Chloride and Ferrous Chloride Dosing System	\$112,640.00

Item Notes:
Includes providing One (1) 7,800 US Gallon Double Contained, high density polyethylene storage tank for ferrous chloride.

Also includes secondary containment sized to provide 110% of storage capacity.
Equipped with a reverse level indicator
Fill line and overflow port into secondary containment
Labels and placards.
Location is 901 North 6th Street or suitable alternate location.

Supplier Notes:

Item Attributes: Please review the following and respond where necessary

#	Name	Note	Response
1	Unit Price	Price per gallon of 88,000 gal/yr	US\$ 1.28
2	Extended Price	88,000 gallons of chemical x unit price =	US\$ 112,640.00

2	1	Response Below in Item Attributes	Provide Hydrogen Peroxide and Hydrogen Peroxide Dosing System	\$118,080.00
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Item Notes:
Includes providing One (1) 3,000 US Gallon Double Contained, high density polyethylene storage tank for hydrogen peroxide.

Also includes secondary containment sized to provide 110% of storage capacity.
Equipped with a reverse level indicator
Fill line and overflow port into secondary containment
Pressure relief device specific to hydrogen peroxide service.
Labels and placards.
Located at Theresa Street Wastewater Treatment Facility into 79" Salt Valley trunk sewer for the regeneration of iron.

Supplier Notes:

Item Attributes: Please review the following and respond where necessary

#	Name	Note	Response
1	Unit Price	Price per gallon of 24,000 gal/yr	US\$ 4.92
2	Extended Price	24,000 gallons of chemical x unit price =	US\$ 118,080.00

3	1	Sum	Provide Full Service Program Utilizing Pri-SC Process	\$230,720.00
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Item Notes: Total Base Bid (Sum of extended price, line 1 for Ferrous Chloride of 88,000 gallons per year and line 2 for Hydrogen Peroxide of 24,000 gallons per year).
Example: Unit Price x 88,000 gallons = ____ + Unit Price x 24,000 gallons = ____ is the Total Base Bid number we are looking for.

Supplier Notes:

Response Total: \$461,440.00

SPECIFICATIONS
Odor and Corrosion Control Services at Wastewater Treatment Facility
Bid No. 11-046

1. GENERAL INFORMATION

- 1.1 The LWWS desires to solicit bids for Odor and Corrosion Control Services using the PRI-SC process.
- 1.2 The Lincoln Wastewater System (LLWWS) in Lincoln, Nebraska has experienced odors and corrosion at the wastewater treatment facility.
- 1.3 Current odor and corrosion control processes include the addition of ferrous chloride at the plant headworks and chemical scrubbing of air on one (East Train) of three treatment trains within the facility.
- 1.4 Over the past 15 months, the LWWS conducted pilot testing of the PRI-SC process to evaluate the performance of iron regeneration using hydrogen peroxide and whether this process could effectively reduce odors.
 - 1.4.1 The pilot project involved relocating the feed point for ferrous chloride, establishing a feed point for hydrogen peroxide at the treatment facility, and gathering field data on gaseous hydrogen sulfide and dissolved sulfide levels within the sewer system.
- 1.5 All inquiries regarding these specifications shall be directed via e-mail or faxed written request to Sharon Mulder, Asst. Purchasing Agent (smulder@lincoln.ne.gov) or fax: (402) 441-6513.
- 1.6 Bidder shall submit bid documents and all supporting material via e-bid.
 - 1.6.1 These inquiries and/or responses shall be distributed to prospective bidders electronically as an addenda
 - 1.6.2 The Purchasing Office shall only reply to written inquiries received within five (5) calendar days of bid opening.
 - 1.6.3 Prospective bidders are encouraged to visit the Theresa Street Facility, chemical feed locations, and monitoring sites if desired.
 - 1.6.3.1 Prospective bidders may contact Randy Wilson at 402-441-7970 for site visit(s).

2. PROJECT DESCRIPTION

- 2.1 The intent of this specification is to describe the requirements for providing Odor and Corrosion Control Services at the Theresa Street Wastewater Treatment Facility in Lincoln, Nebraska (the LWWS).
- 2.2 The Odor and Corrosion Control Services shall consist in part of:
 - 2.2.1 Providing a full service program for controlling hydrogen sulfide concentrations measured at the Grit Handling Structure of the Theresa Street Wastewater Treatment facility utilizing the PRI-SC process.
 - 2.2.1.1 PRI-SC shall be delivered as a full service program.
 - 2.2.1.2 See Figures 1 and 2 for the location of the chemical feed sites and hydrogen sulfide monitoring location(s).
 - 2.2.2 PRI-SC is a patented process, as described in US Patent No. 6,773,604 B2 and 7,147,783.
 - 2.2.2.1 Any bid that does not include the license to practice PRI-SC will not be accepted.

- 2.2.3 Providing a ferrous chloride dosing system at 901 North 6th Street (or suitable alternate location).
- 2.2.4 Providing a hydrogen peroxide dosing system at the Theresa Street Wastewater Treatment Facility into the 78" Salt Valley trunk sewer for the regeneration of iron (PRI-SC).
- 2.2.5 Providing chemical storage tanks (2), chemical feed pumps, remote monitoring and control system and related appurtenances to provide the required chemical dosing rates.
- 2.2.6 Providing the required annual volume of ferrous chloride and hydrogen peroxide to meet Odor Control and Corrosion Program Requirements.
- 2.2.7 Ensure that all chemical inventory is adequate.
- 2.2.8 Providing access to a web-based control and monitoring site.
 - 2.2.8.1 This web site shall allow the Owner to monitor chemical storage tank levels, status of chemical feed pumps, and operational system alarms 24 hours per day.
 - 2.2.8.2 The Owner shall have access to any level indication and system alarms through the website.
 - 2.2.8.3 The Contractor shall control all chemical feed rates.
- 2.2.9 Providing intermittent field measurements of background dissolved sulfide readings within the trunk sewers leading to the facility.
- 2.2.10 Providing and recording continuous on-line readings of the hydrogen sulfide concentration at the Theresa Street Grit Handling Structure.
- 2.2.11 Providing all labor for project management, operating and maintenance services, and program reporting.
- 2.2.12 The Contractor shall provide on-site field services to optimize the H₂O₂ and FeCl₂ feed rates and perform dose response sampling and testing with respect to achieving targeted levels for H₂S control.
 - 2.2.12.1 This includes sampling and monitoring of gaseous H₂S (Odalog – continuous data logging H₂S monitors), liquid sulfides (grab samples), sewage pH and temperature.
 - 2.2.12.2 The Contractor shall provide regular program updates to designated LWWS personnel.

3. **EQUIPMENT**

- 3.1 Provide one(1) 3,000 US gallon double contained, high density polyethylene storage tank for hydrogen peroxide.
 - 3.1.1 The secondary containment shall be sized to provide 110% of storage capacity.
 - 3.1.2 The tank shall be equipped with a reverse level indicator, fill line, overflow port into the secondary containment, and pressure relief device specific to hydrogen peroxide service.
 - 3.1.3 Labels and placards compliant with local codes shall be supplied.
- 3.2 Provide one(1) 7800 US gallon double contained, high density polyethylene storage tank for ferrous chloride.
 - 3.2.1 The secondary containment is sized to provide 110% of storage capacity.
 - 3.2.2 The tank shall be equipped with a reverse level indicator, fill line and overflow port into the secondary containment.
 - 3.2.3 Labels and placards compliant with local codes shall be supplied.
- 3.3 A skid mounted chemical metering pump system shall be provided for the ferrous chloride and hydrogen peroxide dosing systems.

- 3.3.1 The pumps shall be capable of local, or remote, control.
- 3.3.2 All transfer piping shall be passivated 304L tubing for product safety and ease of use.
- 3.3.3 There shall be an automated product degassing valve, back pressure valve, calibration cylinder, and pressure indicator.
- 3.3.4 PRV's specific to peroxide service are used.
- 3.3.5 An environmentally friendly, weather resistant, enclosure houses the entire skid to provide leak containment.
- 3.4 An electrical distribution panel, which provides breakers for all high-draw components, and an isolated lockable main disconnect switch for each dosing system.
- 3.5 A combination eyewash/safety shower and a MSDS right-to-know station.
- 3.6 The web-based remote telemetry system shall provide tank level readings in gallons and shall monitor inventory and status of chemical feed pumps.
 - 3.6.1 The telemetry system shall be capable of controlling the chemical feed pumps remotely.
 - 3.6.2 Dosing profiles and chemical feed rates shall be controlled by the Contractor.

4. DELIVERY

- 4.1 Installation of all dosing equipment shall be completed 3 weeks following notification from the Owner.
 - 4.1.1 Chemical dosing shall begin immediately following equipment installation and check-out.
 - 4.1.2 Should installation take longer, the Contractor shall notify the Owner immediately.

5. ALTERNATE FEED SITE LOCATION FOR FERROUS CHLORIDE

- 5.1 Due to a change in ownership of property currently be utilized for remote ferrous chloride addition, the LWWS may elect to change the location of the ferrous chloride feed system.
 - 5.1.1 If an alternate feed site is necessary, the LWWS will provide the labor and equipment necessary to move the ferrous chloride feed system to the alternate site.
 - 5.1.2 The LWWS will require that a representative of the Contractor be present and available during the moving process to ensure that all equipment is properly handled and protected from damage.
 - 5.1.3 In addition, the Contractor will be responsible for ensuring that the equipment is properly installed and ready for use.

6. MONITORING AND DATA ANALYSIS

- 6.1 The LWWS will collect continuous gaseous H₂S readings at three locations (see Sampling Matrix in Table 1) and provide this information to the Contractor on a weekly basis.
- 6.2 Contractor shall gather sufficient field data to develop dosing profile(s) which meet the target values established and to make efficient use of the chemicals to control costs.
- 6.3 Contractor shall monitor a minimum of the collection system on a quarterly basis at the designated monitoring locations and provide measured H₂S levels, pH, temperatures, and background dissolved sulfide concentrations.

- 6.4 Contractor shall monitor chemical usage and cost.
- 6.4.1 Sampling data and chemical usage information shall be submitted to the Owner on a quarterly basis.
- 6.4.2 After jointly reviewing the monthly monitoring data with the LWWS personnel, the Contractor shall make any required chemical feed dosing changes to insure that system operations are being achieved.

TABLE 1

Below describes the initial sampling locations and sample frequencies for the Contract.

Sampling Location	Sampling Performed	Frequency
Grit Chamber, East Train Diversion Gate	Continuous Gaseous H2S readings using Odalog monitor, (also performed by LWWS)	Continuous
	Liquid Sampling	Monthly
West Train Clarifier, Eff Channel	Continuous Gaseous H2S readings using Odalog monitor, (also performed by LWWS)	Continuous
	Liquid Sampling	Monthly
78" Salt Valley Trunk Sewer at 6 th & Vine	Liquid Sampling	Monthly
78" Salt Valley Trunk Sewer at MH 385	Liquid Sampling	Spot Check to Quantify Loading
78" Salt Valley Trunk Sewer at Antelope Creek Inverted Siphon	Continuous Gaseous H2S readings using Odalog monitor, performed by LWWS	Continuous
78" Salt Valley Trunk Sewer at MH 375	Liquid Sampling	Spot Check to Quantify Loading
54" Line, MH 293	Liquid Sampling	Spot Check to Quantify Loading
60" Line, MH 66	Liquid Sampling	Spot Check to Quantify Loading
42" Line, MH 115	Liquid Sampling	Spot Check to Quantify Loading
30" and 15" Lines, MH 103	Liquid Sampling	Spot Check to Quantify Loading
Grit Vortexes	Liquid Sampling	Spot Check if Irregularities
Grit Structure Influent Channels	Liquid Sampling	Spot Check if Irregularities
A2 and A3 Wetwells	Liquid Sampling	Spot Check if Irregularities

7. **SAMPLING**

7.1 All samples collected for analysis will be grab samples or from approved auto sampling equipment.

7.1.1 Acceptable methods of analysis are listed below:

Liquid (grab) samples

Procedure

Total sulfide	Std. Methods 4500-S ²⁻ D. Methylene Blue (Lamotte drop count kit)
Dissolved sulfide	Ditto, using pre-flocculation to remove insoluble sulfides
pH	Combination glass electrode
Temperature	NIST calibrated thermometer
Total iron	Std. Methods 3500-Fe D. Phenanthroline (Hach colorimeter)
Ferrous iron	Ditto, but without hydroxylamine reduction step
Dissolved iron	Per total iron
Residual H ₂ O ₂	DPD redox test strips (e.g., EM Quant)

Vapor samples (continuous datalogging)

H ₂ S, ppm	App-Tek OdaLog (monitor / datalogger)
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8. **ODOR CONTROL PROGRAM REQUIREMENTS**

8.1 The Odor and Corrosion Control Program Requirements are as follows:

8.2 Program effectiveness will be measured using data from the East Train diversion gate at the Grit Handling Structure (see Figure 2).

8.2.1 Program goals for odor and corrosion control are:

8.2.1.1 < 10 ppm average gaseous H₂S from January 1st thru September 30th.

8.2.1.2 < 20 ppm average gaseous H₂S from October 1st thru December 31st

8.2.1.3 < 0.5 mg/l average dissolved sulfide throughout the entire year.

8.3 Note: For purposes of this bid, it may be assumed that the Average Annual Chemical Requirements are adequate to meet the Odor Control Program Requirements.

9. **AVERAGE ANNUAL CHEMICAL REQUIREMENTS**

9.1 The estimated annual requirements for ferrous chloride and hydrogen peroxide are:

9.1.1 Ferrous Chloride - 88,000 US Gallons (FECL₂:22-27%)

9.1.2 Hydrogen Peroxide - 24,000 US Gallons (H₂O₂:50%)

9.2 The chemical unit prices shall include all labor costs, equipment and materials costs, and services described along with any fuel or energy surcharge costs.

9.2.1 The Contractor may request changes in unit prices on the contract anniversary date.

9.2.2 See Escalation Clause.

9.3 It is understood that the LWWS is not obligated to purchase any specific quantity

of services under this contract.

10. REPORTING REQUIREMENTS

- 10.1 The Contractor shall submit a monthly invoice for reimbursement.
 - 10.1.1 The invoice shall clearly denote the quantity of chemical usage for the invoice period.
- 10.2 A monthly program report shall be provided to the LWWS which shows weekly trending of hydrogen sulfide concentrations measured at the Grit Handling Structure and the results of collection system monitoring for dissolved sulfide in the wastewater.
 - 10.2.1 The monthly report shall also include a description of the current dosing profile being used to dose chemical(s).

11. PROGRAM MANAGER

- 11.1 The Contractor shall provide at least one designated representative to manage the Odor Control Program for the Theresa Street WWTP.
 - 11.1.1 The name or names of personnel involved in performing the Contract shall be listed on the Bid Proposal along with the representative's phone number and place of residence.

12. CONTRACTOR RESPONSIBILITIES

- 12.1 The Contractor shall ensure that both chemical feed sites have adequate chemical inventory at all times and that all chemical deliveries are made in a timely manner.
- 12.2 The Contractor shall ensure that all equipment is in working order and is properly maintained.
 - 12.2.1 Replacement of equipment and/or materials for any reason, other than damage by the LWWS, is the responsibility of the Contractor.
- 12.3 The Contractor shall ensure that all monthly reporting requirements are timely and complete.
 - 12.3.1 If equipment is relocated to an alternate site, the Contractor shall be responsible for all disconnecting, and reconnecting all associated storage and handling equipment.
- 12.4 Hydrogen peroxide and ferrous chloride safety training shall be offered to all designated LWWS personnel at program start-up and on a yearly basis if requested by the LWWS.

13. CITY OF LINCOLN RESPONSIBILITIES

- 13.1 The City of Lincoln and specifically the staff of the Lincoln Wastewater System (LWWS) will be responsible for the following:
- 13.2 The LWWS shall ensure that both chemical feed sites are accessible for the contractor and the chemical supplier at the times agreed upon for chemical deliveries and maintenance.
- 13.3 Both chemical feed sites are within the current City of Lincoln Flood Plain boundaries.
 - 13.3.1 The LWWS shall be responsible for obtaining Flood Plain and Building Permits as necessary.
 - 13.3.2 Any special requirements for the permanent installation of the tanks and related appurtenances shall be the responsibility of the LWWS.

- 13.4 The LWWS shall provide an electrical service of 110 VAC, 60 HZ, 20A, terminating in a junction box within 10 feet of the skid location.
- 13.5 A clear area approximately 18' x 18' to place each storage tank.
 - 13.5.1 A 4" bed of concrete, or coarse crushed aggregate, will be provided for each feed system.
- 13.6 A potable water supply.
- 13.7 If tanks or equipment need to be relocated, the LWWS will provide the lifting equipment and transportation vehicle(s) for relocation.
- 13.8 Any trenching, tapping of lines, drilling through concrete, etc. required to run chemical injection tubing to the application point.

14. TERM OF THE CONTRACT

- 14.1 The term of the Contract/Agreement shall be for one (1) year, with the option to renew for three (3) additional one (1) year periods.
- 14.2 Contract renewal shall be based on the Contractor's performance and the effectiveness of the Odor and Corrosion Control Program during the term of the Contract.
- 14.3 The Owner is not responsible for payment of any user fees, nor any claims against the Contractor by U.S. Peroxide regarding the use of PRI-SC technology, without limitation infringement of patent rights.

15. PATENTS AND ROYALTIES

- 15.1 The Contractor shall indemnify and save harmless the City from any and all claims for infringement by reason of the use of such patented or copyrighted design, device or materials or any trademark or copyright in connection with work agreed to be performed under this contract and shall indemnify the City for any cost, expense or damage it may be obliged to pay by reason of such infringement at any time during the prosecution of the Contract.

16. ESCALATION CLAUSE

- 16.1 Contract prices shall remain firm for a period of at least one year.
 - 16.1.1 At the end of any one year contract period, the Contractor may request an adjustment in chemical unit price based on market conditions.
- 16.2 The contractor shall support any written request with market trend documentation from one or more reputable industry sources.
 - 16.2.1 This clause shall not be construed in any way to increase the Contractor's profit margin.
 - 16.2.2 All written requests for a change in chemical unit price shall be forwarded to the City of Lincoln Purchasing Department.
- 16.3 Pricing shall include the cost of shipping.

17. AWARD CRITERIA

- 17.1 Evaluation and award of Bid will be based upon the unit price of ferrous chloride, the unit price of hydrogen peroxide, the estimated annual chemical requirements, and the past performance of the Contractor, per bid proposal.
 - 17.1.1 Bidder must provide legal and/or contractual proof of the license to practice the PRI-SC technology as described above.
- 17.2 It is expressly understood and agreed that the foregoing Bid is based on the Total bid Price indicated and is inclusive of all work, materials, equipment, and chemicals, and program management for a one year period as specified herein.

18. EXPERIENCE

18.1 The Bidder shall provide a list of current and/or past clients who have contracted services from the Bidder using the PRI-SC process indicating client contact person and client phone number.

18.1.1 These references will be used in evaluating the bid and awarding the contract.

19. SPECIFICATIONS FOR PRI-SC FERROUS CHLORIDE AND PRI-SC HYDROGEN PEROXIDE

19.1 PRI-SC Ferrous Chloride

19.1.1 Concentration 24-28% FeCl₂

19.1.2 Specific Gravity 1.27 – 1.32

19.1.3 Insoluble's 0.5% maximum

19.2 PRI-SC Hydrogen Peroxide

19.2.1 Concentration 50%

19.2.2 Specific Gravity 1.2

19.2.3 pH <= 3.0

19.3 All chemical deliveries must be invoiced reflecting the delivery location and amount of chemical delivered in pounds based on weigh tickets and shall be submitted to the LWWS.

Figure 1



Theresa Street

Alternate (Potential) Feed Site

Phase II Ferrous Chloride Tank Location

901 N. 6th

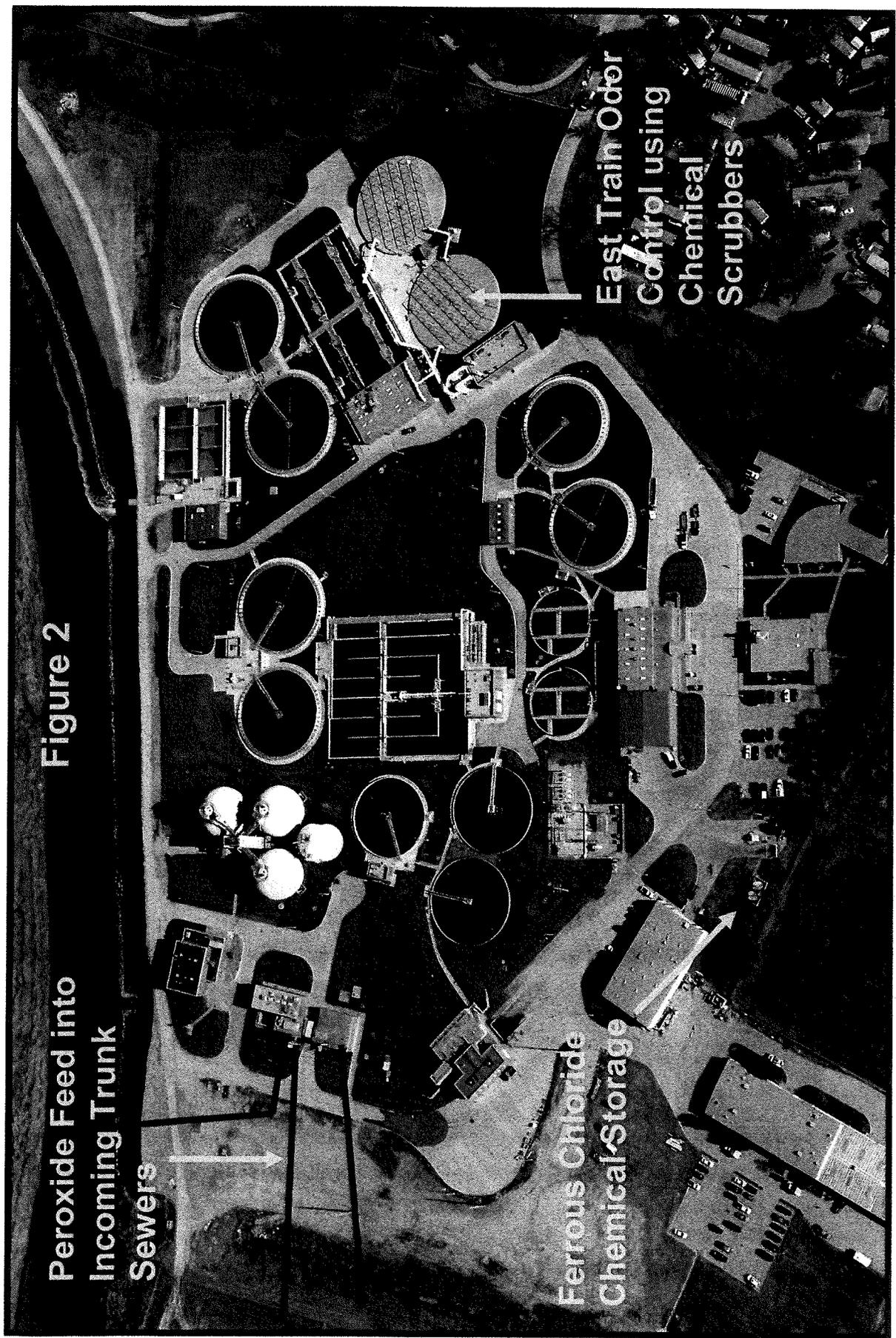


Figure 2

Peroxide Feed into Incoming Trunk Sewers

Ferrous Chloride Chemical Storage

East Train Odor Control using Chemical Scrubbers