



Amendment No. 6  
to  
Contract No. NA180000190  
for  
Hydrogen Peroxide Solution, Feed System, Maintenance  
between  
US Peroxide, LLC D/B/A USP Technologies  
and the  
City of Austin, Texas

- 1.0 The City hereby amends the above referenced contract to correct the revise pricing in Amendment 5 price increase of 25% in accordance with Section 12, Economic Price Adjustment, of the Terms and Conditions, effective October 5, 2022. In the event of unforeseeable circumstances, force majeure is applied, and the revised pricing is corrected below.
- 2.0 By signing this Amendment, the City certifies that the Contractor and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the General Services Administration List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

BY THE SIGNATURE(S) affixed below, this Amendment is hereby incorporated and made a part of the above referenced contract.

Signature & Date:

Signature & Date  Feb 13, 2023

Printed Name: John S. Alcorn  
Authorized Representative

US Peroxide, LLC D/B/A USP Technologies  
900 Circle 75 Parkway, Suite 1330  
Atlanta, GA 30339

Signature & Date:

**Erin D'Vincent** Digitally signed by Erin D'Vincent  
Signature & Date Date: 2023.03.01 14:09:57 -06'00'

Erin D'Vincent, Procurement Manager  
City of Austin



ITEM NO.	Item Description	Unit of Measure	Old Price	Modifier	New Price
1	50% Hydrogen Peroxide Solution, all sites and locations: Payment will be made for price per gallon of chemical delivered for all sites and locations. This item includes, but is not limited to, transportation, permits, delivery of chemical, storage tanks, equipment for pumping of chemical, maintenance services, minor adjustments to chemical feed rates, any repairs or replacement of equipment necessary to feed chemical, and remote tank level monitoring per Section 3.10 of the Scope of Work.	Gallon	\$2.92	.25	\$3.65





Amendment No. 5  
to  
Contract No. NA180000190  
for  
Hydrogen Peroxide Solution, Feed System, Maintenance  
between  
US Peroxide, LLC D/B/A USP Technologies  
and the  
City of Austin, Texas

- 1.0 The City hereby amends the above referenced contract to revise pricing for price increase of 25% in accordance with Section 12, Economic Price Adjustment, of the Terms and Conditions, effective October 5, 2022. In the event of unforeseeable circumstances, force majeure is applied, and revised pricing is attached.
- 2.0 Admin Increase of 66K added to contract
- 3.0 By signing this Amendment, the City certifies that the Contractor and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the General Services Administration List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

BY THE SIGNATURE(S) affixed below, this Amendment is hereby incorporated and made a part of the above referenced contract.

Signature & Date:

Signature & Date  Nov 2, 2022

Printed Name: John S. Alcorn  
Authorized Representative

US Peroxide, LLC D/B/A USP Technologies  
900 Circle 75 Parkway, Suite 1330  
Atlanta, GA 30339

Signature & Date:

**Erin D'Vincent** Digitally signed by Erin D'Vincent  
Signature & Date Date: 2022.11.03 16:02:55 -05'00'

Erin D'Vincent,  
Procurement Manager  
City of Austin



ITEM NO.	Item Description	Unit of Measure	Old Price	Modifier	New Price
1	50% Hydrogen Peroxide Solution, all sites and locations: Payment will be made for price per gallon of chemical delivered for all sites and locations. This item includes, but is not limited to, transportation, permits, delivery of chemical, storage tanks, equipment for pumping of chemical, maintenance services, minor adjustments to chemical feed rates, any repairs or replacement of equipment necessary to feed chemical, and remote tank level monitoring per Section 3.10 of the Scope of Work.	Gallon	\$2.92	.25	\$3.56





Amendment No. 4  
To  
Contract No. NA180000190  
For  
50% Hydrogen Peroxide Solution,  
Feed System Installation, and Maintenance Services  
Between  
U.S. Peroxide , LLC  
dba USP Technologies  
and the  
City of Austin

- 1.0 The City hereby exercises this unilateral extension option for the subject contract. This extension option will be effective October 1, 2022 to September 30, 2023. No options remain.
- 2.0 By signing this Amendment, the Contractor certifies that the Contractor and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the General Services Administration List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

BY THE SIGNATURE affixed below, this Amendment is hereby incorporated and made a part of the above referenced contract.

Signature & Date:

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Sandy Wirtanen  
Procurement Specialist IV  
City of Austin  
Corporate Purchasing  
124 W. 8<sup>th</sup> Street, Ste 310  
Austin, Texas 78701



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Amendment No. 3  
To  
Contract No. NA180000190  
For  
50% Hydrogen Peroxide Solution,  
Feed System Installation, and Maintenance Services  
Between  
U.S. Peroxide, LLC  
dba USP Technologies  
and the  
City of Austin

- 1.0 The City hereby exercises this Unilateral Extension Option for the subject contract. This Unilateral Extension Option will be October 1, 2021 through September 30, 2022. One option will remain.
- 2.0 The City hereby exercises a four-percent (4%) price increase to the subject contract. The price increase will take effect on October 1, 2021, and is displayed in the table below.

Item	Description	Unit	Old Price	Modifier	New Price
1	50% Hydrogen Peroxide Solution, all sites and locations: Payment will be made for price per gallon of chemical delivered for all sites and locations. This item includes, but is not limited to, transportation, permits, delivery of chemical, storage tanks, equipment for pumping of chemical, maintenance services, minor adjustments to chemical feed rates, any repairs or replacement of equipment necessary to feed chemical, and remote tank level monitoring per Section 3.10 of the Scope of Work.	Gallon	\$2.81	1.04	\$2.92

- 3.0 The total contract amount is increased by \$300,000.00 by this extension period. The total contract authorization is recapped below:

Action	Action Amount	Total Contract Amount
Initial Term: 10/01/2018 – 09/30/2020	\$600,000.00	\$600,000.00
Amendment No. 1: Price Increase of 11% 10/01/2019	\$0.00	\$600,000.00
Amendment No. 2: Option 1 – Unilateral Extension 10/01/2020 – 09/30/2021	\$300,000.00	\$900,000.00
Amendment No. 3: Option 2 – Unilateral Extension 10/01/2021 – 09/30/2022 Price increase for 4% 10/01/2021	\$300,000.00	\$1,200,000.00

- 4.0 MBE/WBE goals do not apply to this contract.
- 5.0 By signing this Amendment the Contractor certifies that the vendor and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the GSA List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.
- 6.0 All other terms and conditions remain the same.

BY THE SIGNATURES affixed below, this amendment is hereby incorporated into and made a part of the above-referenced contract.



Sign/Date: **Matthew Duree** Digitally signed by Matthew Duree  
Date: 2021.09.10 14:35:56 -05'00'

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Matthew Duree  
Procurement Manager

City of Austin  
Purchasing Office  
124 W. 8th Street, Ste. 310  
Austin, Texas 78701





## City of Austin

### Purchasing Office

P.O. Box 1088, Austin, TX 78767

10/1/2018

U.S. Peroxide, LLC dba USP Technologies  
Andrew Nangano  
Assistant Secretary  
1375 Peachtree Street NE, Suite 300 N  
Atlanta, GA 30309

Dear Andrew:

The Austin City Council approved the execution of a contract with your company for 50% hydrogen peroxide solution, feed system installation, and maintenance services in accordance with the referenced solicitation.

Responsible Department:	Austin Water
Department Contact Person:	Lydia Rodriguez-Torres
Department Contact Email Address:	Lydia.torres@austintexas.gov
Department Contact Telephone:	512-972-0329
Project Name:	50% Hydrogen Peroxide Solution, Feed System Installation, and Maintenance Services
Contractor Name:	U.S. Peroxide, LLC dba USP Technologies
Contract Number:	MA 2200 NA180000190
Contract Period:	10/1/2018 – 9/30/2020
Dollar Amount	\$600,000
Extension Options:	Three 12-month options for \$300,000/option
Requisition Number:	RQM 2200 18020200247
Solicitation Type & Number:	IFB 2200 SLW1004
Agenda Item Number:	31
Council Approval Date:	9/20/2018

Thank you for your interest in doing business with the City of Austin. If you have any questions regarding this contract, please contact the person referenced under Department Contact Person.

Sincerely,

Sandy Wirtanen  
Procurement Specialist IV  
City of Austin  
Purchasing Office





Amendment No. 2  
To  
Contract No. NA180000190  
For  
50% Hydrogen Peroxide Solution,  
Feed System Installation, and Maintenance Services  
Between  
U.S. Peroxide , LLC  
dba USP Technologies  
and the  
City of Austin

- 1.0 The City hereby exercises this Unilateral Extension Option for the subject contract. This extension option will be October 1, 2020 through September 30, 2020. Two options will remain.
- 2.0 The total contract amount is increased by \$300,000.00 by this extension period. The total contract authorization is recapped below:

Action	Action Amount	Total Contract Amount
Initial Term: 10/01/2018 – 09/30/2020	\$600,000.00	\$600,000.00
Amendment No. 1: Price Increase of 11% 10/01/2019	\$0.00	\$600,000.00
Amendment No. 2: Option 1 – Unilateral Extension 10/01/2020 – 09/30/2021	\$300,000.00	\$900,000.00

- 3.0 MBE/WBE goals do not apply to this contract.
- 4.0 By signing this Amendment the Contractor certifies that the vendor and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the GSA List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.
- 5.0 All other terms and conditions remain the same.

BY THE SIGNATURES affixed below, this amendment is hereby incorporated into and made a part of the above-referenced contract.

Sign/Date: **Matthew Duree** Digitally signed by Matthew Duree  
Date: 2020 09.16 17:19:30 -05'00'

Matthew Duree  
Procurement Manager  
  
City of Austin  
Purchasing Office  
124 W. 8th Street, Ste. 310  
Austin, Texas 78701





Amendment No. 1  
To  
Contract No. NA180000190  
For  
50% Hydrogen Peroxide Solution,  
Feed System Installation, and Maintenance Services  
Between  
U.S. Peroxide, LLC  
dba USP Technologies  
and the  
City of Austin

- 1.0 The City hereby exercises a price increase of eleven percentage (11%) on the subject contract for Item 1. The price increase is displayed in the table below and will become effective on October 01, 2019.

Item	Description	Unit	Old Price	Modifier	New Price
1	50% Hydrogen Peroxide Solution, all sites and locations: Payment will be made for price per gallon of chemical delivered for all sites and locations. This item includes, but is not limited to, transportation, permits, delivery of chemical, storage tanks, equipment for pumping of chemical, maintenance services, minor adjustments to chemical feed rates, any repairs or replacement of equipment necessary to feed chemical, and remote tank level monitoring per Section 3.10 of the Scope of Work.	Gallon	\$2.54	1.11	\$2.81

- 2.0 The total contract authorization is recapped below:

Action	Action Amount	Total Contract Amount
Initial Term: 10/01/2018 – 09/30/2020	\$600,000.00	\$600,000.00
Amendment No. 1: Price Increase of 11% 10/01/2019	\$0.00	\$600,000.00

- 3.0 MBE/WBE goals do not apply to this contract.
- 4.0 By signing this Amendment the Contractor certifies that the vendor and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the GSA List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.
- 5.0 All other terms and conditions remain the same.

BY THE SIGNATURES affixed below, this amendment is hereby incorporated into and made a part of the above-referenced contract.

Sign/Date: 02/25 10/14/19

Printed Name: Thomas Siller  
Authorized Representative

US Peroxide, LLC  
dba USP Technologies  
900 Circle 75 Parkway, Suite 300  
Atlanta, Georgia 30339  
(404) 352-6070  
[anangano@h2o2.com](mailto:anangano@h2o2.com)

Sign/Date: [Signature]

Matthew Duree  
Procurement Manager

City of Austin  
Purchasing Office  
124 W. 8th Street, Ste. 310  
Austin, Texas 78701

1075-L9



**CONTRACT BETWEEN THE CITY OF AUSTIN ("City")  
AND  
U.S. Peroxide, LLC dba USP Technologies ("Contractor")  
for  
Hydrogen Peroxide Solution, Feed System Installation, and Maintenance Services  
MA 2200 NA180000190**

The City accepts the Contractor's Offer (as referenced in Section 1.1.3 below) for the above requirement and enters into the following Contract.

This Contract is between U.S. Peroxide, LLC dba USP Technologies having offices at Atlanta, GA 30309 and the City, a home-rule municipality incorporated by the State of Texas, and is effective as of the date executed by the City ("Effective Date").

Capitalized terms used but not defined herein have the meanings given them in Solicitation Number IFB 2200 SLW1004.

**1.1 This Contract is composed of the following documents:**

- 1.1.1 This Contract
- 1.1.2 The City's Solicitation, IFB, 2200 SLW1004 including all documents incorporated by reference
- 1.1.3 U.S. Peroxide, LLC dba USP Technologies' Offer, dated June 15, 2018, including subsequent clarifications

**1.2 Order of Precedence.** Any inconsistency or conflict in the Contract documents shall be resolved by giving precedence in the following order:

- 1.2.1 This Contract
- 1.2.2 The City's Solicitation as referenced in Section 1.1.2, including all documents incorporated by reference
- 1.2.3 The Contractor's Offer as referenced in Section 1.1.3, including subsequent clarifications.

**1.3 Term of Contract.** The Contract shall commence upon execution, unless otherwise specified, and shall remain in effect for an initial term of 24 months. The Contract may be extended beyond the initial term for up to three additional 12 month periods at the City's sole option.

- 1.3.1 If the City exercises any extension option, all terms, conditions, and provisions of the Contract shall remain in effect for that extension period, subject only to any economic price adjustment otherwise allowed under the Contract.
- 1.3.2 Upon expiration of the initial term or any period of extension, the Contractor agrees to hold over under the terms and conditions of this Contract for such a period of time as is reasonably necessary for the City to re-solicit and/or complete the deliverables due under the Contract (not to exceed 120 calendar days unless mutually agreed to in writing).
- 1.3.3 This is a 24 month Contract. Prices are firm for the first twelve (12) months.

**1.4 Compensation.** The Contractor shall be paid a total Not-to-Exceed amount of \$600,000 for the initial Contract term and \$300,000 for each extension option as indicated in the Bid Sheet, IFB Section 0600. Payment shall be made upon successful completion of services or delivery of goods as outlined in each individual Delivery Order.

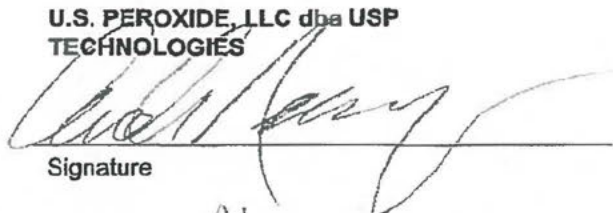
**1.5 Quantity of Work.** There is no guaranteed quantity of work for the period of the Contract and there are no minimum order quantities. Work will be on an as needed basis as specified by the City for each Delivery Order



This Contract (including any Exhibits) constitutes the entire agreement of the parties regarding the subject matter of this Contract and supersedes all prior and contemporaneous agreements and understandings, whether written or oral, relating to such subject matter. This Contract may be altered, amended, or modified only by a written instrument signed by the duly authorized representatives of both parties.

In witness whereof, the parties have caused a duly authorized representative to execute this Contract on the date set forth below.

**U.S. PEROXIDE, LLC dba USP  
TECHNOLOGIES**



Signature

ANDREW NANGANU

Printed Name of Authorized Person

Asst. Secretary

Title

09/29/2018

Date

**CITY OF AUSTIN**



Signature

Sandy Wirtanen

Printed Name of Authorized Person

Procurement Specialist IV

Title

10/1/18

Date





**CITY OF AUSTIN, TEXAS**  
**Purchasing Office**  
**INVITATION FOR BID (IFB)**  
**OFFER SHEET**

**SOLICITATION NO:** IFB 2200 SLW1004

**DATE ISSUED:** May 28, 2018

**REQUISITION NO.:** RQM 2200 18020200247

**COMMODITY CODE:** 88576, 92958, 91392,  
96878, 96892, 97540

**FOR CONTRACTUAL AND TECHNICAL  
ISSUES CONTACT THE FOLLOWING  
AUTHORIZED CONTACT PERSON:**

Sandy Wirtanen  
Procurement Specialist IV

**Phone:** (512) 974-7711

**E-Mail:** sandy.wirtanen@austintexas.gov

Georgia Billela  
Procurement Specialist III

**Phone:** (512) 974-2939

**E-Mail:** georgia.billela@austintexas.gov

**COMMODITY/SERVICE DESCRIPTION:** 50% Hydrogen Peroxide  
Solution, Feed System Installation, and Maintenance Services

**PRE-BID CONFERENCE TIME AND DATE:** June 7, 2018 at 1:30  
PM

**LOCATION:** Webberville Auditorium, 2600 Webberville Rd., 2<sup>nd</sup>  
Floor, Austin, TX 78702

**BID DUE PRIOR TO:** June 19, 2018 at 2:00 PM

**BID OPENING TIME AND DATE:** June 19, 2018 at 3:00 PM

**LOCATION:** MUNICIPAL BUILDING, 124 W 8<sup>th</sup> STREET  
RM 308, AUSTIN, TEXAS 78701

**LIVE BID OPENING ONLINE:**

**For information on how to attend the Bid Opening online, please select  
this link:**

<http://www.austintexas.gov/departments/bid-opening-webinars>

**When submitting a sealed Offer and/or Compliance Plan, use the proper address for the type of service desired,  
as shown below:**

<b>Address for US Mail (Only)</b>	<b>Address for FedEx, UPS, Hand Delivery or Courier Service</b>
City of Austin	City of Austin, Municipal Building
Purchasing Office-Response Enclosed for Solicitation # IFB 2200 SLW1004	Purchasing Office-Response Enclosed for Solicitation # IFB 2200 SLW1004
P.O. Box 1088	124 W 8 <sup>th</sup> Street, Rm 308
Austin, Texas 78767-8845	Austin, Texas 78701
	Reception Phone: (512) 974-2500

**NOTE: Offers must be received and time stamped in the Purchasing Office prior to the Due Date and Time. It is the  
responsibility of the Offeror to ensure that their Offer arrives at the receptionist's desk in the Purchasing Office prior to  
the time and date indicated. Arrival at the City's mailroom, mail terminal, or post office box will not constitute the Offer  
arriving on time. See Section 0200 for additional solicitation instructions.**

**All Offers (including Compliance Plans) that are not submitted in a sealed envelope or container will not be considered.**

**The Vendor agrees, if this Offer is accepted within 120 calendar days after the Due Date, to fully comply in strict accordance with  
the Solicitation, specifications and provisions attached thereto for the amounts shown on the accompanying Offer.**

**SUBMIT 1 ORIGINAL AND 1 ELECTRONIC COPY (USB) OF YOUR RESPONSE**

**\*\*\*SIGNATURE FOR SUBMITTAL REQUIRED ON PAGE 3 OF THIS DOCUMENT\*\*\***



**This solicitation is comprised of the following required sections. Please ensure to carefully read each section including those incorporated by reference. By signing this document, you are agreeing to all the items contained herein and will be bound to all terms.**

SECTION NO.	TITLE	PAGES
0100	STANDARD PURCHASE DEFINITIONS	*
0200	STANDARD SOLICITATION INSTRUCTIONS	*
0300	STANDARD PURCHASE TERMS AND CONDITIONS	*
0400	SUPPLEMENTAL PURCHASE PROVISIONS	9
0500	SPECIFICATION	10
0600	BID SHEET – Must be completed and returned with Offer	2
0605	LOCAL BUSINESS PRESENCE IDENTIFICATION FORM – Complete and return	2
0700	REFERENCE SHEET – Complete and return if required	2
0800	NON-DISCRIMINATION AND NON-RETALIATION CERTIFICATION–Complete and return	2
0805	NON-SUSPENSION OR DEBARMENT CERTIFICATION	*
0810	NON-COLLUSION, NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING CERTIFICATION	*
0815	LIVING WAGES CONTRACTOR CERTIFICATION–Complete, sign and return	1
0835	NONRESIDENT BIDDER PROVISIONS – Complete and return	1
0900	SUBCONTRACTING/SUB-CONSULTING UTILIZATION FORM – Complete & return	1
0905	SUBCONTRACTING/SUB-CONSULTING UTILIZATION PLAN – Complete and return if applicable	3
ATTACHMENT A	EXISTING CHEMICAL FEED SITES AND ESTIMATED FEED RATES	1
ATTACHMENT B	LOCATION MAP	1
ATTACHMENT C	PICTURES OF EACH CHEMICAL FEED SITE	3
ATTACHMENT D	CERTIFICATE OF ANALYSIS	1
ATTACHMENT E	BILL OF LADING	1
ATTACHMENT F	NOTICE OF CHEMICAL DELIVERY	1

**\* Documents are hereby incorporated into this Solicitation by reference, with the same force and effect as if they were incorporated in full text. The full text versions of the \* Sections are available on the Internet at the following online address:**

[http://www.austintexas.gov/financeonline/vendor\\_connection/index.cfm#STANDARDBIDDOCUMENTS](http://www.austintexas.gov/financeonline/vendor_connection/index.cfm#STANDARDBIDDOCUMENTS)

**If you do not have access to the Internet, you may obtain a copy of these Sections from the City of Austin Purchasing Office located in the Municipal Building, 124 West 8<sup>th</sup> Street, Room #308 Austin, Texas 78701; phone (512) 974-2500. Please have the Solicitation number available so that the staff can select the proper documents. These documents can be mailed, expressed mailed, or faxed to you.**





June 15, 2018

VIA: Courier

Ms. Sandy Wirtanen  
Purchasing Office – Response Enclosed  
**City of Austin Municipal Building**  
124 W. 8<sup>th</sup> Street, Room 308  
Austin, TX 78701

RE: Contract #18-B-21, Hydrogen Peroxide

Dear Ms. Wirtanen,

Enclosed please find U.S. Peroxide, LLC dba USP Technologies' submittal in response to the above referenced invitation for bid. We have endeavored to provide a complete submittal in accordance with all bid specifications, including the following documents:

- Fully Executed Bid Forms, Including Price Sheet
- Additional Requested Information
  - Company Background & Qualifications
  - Contact Information
  - Health, Safety & Quality
  - Safety Data Sheet
  - Spill Response Plan
  - Engineering Submittal
  - Material Distribution Points

Since 2009, USP Technologies has demonstrated to the City of Austin that we provide the highest degree of experience, technology and operations capability available in the industry for delivering a reliable and cost effective supply of 50% standard grade hydrogen peroxide, engineered equipment storage and dosing systems and technical applications expertise. Our City of Austin program is managed with a high level of transparency, is carried out according to bid specifications and includes all the resources necessary to ensure the City of Austin's complete satisfaction.

We appreciate the opportunity to conduct business with the City of Austin with respect to submission of this bid. Should you have any questions concerning our submittal, please contact me directly at 404-352-6070 x101.

Sincerely,

Andrew Nangano  
USP Technologies  
Assistant Secretary



The undersigned, by his/her signature, represents that he/she is submitting a binding offer and is authorized to bind the respondent to fully comply with the solicitation document contained herein. The Respondent, by submitting and signing below, acknowledges that he/she has received and read the entire document packet sections defined above including all documents incorporated by reference, and agrees to be bound by the terms therein.

Company Name: U.S. Peroxide, LLC dba USP Technologies

Company Address: 1375 Peachtree Street NE, Suite 300 N

City, State, Zip: Atlanta, GA 30309

Federal Tax ID No. [REDACTED]

Printed Name of Officer or Authorized Representative: Andrew Nangano

Title: Assistant Secretary

Signature of Officer or Authorized Representative: 

Date: 6/15/18

Email Address: anangano@usptechnologies.com

Phone Number: 404-352-6070 x101

**\* Completed Bid Sheet, section 0600 must be submitted with this signed Offer sheet to be considered for award**



**CITY OF AUSTIN**  
**SUPPLEMENTAL PURCHASE PROVISIONS**  
**50% HYDROGEN SOLUTION, FEED SYSTEM INSTALLATION, AND MAINTENANCE SERVICES**  
**SOLICITATION NUMBER: IFB 2200 SLW1004**

The following Supplemental Purchasing Provisions apply to this solicitation:

1. **EXPLANATIONS OR CLARIFICATIONS:** (reference paragraph 5 in Section 0200)

All requests for explanations or clarifications must be submitted in writing to the Purchasing Office by one week prior to the offer closing date by 1:00 PM CST. Any requests should be emailed to [sandy.wirtanen@austintexas.gov](mailto:sandy.wirtanen@austintexas.gov).

2. **INSURANCE:** Insurance is required for this solicitation.

A. **General Requirements:** See Section 0300, Standard Purchase Terms and Conditions, paragraph 32, entitled Insurance, for general insurance requirements.

- i. The Contractor shall provide a Certificate of Insurance as verification of coverages required below to the City at the below address prior to contract execution and within 14 calendar days after written request from the City. Failure to provide the required Certificate of Insurance may subject the Offer to disqualification from consideration for award
- ii. The Contractor shall not commence work until the required insurance is obtained and until such insurance has been reviewed by the City. Approval of insurance by the City shall not relieve or decrease the liability of the Contractor hereunder and shall not be construed to be a limitation of liability on the part of the Contractor.
- iii. The Contractor must also forward a Certificate of Insurance to the City whenever a previously identified policy period has expired, or an extension option or holdover period is exercised, as verification of continuing coverage.
- iv. The Certificate of Insurance, and updates, shall be mailed to the following address:

City of Austin Purchasing Office  
P. O. Box 1088  
Austin, Texas 78767

OR

[PURInsuranceCompliance@austintexas.gov](mailto:PURInsuranceCompliance@austintexas.gov)

B. **Specific Coverage Requirements:** The Contractor shall at a minimum carry insurance in the types and amounts indicated below for the duration of the Contract, including extension options and hold over periods, and during any warranty period. These insurance coverages are required minimums and are not intended to limit the responsibility or liability of the Contractor.

- i. **Worker's Compensation and Employers' Liability Insurance:** Coverage shall be consistent with statutory benefits outlined in the Texas Worker's Compensation Act (Section 401). The minimum policy limits for Employer's Liability are \$100,000 bodily injury each accident, \$500,000 bodily injury by disease policy limit and \$100,000 bodily injury by disease each employee.
  - (1) The Contractor's policy shall apply to the State of Texas and include these endorsements in favor of the City of Austin:
    - (a) Waiver of Subrogation, Form WC420304, or equivalent coverage
    - (b) Thirty (30) days Notice of Cancellation, Form WC420601, or equivalent coverage
- ii. **Commercial General Liability Insurance:** The minimum bodily injury and property damage per occurrence are \$500,000 for coverages A (Bodily Injury and Property Damage) and B (Personal and Advertising Injury).
  - (1) The policy shall contain the following provisions:
    - (a) Contractual liability coverage for liability assumed under the Contract and all other Contracts related to the project.
    - (b) Contractor/Subcontracted Work.
    - (c) Products/Completed Operations Liability for the duration of the warranty period.



**CITY OF AUSTIN**  
**SUPPLEMENTAL PURCHASE PROVISIONS**  
**50% HYDROGEN SOLUTION, FEED SYSTEM INSTALLATION, AND MAINTENANCE SERVICES**  
**SOLICITATION NUMBER: IFB 2200 SLW1004**

- (d) If the project involves digging or drilling provisions must be included that provide Explosion, Collapse, and/or Underground Coverage.
    - (2) The policy shall also include these endorsements in favor of the City of Austin:
      - (a) Waiver of Subrogation, Endorsement CG 2404, or equivalent coverage
      - (b) Thirty (30) days Notice of Cancellation, Endorsement CG 0205, or equivalent coverage
      - (c) The City of Austin listed as an additional insured, Endorsement CG 2010, or equivalent coverage
  - iii. **Business Automobile Liability Insurance:** The Contractor shall provide coverage for all owned, non-owned and hired vehicles with a minimum combined single limit of \$500,000 per occurrence for bodily injury and property damage. Alternate acceptable limits are \$250,000 bodily injury per person, \$500,000 bodily injury per occurrence and at least \$100,000 property damage liability per accident.
    - (1) The policy shall include these endorsements in favor of the City of Austin:
      - (a) Waiver of Subrogation, Endorsement CA0444, or equivalent coverage
      - (b) Thirty (30) days Notice of Cancellation, Endorsement CA0244, or equivalent coverage
      - (c) The City of Austin listed as an additional insured, Endorsement CA2048, or equivalent coverage.
  - C. **Endorsements:** The specific insurance coverage endorsements specified above, or their equivalents must be provided. In the event that endorsements, which are the equivalent of the required coverage, are proposed to be substituted for the required coverage, copies of the equivalent endorsements must be provided for the City's review and approval.
3. **TERM OF CONTRACT:**
- A. The Contract shall commence upon execution, unless otherwise specified, and shall remain in effect for an initial term of 24 months. The Contract may be extended beyond the initial term for up to three additional 12 month periods at the City's sole option. If the City exercises any extension option, all terms, conditions, and provisions of the Contract shall remain in effect for that extension period, subject only to any economic price adjustment otherwise allowed under the Contract.
  - B. Upon expiration of the initial term or any period of extension, the Contractor agrees to hold over under the terms and conditions of this Contract for such a period of time as is reasonably necessary for the City to re-solicit and/or complete the deliverables due under this Contract. Any hold over period will not exceed 120 calendar days unless mutually agreed on by both parties in writing.
  - C. Upon written notice to the Contractor from the City's Purchasing Officer or his designee and acceptance of the Contractor, the term of this contract shall be extended on the same terms and conditions for an additional period as indicated in paragraph A above.
  - D. Prices are firm and fixed for the first 12 months. Thereafter, price changes are subject to the Economic Price Adjustment provisions of this Contract.
4. **QUANTITIES:** The quantities listed herein are estimates for the period of the Contract. The City reserves the right to purchase more or less of these quantities as may be required during the Contract term. Quantities will be as needed and specified by the City for each order. Unless specified in the solicitation, there are no minimum order quantities.
5. **DELIVERY REQUIREMENTS:**
- A. Contractors may request a site visit through the authorized contact person to ensure delivery conditions are acceptable **PRIOR** to submitting a bid. Otherwise, the City will assume the delivery conditions are acceptable to the Contractor submitting a bid.



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- B. If the Contractor changes the trucking company to one that is different than the one listed on the bid sheet, the Contractor must notify the Contact Person or designee, in writing, at least one week prior to any deliveries made by the new company.
- C. Delivery drivers must be fluent in the English language and shall be able to communicate effectively with City staff. This is vital to accepting a load because testing may take place. If compliance cannot be determined, the load may be rejected by the Contact Person or designee.
- D. An individual certified scale receipt indicating the date, the tare and gross weight shall accompany each delivered load. When requested, the Contractor shall provide to the Contact Person or designee weight certificates from scales, within 24 hours, which are checked periodically by the State of Texas. The Contact Person or designee reserves the right to have the trucks weighed by certified City scales.
- E. The City reserves the right to collect a sample and perform tests to determine product specification conformance prior to offloading the delivery. Testing of the sample will occur within seven calendar days. If it is determined the sample does not meet product specifications, the Contact Person or designee will decide if the Contractor will need to remove Hydrogen Peroxide solution from the tanks.
- F. The Contractor shall be responsible for cleanup of any spillage or leakage during transportation and/or on the Plant site due to defective pumping and/or unloading equipment and/or negligence of the driver. Cleanups/repairs shall be completed before the driver leaves the facility, if possible. If an immediate cleanup/repair is not possible, the Contractor shall complete the cleanup/repairs within five business days.
- G. Delivery trucks must be equipped to unload the Hydrogen Peroxide solution into the tanks.

Location:

Contact Person

Austin Water, Collection System Engineering

ATTN: Thomas Corner or Norman Luther

[Thomas.Corner@austintexas.gov](mailto:Thomas.Corner@austintexas.gov)

[Norman.Luther@austintexas.gov](mailto:Norman.Luther@austintexas.gov)

(512) 972-2045 – office

(512) 972-2068 - fax

**DELIVERY LOCATIONS:**

Govalle Junction Box

Govalle Wastewater Treatment Plant

911 Linger Lane

Austin, Texas 78721

Lake Creek Lift Station #59

8601 W Parmer Ln

Austin, Texas, 78729



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- H. It is the responsibility of the Contractor to ensure that there is Hydrogen Peroxide solution in the tank at all times. Delivery is to be made within three business days after an order is placed. The Contractor shall accept orders by phone/fax/email, on an "as needed" basis. No partial shipments or backorders shall be allowed.
- I. The Contractor shall email the City 24 hours in advance of a delivery. Scheduled deliveries shall be between the normal working hours of 7:30 am and 3:00 pm, Monday through Friday. After hours and weekend deliveries may be made with prior notification and approval by the Contact Person or designee on an as needed basis. The Contractor shall be responsible for overtime and call back expenses resulting from spills or emergencies for deliveries conducted after hours and on weekends.
- J. The Contractor shall be responsible for overtime and call back expenses resulting from spills or emergencies for deliveries conducted after hours and on weekends.
- K. The Contractor shall complete delivery by 3:00 p.m. any transferring to the storage tank without demurrage of additional truck standing time charges.
- L. The Contractor may be required to deliver on holidays and weekends, as needed. Orders shall be made in full truckloads only. Deliveries will not be accepted at other times unless scheduled and approved by the Contact Person or designee.
- M. If a truck arrives to deliver on a Saturday, Sunday, holiday, or after 2:00 p.m. (City regular work day) without the prior approval from the Contact Person or designee, the City reserves the right to reject the delivery or the Contractor can decide that the truck will not be unloaded until normal City working hours.
- N. The Contractor shall provide, with each delivery, a Shipping or Delivery Ticket showing the description of each item, quantity, and unit price. Trucks shall be equipped with the correct unloading equipment, hoses and fittings to transfer the product.
- O. A Chemical Delivery Notice shall be submitted to the Contact Person or designee, a minimum four (4) hours prior to delivery.

6. **INVOICES and PAYMENT:** (reference paragraphs 12 and 13 in Section 0300)

- A. Invoices shall contain a unique invoice number and the information required in Section 0300, paragraph 12, entitled "Invoices." Invoices received without all required information cannot be processed and will be returned to the Contractor. In addition, the date delivery was made and location of delivery shall be included in the Invoice. Quantities shown on the invoice must match quantities shown on the Bill of Lading. If there is a discrepancy, the Contractor will issue a new invoice with corrected quantities and updated with the date the invoice was approved by the City.
- B. The Contractor shall provide pricing in terms of price per gallon of chemical delivered. Charges, including freight, mobilization/demobilization, testing and reporting activities, optimization services, maintenance and inspection services, and repairs, shall be ***included in the per gallon bid price.***
- C. Payment Request shall be submitted monthly for all chemicals delivered in the month. The invoice shall clearly show the breakdown of the amount of chemical delivered to each site.
- D. Invoices shall include a completed and signed Chemical Delivery Notice and certified scale receipt for each delivery. The City will pay based on gallons of Hydrogen Peroxide solution as stated in the certificate of analysis received with each load. The City will spot check loads and if there is a discrepancy between the City's results and the certificate of analysis, the City's result will be the one used for payment. If the Contractor disagrees, a third party lab will be retained to run a sample. If the result is closer to the City's result, the Contractor will pay for the analysis. If the result is closer to the Contractor's result, the City will pay.



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Invoices shall be emailed (invoices sent by regular mail may be accepted as backup documentation) by the 5<sup>th</sup> calendar day of each month to the below address:

	City of Austin
Department	Austin Water, Collection System Engineering
Attn:	Thomas Corner or Norman Luther
Address	2600 Webberville Road
City, State Zip Code	Austin, TX 78702
	(512) 972-2045 – office (512) 972-2068 - fax

Upon the agreement of both sides on the content of the invoice, email a finalized invoice to [Thomas.Corner@austintexas.gov](mailto:Thomas.Corner@austintexas.gov) and then mail the invoice to the below address:

- E. Invoices shall include:
- Contractor's name, on a professionally pre-printed, sequentially numbered form
  - Contractor's address and phone number
  - City's contract number and purchase order number
  - Date of delivery
  - Location of delivery including facility name and asset ID number
  - Quantity delivered, if split load indicate quantities delivered to each location
  - Certificate of Weight using certified scales
  - Certificate of Analysis
  - Copy of the Bill of Lading
  - Signed Chemical Delivery form
- F. The Contractor shall keep the AW Project Manager informed of all chemical deliveries in accordance with applicable Sections before each invoice is issued and agree on the quantities prior to submitting the Payment Request to the City.
- G. The Contractor agrees to accept payment by credit card, check or Electronic Funds Transfer (EFT) for all goods and/or services provided under the Contract. The Contractor shall factor the cost of processing credit card payments into the Offer. There shall be no additional charges, surcharges, or penalties to the City for payments made by credit card.

7. **SAMPLES – EXACT REPLICA:**

- A. The Offeror shall submit an exact replica of the goods to be provided per specification section 3.0 upon request. This sample shall be provided within three business days after being requested by the City. The sample shall be not less than one pint of each chemical prior to recommendation of award. The sample shall be accompanied by an SDS and a certificate of analysis and provided in a packed airtight, container.
- B. Send samples to the City at the following address:

City of Austin	
Department	Austin Water, Collection System Engineering
Address	2600 Webberville Road, 2 <sup>nd</sup> Floor
City, State Zip Code	Austin, Texas 78702
Attn:	Thomas Corner or Norman Luther



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- C. All products provided to the City under this solicitation will be evaluated or tested and must meet all requirements of the specification, regardless of whether or not all requirements are to be evaluated or tested.
- D. Samples will be provided at no cost to the City, will be retained by the City, and may be used for use in assuring compliance with materials specifications after award. Failure to supply samples when requested shall subject the Offer to disqualification from consideration for award.
- E. The sample will be tested for compliance with the City specifications. Tests will be performed by the City's laboratory and will include percent soluble ion, percent free acid and percent insoluble matter.
- F. The City reserves the right to conduct sampling analysis during the bid process and throughout the contract period.***

**8. HAZARDOUS MATERIALS:**

- A. If this Solicitation involves hazardous materials, the Offeror shall furnish with the Offer Material Safety Data Sheets (MSDS), (OSHA Form 20), on all chemicals and hazardous materials specifying the generic and trade name of product, product specification, and full hazard information including receiving and storage hazards. Instructions, special equipment needed for handling, information on approved containers, and instructions for the disposal of the material are also required.
- B. Failure to submit the MSDS as part of the Offer may subject the Offer to disqualification from consideration for award.
- C. The MSDS, instructions and information required in paragraph "A" must be included with each shipment under the contract.

**9. LIVING WAGES:**

**The City's Living Wage Program, Rule R161-17.14, is located at:**

<http://www.austintexas.gov/edims/document.cfm?id=277854>

- A. The minimum wage required for all Contractor Employees (and all tiers of Subcontracting) directly assigned to this City Contract is \$14.00 per hour, unless Published Wage Rates are included in this solicitation. In addition, the City may stipulate higher wage rates in certain solicitations in order to assure quality and continuity of service.
- B. The City requires Contractors submitting Offers on this Contract to provide a certification (**see the Living Wages Contractor Certification included in the Solicitation**) with their Offer certifying that all Contractor Employees (and all tiers of Subcontracting) directly assigned to this City Contract will be paid a minimum living wage equal to or greater than \$14.00 per hour. The certification shall include a list of all Contractor Employees (and all tiers of Subcontracting) directly assigned to providing services under the resultant contract including their name and job title. The list shall be updated and provided to the City as necessary throughout the term of the Contract.
- C. The Contractor shall maintain throughout the term of the resultant contract basic employment and wage information for each employee as required by the Fair Labor Standards Act (FLSA).
- D. The Contractor shall provide to the Department's assigned Contract Manager with the first invoice, individual Employee Certifications for all Contractor Employees (and all tiers of Subcontracting) directly assigned to the contract. The City reserves the right to request individual Employee Certifications at any time during the contract term. Employee Certifications shall be signed by each Contractor Employee (and all tiers of Subcontracting) directly assigned to the contract. The Employee Certification form is available on-line at [https://www.austintexas.gov/financeonline/vendor\\_connection/index.cfm](https://www.austintexas.gov/financeonline/vendor_connection/index.cfm).



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- E. Contractor shall submit employee certifications for Contractor Employees (and all tiers of Subcontracting) annually on the anniversary date of contract award with the respective invoice to verify that employees are paid the Living Wage throughout the term of the contract. The Employee Certification Forms shall be submitted for Contractor Employees (and all tiers of Subcontracting) added to the contract and/or to report any employee changes as they occur.
- F. The Department's assigned Contract Manager will periodically review the employee data submitted by the Contractor to verify compliance with this Living Wage provision. The City retains the right to review employee records required in paragraph C above to verify compliance with this provision.

**10. NON-COLLUSION, NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING:**

- A. On November 10, 2011, the Austin City Council adopted Ordinance No. 20111110-052 amending Chapter 2.7, Article 6 of the City Code relating to Anti-Lobbying and Procurement. The policy defined in this Code applies to Solicitations for goods and/or services requiring City Council approval under City Charter Article VII, Section 15 (Purchase Procedures). During the No-Contact Period, Offerors or potential Offerors are prohibited from making a representation to anyone other than the Authorized Contact Person in the Solicitation as the contact for questions and comments regarding the Solicitation.
- B. If during the No-Contact Period an Offeror makes a representation to anyone other than the Authorized Contact Person for the Solicitation, the Offeror's Offer is disqualified from further consideration except as permitted in the Ordinance.
- C. If an Offeror has been disqualified under this article more than two times in a sixty (60) month period, the Purchasing Officer shall debar the Offeror from doing business with the City for a period not to exceed three (3) years, provided the Offeror is given written notice and a hearing in advance of the debarment.
- D. The City requires Offerors submitting Offers on this Solicitation to certify that the Offeror has not in any way directly or indirectly made representations to anyone other than the Authorized Contact Person during the No-Contact Period as defined in the Ordinance. The text of the City Ordinance is posted on the Internet at: <http://www.ci.austin.tx.us/edims/document.cfm?id=161145>

**11. WORKFORCE SECURITY CLEARANCE AND IDENTIFICATION (ID):**

- A. Access to the Austin Water Department building by the Contractor, all subcontractors and their employees will be strictly controlled at all times by the City. Security badges will be issued by the Department for this purpose. The Contractor shall submit a complete list of all persons requiring access to the Austin Water building at least thirty (30) days in advance of their need for access. The City reserves the right to deny a security badge to any Contractor personnel for reasonable cause. The City will notify the Contractor of any such denial no more than twenty (20) days after receipt of the Contractor's submittal.
- B. Where denial of access by a particular person may cause the Contractor to be unable to perform any portion of the work of the contract, the Contractor shall so notify the City's Contract Manager, in writing, within ten (10) days of the receipt of notification of denial.
- C. Contractor personnel will be required to check in at the security desk when entering or leaving the Austin Water building and security badges must be on display at all times when in the building. Failure to do so may be cause for removal of Contractor Personnel from the worksite, without regard to Contractor's schedule. Security badges may not be removed from the premises.
- D. The Contractor shall provide the City's Contract Manager with a list of personnel scheduled to enter the building, seven days in advance. The list shall identify the persons by name, date of birth, driver's license number, the times that they will be inside the building and the areas where they will be working.



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Only persons previously approved by the City for the issuance of security badges will be admitted to the building.

- E. The Contractor shall comply with all other security requirements imposed by the City and shall ensure that all employees and subcontractors are kept fully informed as to these requirements.

12. **ECONOMIC PRICE ADJUSTMENT:**

- A. **Price Adjustments:** Prices shown in this Contract shall remain firm for the first 12 months of the Contract. After that, in recognition of the potential for fluctuation of the Contractor's cost, a price adjustment (increase or decrease) may be requested by either the City or the Contractor on the anniversary date of the Contract or as may otherwise be specified herein. The percentage change between the contract price and the requested price shall not exceed the percentage change between the specified index in effect on the date the solicitation closed and the most recent, non-preliminary data at the time the price adjustment is requested. The requested price adjustment shall not exceed twenty five percent (25%) for any single line item and in no event shall the total amount of the contract be automatically adjusted as a result of the change in one or more line items made pursuant to this provision. Prices for products or services unaffected by verifiable cost trends shall not be subject to adjustment.
- B. **Effective Date:** Approved price adjustments will go into effect on the first day of the upcoming renewal period or anniversary date of contract award and remain in effect until contract expiration unless changed by subsequent amendment.
- C. **Adjustments:** A request for price adjustment must be made in writing and submitted to the other Party prior to the yearly anniversary date of the Contract; adjustments may only be considered at that time unless otherwise specified herein. Requested adjustments must be solely for the purpose of accommodating changes in the Contractor's direct costs. Contractor shall provide an updated price listing once agreed to adjustment(s) have been approved by the parties.
- D. **Indexes:** In most cases an index from the Bureau of Labor Standards (BLS) will be utilized; however, if there is more appropriate, industry recognized standard then that index may be selected.
- i. The following definitions apply:
- (1) **Base Period:** Month and year of the original contracted price (the solicitation close date).
  - (2) **Base Price:** Initial price quoted, proposed and/or contracted per unit of measure.
  - (3) **Adjusted Price:** Base Price after it has been adjusted in accordance with the applicable index change and instructions provided.
  - (4) **Change Factor:** The multiplier utilized to adjust the Base Price to the Adjusted Price.
  - (5) **Weight %:** The percent of the Base Price subject to adjustment based on an index change.
- ii. **Adjustment-Request Review:** Each adjustment-request received will be reviewed and compared to changes in the index(es) identified below. Where applicable:
- (1) Utilize final Compilation data instead of Preliminary data
  - (2) If the referenced index is no longer available shift up to the next higher category index.
- iii. **Index Identification:** Complete table as they may apply.

Weight % or \$ of Base Price: 100%	
Database Name: Bureau of Labor Statistics	
Series ID: PCU325180325180	
<input checked="" type="checkbox"/> Not Seasonally Adjusted	<input type="checkbox"/> Seasonally Adjusted
Geographical Area: National	
Description of Series ID: Other basic inorganic chemical manufacturing	
This Index shall apply to the following items of the Bid Sheet / Cost Proposal: All	



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- E. **Calculation:** Price adjustment will be calculated as follows:

**Single Index:** Adjust the Base Price by the same factor calculated for the index change.

Index at time of calculation
Divided by index on solicitation close date
Equals Change Factor
Multiplied by the Base Rate
Equals the Adjusted Price

- F. If the requested adjustment is not supported by the referenced index, the City, at its sole discretion, may consider approving an adjustment on fully documented market increases.

13. **INTERLOCAL PURCHASING AGREEMENTS:**

- A. The City has entered into Interlocal Purchasing Agreements with other governmental entities, pursuant to the Interlocal Cooperation Act, Chapter 791 of the Texas Government Code. The Contractor agrees to offer the same prices and terms and conditions to other eligible governmental agencies that have an interlocal agreement with the City.
- B. The City does not accept any responsibility or liability for the purchases by other governmental agencies through an interlocal cooperative agreement.

14. **CONTRACT MANAGER:** The following person is designated as Contract Manager, and will act as the contact point between the City and the Contractor during the term of the Contract:

Lydia Rodriguez – Torres, CTCM

Contract Management Specialist III

512-972-0329

Lydia.torres@austintexas.gov

\*Note: The above listed Contract Manager is not the authorized Contact Person for purposes of the **NON-COLLUSION, NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING Provision** of this Section; and therefore, contact with the Contract Manager is prohibited during the no contact period.



**CITY OF AUSTIN  
SCOPE OF WORK  
50% HYDROGEN PEROXIDE SOLUTION, FEED SYSTEM INSTALLATION, AND MAINTENANCE SERVICES  
SOLICITATION NUMBER: IFB 2200 SLW1004**

**1.0 PURPOSE**

The City of Austin ("City") seeks a contract with a qualified Vendor ("Contractor") who can provide 50% Hydrogen Peroxide solution for use in removing Hydrogen Sulfide to prevent odor and corrosion within wastewater collection and treatment systems. Hydrogen Peroxide is currently used at two facilities as shown on Attachments A, B, and C. The Contractor shall provide the chemical, chemical storage tanks, feed systems, and associated installation and maintenance services including all labor, materials, equipment, and supplies. Depending on the needs and availability of funds, the City may expand up to one additional site or remove one site each year. When sites are added or deleted, the City will reimburse the Contractor in according with the terms of the Contract and bid prices.

**2.0 APPLICABLE SPECIFICATIONS**

- 2.1 The Contractor shall ensure that the production, transportation, storage, and application of the Hydrogen Peroxide complies with federal, state and local laws, ordinances, guidelines, and Austin Water ("AW") guidelines for this type of chemical.
- 2.2 ASTM-D1998-15 Polyethylene Upright Storage Tanks.
- 2.3 Environmental Protection Agency (EPA).
- 2.4 Texas Commission on Environmental Quality (TCEQ).
- 2.5 Occupational Safety and Health Administration (OSHA) safety requirements.
- 2.6 Federal Motor Carrier Safety Regulations specifically 49CFR part 383.
- 2.7 City of Austin Ordinances and regulations.
- 2.8 National Electrical Code (NEC), NFPA 70.
- 2.9 National Fire Protection Agency (NFPA), 820.
- 2.10 Underwriters Laboratories Listed manufacturer of Enclosed Industrial Control Panels.
- 2.11 Electrical components of the chemical feed systems shall be installed by Texas-licensed and bonded electricians/Contractors and meet the requirements of the following specifications which form a part of this solicitation:
  - City of Austin Specification 16150 - Raceways, Fittings and Supports
  - City of Austin Specification 16200 – Wires, Conductor and Cable – 600V



**CITY OF AUSTIN  
SCOPE OF WORK  
50% HYDROGEN PEROXIDE SOLUTION, FEED SYSTEM INSTALLATION, AND MAINTENANCE SERVICES  
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**3.0 MATERIAL REQUIREMENTS**

3.1 The Contractor shall provide Hydrogen Peroxide that:

- is an aqueous solution of Hydrogen Peroxide containing a minimum of 50% and maximum of 51% Hydrogen Peroxide, by weight.
- is of the consistency where it will pump, flow, and mix with the wastewater.
- is a clear, colorless solution capable of reducing the dissolved Hydrogen Sulfide concentration in the wastewater to less than 0.1 mg/L S<sup>2-</sup> and reducing the vapor phase Hydrogen Sulfide concentration to less than 5 ppm.
- is fully compatible with storage and feed equipment constructed of high density linear polyethylene, PVC, Teflon, or stainless steel (SS).

3.2 The Contractor shall supply Hydrogen Peroxide delivered to each designated chemical feed site conforming to the specifications below. Any delivery which does not meet these specifications shall be refused and returned to the Contractor.

	Minimum	Maximum
H <sub>2</sub> O <sub>2</sub> Percent %, by weight	50.0	51.0
Specific Gravity at 20° C	1.14	1.26
Density (lb/gal) at 20° C	9.5	10.5
Viscosity (cP) at 20° C	1.11	1.22
pH	1.0	3.0
Appearance	Clear	
Solubility in water	100 %	

3.3 The Contractor shall provide the following documentation to the City for each delivery:

3.3.1 Certificate of Analysis with the following information (*See sample in Attachment D*);

Product Description
Order #
Customer Order #
Customer Address
Concentration weight % solids
Density, lbs/gal
Viscosity, cp

3.3.2 Bill of Lading with the following information (*See sample in Attachment E*);

BOL #
Order #
Date



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Truck #	Trailer #
Gross Truck Weight	
TARE Truck Weight	
Net Truck Weight	
Gallons delivered	
Dry weight delivered	

STATION	GALLONS	DRY WEIGHT
Name	After (quantity)	Quantity
	Before (quantity)	Quantity
Delivered	Quantity	Quantity
Driver Name	Signature	
Receiver Name	Signature	

- 3.4 The Contractor shall provide the Contact Person, or designee, weight certificates from State inspected scales within 24 hours of request by the Contact Person or designee. The Contact Person or designee reserves the right to have the trucks weighed by certified City scales.
- 3.5 The Contractor shall provide a turnkey chemical storage tank and feed system at each designated site designed specifically for a Hydrogen Peroxide feed rate to meet the City's performance requirements. The contractor shall provide the following key components of the chemical storage and feed system with requirements in the following sections:
- Hydrogen Peroxide Storage Tank
  - Chemical Feed Pumps
  - Chemical Fill/Feed Piping
  - Control Panel and Accessories
  - Tank Level Indicator, Leak Monitoring, and Remote Monitoring
- 3.6 Hydrogen Peroxide Storage Tanks
- 3.6.1 The Contractor shall provide a double wall, high-density linear polyethylene Chemical Storage Tank. The double wall shall extend the full straight wall height of the inner tank. All tank materials, parts, and equipment shall be compatible with 50% Hydrogen Peroxide solution and work in the specified location.
- 3.6.2 The inner tank wall thickness shall be rated for 1.9 specific gravity, extra heavy wall, and the overall minimum required wall thickness shall be in accordance with ASTM D1998.
- 3.6.3 The outer wall shall contain between 0.25 - 0.50% ultraviolet stabilizer that is compounded in the resin. No titanium, or carbon based pigments, shall be used.



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- 3.6.4 Double contained storage tanks shall be sized with the containment tank providing 110% capacity of the primary tank. The containment tank shall be sealed to the outer wall of the primary tank to prevent contamination.
- 3.6.5 Tank vents shall comply with current federal, state and local requirements for normal venting of atmospheric tanks. Vent devices shall be designed in accordance with Hydrogen Peroxide industry standards to provide adequate relief in the event of deflagration of the tank contents.
- 3.6.6 Each tank shall have a dedicated fill line. All nozzles attached to the tanks below the full level of the tanks shall be two-flanged style. The nozzles shall incorporate a passivated Type 316 SS standard flange on each side of the tank wall with gaskets. Gaskets shall be of Viton, or equal cross-linked polyethylene. Bolts made of Type 316 SS shall clamp the two flanges together, clamping the gaskets to the tank wall.
- 3.6.7 When requested, the Contractor shall provide recommendations on the size of the chemical storage tank at each location to meet the treatments goals for the site.
- 3.6.8 The Contractor shall label storage tanks in compliance with current federal, state and local requirements. The Contractor shall not transport or deliver chemicals into any tank or vessel which is not properly labelled.
- 3.7 Chemical Feed Pumps
  - 3.7.1 The Contractor shall provide a dosing feed system such as Chemwatch ACS™ (supplied by USP Technologies), VersaDose™ LT (supplied by Evoqua Water Technologies), or City approved equal.
  - 3.7.2 The Contractor shall provide two chemical metering pumps per injection site. The chemical metering pumps shall be motor-driven mechanically actuated multi-diaphragm style pumps. The pumps shall be capable of pumping Hydrogen Peroxide under all operating conditions at the desired dosages.
  - 3.7.3 The pumps shall be sized by the Contractor and capable of continuous and intermittent operation allowing volume adjustments to meet the minimum and maximum chemical dosing requirements for the intended wastewater flow.
  - 3.7.4 The pumps shall be capable of being run locally with a scheduler running 24 set points per day seven distinct days.
- 3.8 Chemical Fill/Feed Piping
  - 3.8.1 All chemical feed piping, shall be Type 316 SS piping or other approved material suitable for above ground installation and compatible with Hydrogen Peroxide.
  - 3.8.2 Fittings, valves and seals shall be compatible with Hydrogen Peroxide in the regular operation, maintenance, and cleaning of the chemical feed system.



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- 3.8.3 Suction, discharge, and injection pipe and tubing shall be passivated Type 304L and/or Type 316 SS. All components (pipe and tube) in the transfer system shall have a minimum wall thickness of 0.035". Passivation procedures shall be in accordance to Hydrogen Peroxide industry standards.
- All pipe, 1" and smaller, shall conform to ASTM A312/A312M; Type 316 SS, welded (seamless), schedule 40S, threaded. All associated pipe fittings, 1" and smaller, shall conform to ASTM A182/A182M Rev C; Grade F316, forged, threaded.
  - All tubing, 3/4" and smaller, shall conform to ASTM A312/A312M; Type 304L SS, welded (seamless), soft. All associated pipe fittings, 1/2" and smaller, shall conform to ASTM A182/A182M Rev C; Grade F304, forged, flareless compression type
- 3.8.4 Hand valves within the system shall provide safety isolation, operational functionality, and isolation of pump components for inspection and repair. All hand valves shall conform to Federal Specification WW-V-35C, Type 2, Class A, Style 3; Type 316 SS uni-body ball valve, with vented ball, threaded – Conbraco Ind., Apollo series Saturn ball valve, or equivalent.
- 3.8.5 Pressure relief valves (PRVs) shall provide adequate venting in areas of the transfer system where peroxide can be confined. The transfer system shall vent through the pressure relief devices on the tank and the backpressure valve on the pump unit during normal operating conditions. Redundant PRVs shall be Type 316 SS inline check valves with a fixed cracking pressure of 100 psi, threaded – Swagelok CP Series, or equivalent.
- 3.8.6 Gaskets shall be of virgin Viton, or Garlock Style 3545 Gylon. O-rings shall be virgin Viton. Pipe compound shall be Loctite 567. Anti-galling compounds shall be a Chlorotrifluoro-ethylene Polymer, suitable for the site requirements, and other metals present.
- 3.8.7 All PVC pipe must be protected from UV exposure.
- 3.9 Control Panel and Accessories
- 3.9.1 Control Panel shall be an Underwriters Laboratories Listed manufacturer of Enclosed Industrial Control Panels.
- 3.9.2 Control Panel shall be housed in a NEMA 4X rated electrical enclosure(s).
- 3.9.3 Control Panel and Accessories shall contain the following components at a minimum in one or more control panels as necessary:
- Main Power Disconnect
  - PLC scheduler for the feed pump running twenty four (24) set points per day seven (7) distinct days
  - Pump H/O/A Selector Switch
  - Mixer ON/OFF Selector Switch
  - Tank level indicator (level of amount of chemical in the tank)



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3.10 Tank Level Indicator, Leak Monitoring, and Remote Monitoring

3.10.1 The Contractor shall provide a measuring device that can measure the Hydrogen Peroxide liquid level in the tank at all times.

3.10.2 The Contractor shall provide telemetry and associated accessories to allow for remote web based monitoring of tank level.

3.10.3 Remote monitoring shall be web accessible, secure, and password protected to allow the Contractor and City to monitor the level in the tank for each site.

3.10.4 Contractor shall include remote monitoring for detection of chemical leaks or spills. The monitor shall be capable of alarming and notifying the contractor who shall respond and investigate as outlined in section 4.6.

3.10.5 Chemical feed tanks shall be incorporated with flanges to allow for the installation of the level indicator by the Contractor.

3.11 Hydrogen Sulfide (H<sub>2</sub>S) Remote Monitoring

3.11.1 The Contractor shall provide continuous remote Hydrogen Sulfide (H<sub>2</sub>S) monitoring in the downstream manhole of chemical deliveries for each selected chemical feed site. Item includes installation, calibration, telemetry, and associated accessories to allow for remote web based monitoring of Hydrogen Sulfide (H<sub>2</sub>S) levels.

3.11.2 Hydrogen Sulfide (H<sub>2</sub>S) monitoring devices shall be installed in accordance with the manufacturer's written instructions and calibrated within the designated timeframes.

3.11.3 Remote monitoring shall be web accessible, secure, and password protected to allow the Contractor and City staff to monitor Hydrogen Sulfide (H<sub>2</sub>S) in the downstream manhole for each selected site.

**4.0 CONTRACTOR AND OPERATIONAL REQUIREMENTS**

4.1 The Contractor shall provide all labor, chemical, chemical metering pumps, tubing, control panels and accessories necessary to supply Hydrogen Peroxide at the sites owned and operated by the City.

4.2 The Contractor shall examine the physical and site conditions of each of the chemical metering sites. The Contractor shall be responsible for the selection and determination of the appropriate chemical metering pumps, control, and accessories necessary to properly feed chemicals to match site and system conditions.

4.3 The Contractor shall provide qualified and trained personnel with relevant field experience to supply chemical, operate, maintain, inspect, and be responsible for the safe, clean delivery of chemical for each chemical feed location.



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- 4.4 The Contractor shall be responsive to the needs and operational concerns of the City. Flow rates and pump profiles may be modified in response to changes in wastewater flows, characteristics, changes to Hydrogen Sulfide monitoring, or odor complaints.
- 4.5 The Contractor shall perform routine maintenance services for all chemical metering sites to maintain proper feeding of chemical and at a minimum when chemical is delivered to the site. Routine and preventative maintenance shall include:
- Checking operation of equipment and verifying equipment operation, as necessary
  - Restoring or replacing any defective or non-performing equipment
  - Control system alarms and diagnostic problems
  - Pump profiling/calibration
  - Adjustments to feed rates
- All repairs and replacements of the tanks, components in chemical metering pumps, including the pumps themselves, is considered as part of the base bid and shall not be applicable for any additional payment.
- 4.6 The Contractor shall respond to emergencies and chemical spills immediately upon discovery or within four hours from notification by the City. The Contractor is responsible for immediately notifying the City of a chemical spill. These notification requirements and emergency contact information shall be incorporated into a Spill Response Plan to be submitted at kick off meeting. The Contractor shall provide parts and components for repairs or performance issues.
- 4.7 The Contractor shall be capable of responding to any emergency or priority maintenance issue in less than four hours from notification.
- 4.8 The Contractor of this material shall be recognized and established a minimum of three years in the field of wastewater odor control. The Contractor must provide a list of five references currently using the material with services for control of Hydrogen Sulfide and other compounds. The list shall contain contact names, phone numbers, email addresses, and physical addresses. At least three of these references must have used the material and services for three or more years. Also, at least two references must be from utilities providing wastewater service to 100,000 customers or more. This list (Section 0700) shall be submitted with the bid.
- 4.9 The Contractor shall have a material distribution terminal within 200 miles of downtown Austin from which product can be shipped. Supplier shall also have an alternate distribution terminal available in the case the primary one is not available. The addresses of these facilities must be provided with the bid.
- 4.10 Contractors shall include the following information with their bid:
- 4.10.1 Company background/history and qualifications.
- 4.10.2 Reference list.
- 4.10.3 Names and contact phone numbers for management and field supervisors.



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- 4.10.4 Contractor's Health and Safety Plan including confined space entry information, hand washing and sanitizing procedures for field personnel.
- 4.10.5 Safety Data Sheet for the material, showing the CAS number of the material.
- 4.10.6 Spill Response Plan as detailed in Section 4.6
- 4.10.7 A complete Equipment Engineering submittal with the bid that details the equipment to be provided.
- 4.10.8 List of material distribution points.
- 4.11 City's Contact Person  
Collection System Engineering  
ATTN: Thomas Corner, PE  
Austin Water, Collection System Engineering  
2600 Webberville Road  
Austin, TX 78702  
(512) 972-2045 – office  
(512) 972-2068 – fax
- 4.12 The Contractor shall call the Contact Person to schedule a kick-off meeting within 5 calendar days of contract execution to discuss this contract, delivery schedule, and requirements.
- 4.13 Chemical Deliveries - The Contractor shall have an inventory control program to monitor tank levels to insure that chemical dosage is not impacted due to lack to delivery. The Contractor shall monitor the tank levels on routine basis and coordinate with the Contact Person or designee for orders.
- 4.14 The Contractor shall be responsible for informing the Contractor's employees and subcontractor personnel of the City's policies and requirements with regard to safety and access.
- 4.15 The Contractor will be responsible for property damage or interruption to wastewater services resulting from the activities of Contractor's employees or subcontractor employees.
- 4.16 Tobacco use is not permitted while on City property. Tobacco includes cigarettes, cigars, chewing tobacco, snuff, pipes, and electronic cigarettes. The Contractor shall be responsible for informing the Contractor's employees and subcontractors of this policy.

**5.0 CONTRACTOR OPTIMIZATION SERVICES**

- 5.1 The Contractor's chemical feed system shall help optimize the feed rates to meet the treatment goals. The City's target performance goals as measured in the downstream manhole are:
- Atmospheric Hydrogen Sulfide ( $H_2S$ ) gases less than 5 ppm
  - Dissolved sulfides in the wastewater less than 0.1 mg/L  $S^{2-}$  solution
  - Residual Hydrogen Peroxide ( $H_2O_2$ ) in the wastewater less than 10 mg/L



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Estimated feed rates for each site are shown in Attachment A. It is noted that each site is unique and that there are some instances when these goals may be set higher or lower by the City.

- 5.2 The Contractor shall make minor adjustments to chemical feed rates based upon remote H<sub>2</sub>S monitoring, seasonal temperatures, and historic data to make efficient use of the chemical budget. Any adjustments needed greater than 10% will require review and approval of the City. The Contractor will be notified in writing.

**6.0 SAFETY**

- 6.1 The Contractor shall follow all applicable OSHA (Occupational and Safety Health Administration) rules for all tasks performed during this contract. The Contractor shall also follow industry standard safety procedures and other safety practices for all work performed under this contract. The Contractor shall be responsible for the safety of their employees and any subcontractors at all times. In addition, the Contractor and any subcontractors shall provide a safe environment for the driving public and citizens during the Contractor's activities.
- 6.2 The Contractor shall prepare and submit a Health and Safety Plan with their bid which includes confined space entry information, hand washing, and sanitizing procedures for field personnel. The City will not accept any liability or release the Contractor from any safety responsibilities. The Contractor is responsible for adherence to their Health and Safety Plan throughout the life of the contract.
- 6.3 The Contractor shall provide, on or before the date of each delivery of hazardous material, a "Safety Data Sheet" ("SDS") in electronic form as required under Texas Health & Safety Code, Sec. 502.006. Each SDS provided shall indicate the CAS number and bear the date when it was last revised. SDS sheets shall be sent to the following City email address:  
[awumsds@austintexas.gov](mailto:awumsds@austintexas.gov)

**7.0 CITY RESPONSIBILITIES**

- 7.1 The City will provide at the dosing site:
- Water for the safety eyewash and shower. The Contractor shall provide the safety eyewash and shower equipment and necessary plumbing to connect to the City water supply.
  - A 120 volt, 20 amp electrical service and/or 480V, 3 phase, 60Hz or 230 volt of power source with a local disconnect at each feed location.
  - A pad suitable for the tank and dosing system
  - Access to the site.
- 7.2 The City reserves the right to test the Contractor's product prior to executing contract award or any time during the contract period.
- 7.3 The City reserves the right to split deliveries between two or more locations, at no additional cost to the City.
- 7.4 The City reserves the right to add or delete locations as deemed necessary.



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**8.0 SECURITY**

- 8.1 Due to developments in national security, AW is required to know who is delivering bulk chemicals and needs to ensure orders are accurate. The Contractor shall FAX a completed Notice of Chemical Delivery (Attachment F) to the Contact Person or designee within four business hours prior to dispatching the driver for delivery. The driver must provide a photo ID (any state) to the Contact Person or designee, no exceptions.
- 8.2 Transportation of Hazardous Material to a City location must be in compliance with the Federal Motor Carrier Safety Regulations, specifically 49CFR part 383 which governs commercial driver license standards requirements and penalties. In accordance with this regulation, delivery driver shall present a Class C CDL with an H or an X endorsement at the time of delivery.
- 8.3 Hazardous Material is defined under 49 CFR part 383.5 as: Any material that has been designated as hazardous referencing 49 U.S.C. 5103 and is required to be placarded under subpart F of 49 CFR Subpart F, Part 172 or any quantity of a material listed as a select agent or toxin in 42 CFR part 73.



**CITY OF AUSTIN  
BID SHEET  
HYDROGEN PEROXIDE SOLUTION, FEED SYSTEM INSTALLATION, AND MAINTENANCE SERVICES  
SOLICITATION NUMBER: IFB 2200 SLW1004**

**Special Instructions:** Offerors must use this Bid Sheet to submit pricing. Be advised that altering the bid sheet or taking exceptions to any portion of the solicitation may jeopardize acceptance of your Offer.

The quantities noted below are estimates and not a guarantee of actual volume. The City does not guarantee the purchase of the quantities listed, actual purchases may be more or less. Quantities are provided as a guide based on historical or anticipated usage. Order quantities will be as-needed and specified by the City for each order.

A bid of "0" (zero) will be interpreted by the City as a no-charge (free) item and the City will not expect to pay for that item. A bid of "no bid" or no response (space left blank) will be interpreted by the City that the Offeror does not wish to bid on that item. Be advised, a "no bid" or no response may be considered as non-responsive and may result in disqualification of the bid.

Prices offered on the bid sheet shall be all inclusive of fees not expressly allowed in the scope of work. The Offeror shall not charge separately for administrative, overhead, per diem, and shipping or transportation costs (travel time, fuel surcharges, mileage, stop-fee, etc.) to deliver services or items to the Austin, Texas area. The Offeror shall provide all tools, labor, travel, and equipment necessary to perform the services required under this contract.

The City reserves the right to award a single contract based on overall low cost or multiple awards based on individual or categories/groups of specific line items, cost, or any criteria or combination deemed most advantageous to the City.

ITEM NO.	ITEM DESCRIPTION	ESTIMATED ANNUAL QUANTITY	UNIT OF MEASURE	UNIT PRICE	EXTENDED PRICE
1	50% Hydrogen Peroxide Solution, all sites and locations: Payment will be made for price per gallon of chemical delivered for all sites and locations. This item includes, but is not limited to, transportation, permits, delivery of chemical, storage tanks, equipment for pumping of chemical, maintenance services, minor adjustments to chemical feed rates, any repairs or replacement of equipment necessary to feed chemical, and remote tank level monitoring per Section 3.10 of the Scope of Work	100,000	Gallon	\$ 2.54	\$ 254,000.00
2	Remote Hydrogen Sulfide (H2S) Monitoring as outlined in Section 3.11 per site for a time duration of one year. Location and number sites monitored may change each time period depending upon customer and business needs.	2	Site	\$ 1,900.00	\$ 3,800.00
3	Addition of a Chemical Feed Site, per site. Lump sum payment for adding a new chemical feed site as requested by the City. This item includes, but is not limited to performing background testing, minor site preparation, chemical feed pumps, piping, control panel, start-up and testing, and other required accessories to insure the successful installation of the chemical feed system at the site. Any site added would be located within the City of Austin wastewater collection system.	1	Site	\$ -	\$ -
4	Deletion of a Chemical Feed site Deletion of a Chemical Feed site, per site. Lump sum payment for deleting an existing chemical feed site as requested by the City. This item includes, but is not limited to, removing existing chemical feed pumps, piping, control panel, and accessories and minor site restoration. Only sites currently feeding chemical would be eligible for this bid item.	1	Site	\$ -	\$ -
<b>TOTAL EXTENDED PRICE:</b>				<b>\$</b>	<b>257,800.00</b>



Please check the boxes below as confirmation.

<input checked="" type="checkbox"/>	Offer Sheet - required
<input checked="" type="checkbox"/>	Bid Sheet (Section 0600) - required
<input checked="" type="checkbox"/>	Local Business Presence Identification Form (Section 0605) - if applicable
<input checked="" type="checkbox"/>	Reference Sheet (Section 0700) - required
<input checked="" type="checkbox"/>	Non-Discrimination Certification (Section 0800) - required
<input checked="" type="checkbox"/>	Living Wages Contract Certification (Section 0815) - required
<input checked="" type="checkbox"/>	Nonresident Bidder Provisions (Section 0835)- required
<input checked="" type="checkbox"/>	No Goals Form & No Goals Utilization Plan (Section 0900) - required
<input type="checkbox"/>	Subcontracting/Sub-Consulting ("Subcontractor") Utilization Plan - if applicable
<input checked="" type="checkbox"/>	Submittals listed in Section 0500 Scope of Work
<input type="checkbox"/>	I UNDERSTAND THAT FAILURE TO SUBMIT THE COMPLETED FORMS ABOVE MAY RESULT IN DISQUALIFICATION OF MY BID
<input type="checkbox"/>	I UNDERSTAND THAT SUBMITTING WITH MY BID ANY CLARIFICATION STATEMENTS, QUALIFYING STATEMENTS, AND/OR EXCEPTIONS TO THE CITY'S TERMS AND CONDITIONS MAY RESULT IN DISQUALIFICATION OF MY BID

DELIVERY TERM: FOB Destination, Freight Pre-Paid and Allowed

TRUCKING COMPANY TO BE USED: Quality Carriers

VENDOR NAME: U.S. Peroxide, LLC dba USP Technologies

VENDOR EMAIL ADDRESS: anangano@usptechnologies.com



# NOT APPLICABLE TO USP TECHNOLOGIES

## **Section 0605: Local Business Presence Identification**

A firm (Offeror or Subcontractor) is considered to have a Local Business Presence if the firm is headquartered in the Austin Corporate City Limits, or has a branch office located in the Austin Corporate City Limits in operation for the last five (5) years, currently employs residents of the City of Austin, Texas, and will use employees that reside in the City of Austin, Texas, to support this Contract. The City defines headquarters as the administrative center where most of the important functions and full responsibility for managing and coordinating the business activities of the firm are located. The City defines branch office as a smaller, remotely located office that is separate from a firm's headquarters that offers the services requested and required under this solicitation.

**OFFEROR MUST SUBMIT THE FOLLOWING INFORMATION FOR EACH LOCAL BUSINESS (INCLUDING THE OFFEROR, IF APPLICABLE) TO BE CONSIDERED FOR LOCAL PRESENCE.**

*NOTE: ALL FIRMS MUST BE IDENTIFIED ON THE MBE/WBE COMPLIANCE PLAN OR NO GOALS UTILIZATION PLAN (REFERENCE SECTION 0900).*

**\*USE ADDITIONAL PAGES AS NECESSARY\***

### **OFFEROR:**

Name of Local Firm	N/A	
Physical Address	N/A	
Is your headquarters located in the Corporate City Limits? (circle one)	Yes	No
or		
Has your branch office been located in the Corporate City Limits for the last 5 years?	Yes	No
Will your business be providing additional economic development opportunities created by the contract award? (e.g., hiring, or employing residents of the City of Austin or increasing tax revenue?)	Yes	No

### **SUBCONTRACTOR(S):**

Name of Local Firm	N/A	
Physical Address	N/A	
Is your headquarters located in the Corporate City Limits? (circle one)	Yes	No
or		
Has your branch office been located in the Corporate City Limits for the last 5 years	Yes	No



# NOT APPLICABLE TO USP TECHNOLOGIES

Will your business be providing additional economic development opportunities created by the contract award? (e.g., hiring, or employing residents of the City of Austin or increasing tax revenue?)	Yes	No

## SUBCONTRACTOR(S):

Name of Local Firm		
Physical Address		
Is your headquarters located in the Corporate City Limits? (circle one)	Yes	No
or		
Has your branch office been located in the Corporate City Limits for the last 5 years	Yes	No
Will your business be providing additional economic development opportunities created by the contract award? (e.g., hiring, or employing residents of the City of Austin or increasing tax revenue?)	Yes	No



**Section 0700: Reference Sheet**Responding Company Name U.S. Peroxide, LLC dba USP Technologies

The City at its discretion may check references in order to determine the Offeror's experience and ability to provide the products and/or services described in this Solicitation. The Offeror shall furnish at least 5 complete and verifiable references. References shall consist of customers to whom the offeror has provided the same or similar services within the last 5 years. References shall indicate a record of positive past performance.

1. Company's Name San Antonio Water & Sewer  
Name and Title of Contact Temple Williamson, Dos Rios Superintendent  
Project Name SAWS Dos Rios WRC Full Service H2S Control Program  
Present Address 3495 Valley Road  
City, State, Zip Code San Antonio, TX 78221  
Telephone Number ( 713 ) 299-8758 Fax Number (      ) N/A  
Email Address temple.williamson@saws.org
  
2. Company's Name JEA, Jacksonville, FL  
Name and Title of Contact Ryan R. Popko, Environmental Manager  
Project Name Full Service Odor & Corrosion Control Program  
Present Address 4215 Talleyrand Avenue  
City, State, Zip Code Jacksonville, FL 32206  
Telephone Number ( 904 ) 665-8515 Fax Number (      ) N/A  
Email Address popkrr@jea.com
  
3. Company's Name Trinity River Authority  
Name and Title of Contact Bill Cyrus, Manager, Technical Services  
Project Name Full-service PRI-SC Program on the Major Trunkline  
Present Address 6500 W. Singleton Blvd.  
City, State, Zip Code Dallas, TX 75212  
Telephone Number (972 ) 331-4309 Fax Number (      ) N/A  
Email Address cyrusb@trinityra.org



4. Company's Name City of San Diego, CA  
Name and Title of Contact Carlos Nunez, Process Control Supervisor  
Project Name Pt. Loma WWTP Full Service Odor & Corrosion Control  
Present Address 1902 Gatchell Road  
City, State, Zip Code San Diego, CA 92106  
Telephone Number ( 619 ) 221-8771 Fax Number ( ) N/A  
Email Address cnunez@sandiego.gov

5. Company's Name City of Springfield, MO  
Name and Title of Contact Brian Wirth, Plant Superintendent  
Project Name Southwest WWTP PRI-SC Full Service Program  
Present Address 3301 S. FF Highway  
City, State, Zip Code Springfield, MO 65807  
Telephone Number ( 417 ) 891-1600 x121 Fax Number ( ) N/A  
Email Address bwirth@springfieldmo.gov



**City of Austin, Texas**

**Section 0800**

**NON-DISCRIMINATION AND NON-RETALIATION CERTIFICATION**

**City of Austin, Texas**

**Equal Employment/Fair Housing Office**

To: City of Austin, Texas,

I hereby certify that our firm complies with the Code of the City of Austin, Section 5-4-2 as reiterated below, and agrees:

- (1) Not to engage in any discriminatory employment practice defined in this chapter.
- (2) To take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without discrimination being practiced against them as defined in this chapter, including affirmative action relative to employment, promotion, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rate of pay or other forms of compensation, and selection for training or any other terms, conditions or privileges of employment.
- (3) To post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Equal Employment/Fair Housing Office setting forth the provisions of this chapter.
- (4) To state in all solicitations or advertisements for employees placed by or on behalf of the Contractor, that all qualified applicants will receive consideration for employment without regard to race, creed, color, religion, national origin, sexual orientation, gender identity, disability, sex or age.
- (5) To obtain a written statement from any labor union or labor organization furnishing labor or service to Contractors in which said union or organization has agreed not to engage in any discriminatory employment practices as defined in this chapter and to take affirmative action to implement policies and provisions of this chapter.
- (6) To cooperate fully with City and the Equal Employment/Fair Housing Office in connection with any investigation or conciliation effort of the Equal Employment/Fair Housing Office to ensure that the purpose of the provisions against discriminatory employment practices are being carried out.
- (7) To require of all subcontractors having 15 or more employees who hold any subcontract providing for the expenditure of \$2,000 or more in connection with any contract with the City subject to the terms of this chapter that they do not engage in any discriminatory employment practice as defined in this chapter

For the purposes of this Offer and any resulting Contract, Contractor adopts the provisions of the City's Minimum Standard Non-Discrimination and Non-Retaliation Policy set forth below.

**City of Austin**

**Minimum Standard Non-Discrimination and Non-Retaliation in Employment Policy**

As an Equal Employment Opportunity (EEO) employer, the Contractor will conduct its personnel activities in accordance with established federal, state and local EEO laws and regulations.

The Contractor will not discriminate against any applicant or employee based on race, creed, color, national origin, sex, age, religion, veteran status, gender identity, disability, or sexual orientation. This policy covers all aspects of employment, including hiring, placement, upgrading, transfer, demotion, recruitment, recruitment advertising, selection for training and apprenticeship, rates of pay or other forms of compensation, and layoff or termination.



The Contractor agrees to prohibit retaliation, discharge or otherwise discrimination against any employee or applicant for employment who has inquired about, discussed or disclosed their compensation.

Further, employees who experience discrimination, sexual harassment, or another form of harassment should immediately report it to their supervisor. If this is not a suitable avenue for addressing their complaint, employees are advised to contact another member of management or their human resources representative. No employee shall be discriminated against, harassed, intimidated, nor suffer any reprisal as a result of reporting a violation of this policy. Furthermore, any employee, supervisor, or manager who becomes aware of any such discrimination or harassment should immediately report it to executive management or the human resources office to ensure that such conduct does not continue.

Contractor agrees that to the extent of any inconsistency, omission, or conflict with its current non-discrimination and non-retaliation employment policy, the Contractor has expressly adopted the provisions of the City's Minimum Non-Discrimination Policy contained in Section 5-4-2 of the City Code and set forth above, as the Contractor's Non-Discrimination Policy or as an amendment to such Policy and such provisions are intended to not only supplement the Contractor's policy, but will also supersede the Contractor's policy to the extent of any conflict.

UPON CONTRACT AWARD, THE CONTRACTOR SHALL PROVIDE THE CITY A COPY OF THE CONTRACTOR'S NON-DISCRIMINATION AND NON-RETALIATION POLICIES ON COMPANY LETTERHEAD, WHICH CONFORMS IN FORM, SCOPE, AND CONTENT TO THE CITY'S MINIMUM NON-DISCRIMINATION AND NON-RETALIATION POLICIES, AS SET FORTH HEREIN, OR THIS NON-DISCRIMINATION AND NON-RETALIATION POLICY, WHICH HAS BEEN ADOPTED BY THE CONTRACTOR FOR ALL PURPOSES WILL BE CONSIDERED THE CONTRACTOR'S NON-DISCRIMINATION AND NON-RETALIATION POLICY WITHOUT THE REQUIREMENT OF A SEPARATE SUBMITTAL.

**Sanctions:**

Our firm understands that non-compliance with Chapter 5-4 and the City's Non-Retaliation Policy may result in sanctions, including termination of the contract and suspension or debarment from participation in future City contracts until deemed compliant with the requirements of Chapter 5-4 and the Non-Retaliation Policy.

**Term:**

The Contractor agrees that this Section 0800 Non-Discrimination and Non-Retaliation Certificate of the Contractor's separate conforming policy, which the Contractor has executed and filed with the City, will remain in force and effect for one year from the date of filing. The Contractor further agrees that, in consideration of the receipt of continued Contract payment, the Contractor's Non-Discrimination and Non-Retaliation Policy will automatically renew from year-to-year for the term of the underlying Contract.

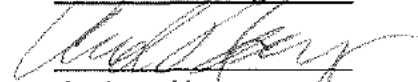
Dated this 15th day of June, 2018

CONTRACTOR

Authorized  
Signature

Title

USP Technologies



Andrew Nangano  
Assistant Secretary



**Section 0815: Living Wages Contractor Certification**

Pursuant to the Living Wages provision (reference Section 0400, Supplemental Purchase Provisions) the Contractor is required to pay to all employees of the Prime Contractor and all tiers of subcontractors directly assigned to this City contract a minimum Living Wage equal to or greater than \$14.00 per hour.

- (1) The below listed individuals are all known employees of the Prime Contractor and its subcontractors who are directly assigned to this contract, and all are compensated at wage rates equal to or greater than \$14.00 per hour:

Employee Name	Employer	Prime or Sub	Your Normal Rate	Employee Job Title
Eric Mehr	USP	Prime	>\$14/hr	Program Mgr
Phillip Rowland	USP	Prime	>\$14/hr	App. Specialist
Troy Adams	USP	Prime	>\$14/hr	App. Spec. (B/u)
Joshua Austin	USP	Prime	>\$14/hr	Field Svc. Tech.
Ricky Joseph	USP	Prime	>\$14/hr	Logistics Spec.
Greg Kubik	USP	Prime	>\$14/hr	Project Manager

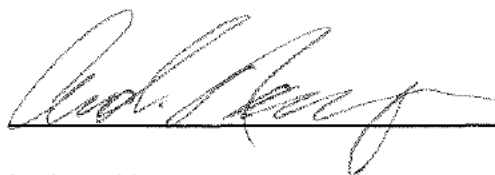
- (2) All future employees of both the Prime Contractor and all tiers of subcontractors directly assigned to this Contract will be paid a minimum Living Wage equal to or greater than \$14.00 per hour.
- (3) Our firm will not retaliate against any employee of either the Prime Contractor or any tier of subcontractors claiming non-compliance with the Living Wage provision.

A Prime Contractor or subcontractor that violates this Living Wage provision shall pay each of its affected employees the amount of the deficiency for each day the violation continues. Willful or repeated violations of the provision by either the Prime Contractor or any tier of subcontractor, or fraudulent statements made on this certification, may result in termination of this Contract for Cause, subject the violating firm to possible suspension or debarment, or result in legal action.

I hereby certify that all the listed employees of both the Prime Contractor and all tiers of subcontractors who are directly assigned to this contract are paid a minimum Living Wage equal to or greater than \$14.00 per hour.

Contractor's Name: U.S. Peroxide, LLC dba USP Technologies

Signature of Officer  
or Authorized  
Representative:



Date: 6/15/18

Printed Name:

Andrew Nangano

Title

Assistant Secretary



**Section 0835: Non-Resident Bidder Provisions**

Company Name U.S. Peroxide, LLC dba USP Technologies

- A. Bidder must answer the following questions in accordance with Vernon's Texas Statutes and Codes Annotated Government Code 2252.002, as amended:

Is the Bidder that is making and submitting this Bid a "Resident Bidder" or a "non-resident Bidder"?

Answer: Non-resident Bidder

- (1) Texas Resident Bidder- A Bidder whose principle place of business is in Texas and includes a Contractor whose ultimate parent company or majority owner has its principal place of business in Texas.  
(2) Nonresident Bidder- A Bidder who is not a Texas Resident Bidder.

- B. If the Bidder is a "Nonresident Bidder" does the state, in which the Nonresident Bidder's principal place of business is located, have a law requiring a Nonresident Bidder of that state to bid a certain amount or percentage under the Bid of a Resident Bidder of that state in order for the nonresident Bidder of that state to be awarded a Contract on such bid in said state?

Answer: No Which State: Georgia

- C. If the answer to Question B is "yes", then what amount or percentage must a Texas Resident Bidder bid under the bid price of a Resident Bidder of that state in order to be awarded a Contract on such bid in said state?

Answer: N/A



**Section 0900: SUBCONTRACTING/SUB-CONSULTING UTILIZATION FORM**



**MINORITY- AND WOMEN-OWNED BUSINESS ENTERPRISE (MBE/WBE)  
PROCUREMENT PROGRAM  
Subcontracting/Sub-Consulting ("Subcontractor") Utilization Form**

SOLICITATION NUMBER: IFB 2200 SLW1004

SOLICITATION TITLE: **Hydrogen Peroxide Solution, Feed System Installation & Maintenance Services**

In accordance with the City of Austin's Minority and Women-Owned Business Enterprises (M/WBE) Procurement Program (Program), Chapters 2-9A/B/C/D of the City Code and M/WBE Program Rules, this Solicitation was reviewed by the Small and Minority Business Resources Department (SMBR) to determine if M/WBE Subcontractor/Sub-Consultant ("Subcontractor") Goals could be applied. Due to insufficient subcontracting/subconsultant opportunities and/or insufficient availability of M/WBE certified firms, SMBR has assigned no subcontracting goals for this Solicitation. However, Offerors who choose to use Subcontractors must comply with the City's M/WBE Procurement Program as described below. Additionally, if the Contractor seeks to add Subcontractors after the Contract is awarded, the Program requirements shall apply to any Contract(s) resulting from this Solicitation.

**Instructions:**

- a.) Offerors who do not intend to use Subcontractors shall check the "NO" box and follow the corresponding instructions.  
b.) Offerors who intend to use Subcontractors shall check the applicable "YES" box and follow the instructions. **Offers that do not include the following required documents shall be deemed non-compliant or nonresponsive as applicable, and the Offeror's submission may not be considered for award.**

☒ **NO, I DO NOT intend to use Subcontractors/Sub-consultants.**

**Instructions:** Offerors that do not intend to use Subcontractors shall complete and sign this form below (Subcontracting/Sub-Consulting ("Subcontractor") Utilization Form) and include it with their sealed Offer.

☐ **YES, I DO intend to use Subcontractors/Sub-consultants.**

**Instructions:** Offerors that do intend to use Subcontractors shall complete and sign this form below (Subcontracting/Sub-Consulting ("Subcontractor") Utilization Form), and follow the additional Instructions in the (Subcontracting/Sub-Consulting ("Subcontractor") Utilization Plan). Contact SMBR if there are any questions about submitting these forms.

Offeror Information			
Company Name	U.S. Peroxide, LLC dba USP Technologies		
City Vendor ID Code	VS0000026443		
Physical Address	1375 Peachtree Street NE, Suite 300 N		
City, State Zip	Atlanta, GA 30309		
Phone Number	404-352-6070 x101	Email Address	anangano@uspstechnologies.com
Is the Offeror City of Austin M/WBE certified?	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES      Indicate one: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> MBE/WBE Joint Venture		

**Offeror Certification:** I understand that even though SMBR did not assign subcontract goals to this Solicitation, I will comply with the City's M/WBE Procurement Program if I intend to include Subcontractors in my Offer. I further agree that this completed **Subcontracting/Sub-Consulting Utilization Form**, and if applicable my completed **Subcontracting/Sub-Consulting Utilization Plan**, shall become a part of any Contract I may be awarded as the result of this Solicitation. Further, if I am awarded a Contract and I am not using Subcontractor(s) but later intend to add Subcontractor(s), before the Subcontractor(s) is hired or begins work, I will comply with the City's M/WBE Procurement Program and submit the **Request For Change** form to add any Subcontractor(s) to the Project Manager or the Contract Manager for prior authorization by the City and perform Good Faith Efforts (GFE), if applicable. I understand that, if a Subcontractor is not listed in my **Subcontracting/Sub-Consulting Utilization Plan**, it is a violation of the City's M/WBE Procurement Program for me to hire the Subcontractor or allow the Subcontractor to begin work, unless I first obtain City approval of my **Request for Change** form. I understand that, if a Subcontractor is not listed in my **Subcontracting/Sub-Consulting Utilization Plan**, it is a violation of the City's M/WBE Procurement Program for me to hire the Subcontractor or allow the Subcontractor to begin work, unless I first obtain City approval of my **Request for Change** form.

**Andrew Nangano, Assistant Secretary**

**6/15/18**

Name and Title of Authorized Representative (Print or Type)

Signature/Date



**Section 0905: SUBCONTRACTING/SUB-CONSULTING UTILIZATION PLAN**

**THIS FORM IS NOT APPLICABLE TO USP**



MINORITY- AND WOMEN-OWNED BUSINESS ENTERPRISE (MBE/WBE)  
PROCUREMENT PROGRAM  
Subcontracting/Sub-Consulting ("Subcontractor") Utilization Form

SOLICITATION NUMBER:  
SOLICITATION TITLE:

**THIS FORM IS NOT APPLICABLE TO USP**

INSTRUCTIONS: Offerors who DO intend to use Subcontractors may utilize M/WBE Subcontractor(s) or perform Good Faith efforts when retaining Non-certified Subcontractor(s). Offerors must determine which type of Subcontractor(s) they are anticipating to use (CERTIFIED OR NON-CERTIFIED), check the box of their applicable decision, and comply with the additional instructions associated with that particular selection.

- ☐ I intend to use City of Austin CERTIFIED M/WBE Subcontractor/Sub-consultant(s).

Instructions: Offerors may use Subcontractor(s) that ARE City of Austin certified M/WBE firms. Offerors shall contact SMBR (512-974-7600 or [SMBRComplianceDocuments@austintexas.gov](mailto:SMBRComplianceDocuments@austintexas.gov)) to confirm if the Offeror's intended Subcontractor(s) are City of Austin certified M/WBE and if these firm(s) are certified to provide the goods and services the Offeror intends to subcontract. If the Offeror's Subcontractor(s) are current valid certified City of Austin M/WBE firms, the Offeror shall insert the name(s) of their Subcontractor(s) into the table below and must include the following documents in their sealed Offer:

- Subcontracting/Sub-Consulting Utilization Form (completed and signed)
- Subcontracting/Sub-Consulting Utilization Plan (completed)

- ☐ I intend to use NON-CERTIFIED Subcontractor/Sub-Consultant(s) after performing Good Faith Efforts.

Instructions: Offerors may use Subcontractors that ARE NOT City of Austin certified M/WBE firms ONLY after Offerors have first demonstrated Good Faith Efforts to provide subcontracting opportunities to City of Austin M/WBE firms.

STEP ONE: Contact SMBR for an availability list for the scope(s) of work you wish to subcontract;

STEP TWO: Perform Good Faith Efforts (Check List provided below);

STEP THREE: Offerors shall insert the name(s) of their certified or non-certified Subcontractor(s) into the table below and must include the following documents in their sealed Offer:

- Subcontracting/Sub-Consulting Utilization Form (completed and signed)
- Subcontracting/Sub-Consulting Utilization Plan (completed)
- All required documentation demonstrating the Offeror's performance of Good Faith Efforts (see Check List below)

**GOOD FAITH EFFORTS CHECK LIST –**

When using NON-CERTIFIED Subcontractor/Sub-consultants(s), **ALL of the following CHECK BOXES MUST be completed in order to meet and comply with the Good Faith Effort requirements and all documentation must be included in your sealed Offer. Documentation CANNOT be added or changed after submission of the bid.**

- ☐ **Contact SMBR.** Offerors shall contact SMBR (512-974-7600 or [SMBRComplianceDocuments@austintexas.gov](mailto:SMBRComplianceDocuments@austintexas.gov)) to obtain a list of City of Austin certified M/WBE firms that are certified to provide the goods and services the Offeror intends to subcontract out. (Availability List). Offerors shall document their contact(s) with SMBR in the "SMBR Contact Information" table on the following page.
- ☐ **Contact M/WBE firms.** Offerors shall contact all of the M/WBE firms on the Availability List with a Significant Local Business Presence which is the Austin Metropolitan Statistical Area, to provide information on the proposed goods and services proposed to be subcontracted and give the Subcontractor the opportunity to respond on their interest to bid on the proposed scope of work. When making the contacts, Offerors shall use at least two (2) of the following communication methods: email, fax, US mail or phone. Offerors shall give the contacted M/WBE firms at least seven days to respond with their interest. Offerors shall document all evidence of their contact(s) including: emails, fax confirmations, proof of mail delivery, and/or phone logs. These documents shall show the date(s) of contact, company contacted, phone number, and contact person.



MINORITY- AND WOMEN-OWNED BUSINESS ENTERPRISE (MBE/WBE)  
PROCUREMENT PROGRAM  
Subcontracting/Sub-Consulting ("Subcontractor") Utilization Form

SOLICITATION NUMBER:  
SOLICITATION TITLE:

**THIS FORM IS NOT APPLICABLE TO USP**

- ☐ **Follow up with responding M/WBE firms.** Offeror shall follow up with all M/WBE firms that respond to the Offeror's request. Offerors shall provide written evidence of their contact(s): emails, fax confirmations, proof of mail delivery, and/or phone logs. These documents shall show the date(s) of contact, company contacted, phone number, and contact person.
  
- ☐ **Advertise.** Offerors shall place an advertisement of the subcontracting opportunity in a local publication (i.e. newspaper, minority or women organizations, or electronic/social media). Offerors shall include a copy of their advertisement, including the name of the local publication and the date the advertisement was published.
  
- ☐ **Use a Community Organization.** Offerors shall solicit the services of a community organization(s); minority persons/women contractors'/trade group(s); local, state, and federal minority persons/women business assistance office(s); and other organizations to help solicit M/WBE firms. Offerors shall provide written evidence of their Proof of contact(s) include: emails, fax confirmations, proof of mail delivery, and/or phone logs. These documents shall show the date(s) of contact, organization contacted, phone number, email address and contact person.



**MINORITY- AND WOMEN-OWNED BUSINESS ENTERPRISE (MBE/WBE)  
PROCUREMENT PROGRAM  
Subcontracting/Sub-Consulting ("Subcontractor") Utilization Form**

SOLICITATION NUMBER: **THIS FORM IS NOT APPLICABLE TO USP**  
SOLICITATION TITLE:

*(Offerors may duplicate this page to add additional Subcontractors as needed)*

Subcontractor/Sub-consultant	
City of Austin Certified	<input type="checkbox"/> MBE <input type="checkbox"/> WBE Ethnic/Gender Code: <input type="checkbox"/> NON-CERTIFIED
Company Name	
Vendor ID Code	
Contact Person	Phone Number:
Additional Contact Info	Fax Number: E-mail:
Amount of Subcontract	\$
List commodity codes & description of services	
Justification for not utilizing a certified MBE/WBE	

Subcontractor/Sub-consultant	
City of Austin Certified	<input type="checkbox"/> MBE <input type="checkbox"/> WBE Ethnic/Gender Code: <input type="checkbox"/> NON-CERTIFIED
Company Name	
Vendor ID Code	
Contact Person	Phone Number:
Additional Contact Info	Fax Number: E-mail:
Amount of Subcontract	\$
List commodity codes & description of services	
Justification for not utilizing a certified MBE/WBE	

SMBR Contact Information			
SMBR Contact Name	Contact Date	Means of Contact	Reason for Contact
		<input type="checkbox"/> Phone <b>OR</b> <input type="checkbox"/> Email	

**FOR SMALL AND MINORITY BUSINESS RESOURCES DEPARTMENT USE ONLY:**

Having reviewed this plan, I acknowledge that the Offeror ☐ HAS or ☐ HAS NOT complied with these instructions and City Code Chapters 2-9A/B/C/D, as amended.

\_\_\_\_\_  
Reviewing Counselor

\_\_\_\_\_  
Date

I have reviewed the completing the Subcontracting/Sub-Consultant Utilization Plan and ☐ Concur ☐ Do Not Concur with the Reviewing Counselor's recommendation.

\_\_\_\_\_  
Director/Assistant Director or Designee

\_\_\_\_\_  
Date





**50% Hydrogen Peroxide Solution, Feed System Installation, and Maintenance  
Services; IFB 2200 SLW1004**

# **The City of Austin**

**PROPOSAL RESPONSE**

**June 19, 2018**

Contact: Andrew Nangano  
Voice: 404-352-6070  
Email: [anangano@usptechnologies.com](mailto:anangano@usptechnologies.com)

USP Technologies  
1375 Peachtree Street NE, Suite 300 N, Atlanta, GA 30309  
Phone: 404-352-6070  
Fax: 404-352-6077

[www.usptechnologies.com](http://www.usptechnologies.com)



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## SECTION 1 – COMPANY BACKGROUND & QUALIFICATIONS

USP Technologies (USP) is a Limited Liability Company registered under the name U.S. Peroxide, LLC, with its headquarters located in Atlanta, GA. USP is a part of the Trojan Technologies group, which consists of six businesses including leading global providers of UV disinfection systems for municipal, industrial and residential water and wastewater treatment applications, specialized filtration equipment and ballast water treatment systems. Trojan Technologies itself is a subsidiary of Danaher Corporation, which has revenues of >\$16B and consists of three main business platforms, Environmental, Life Sciences and Dental applications and is listed on the NYSE under DHR.

USP focuses on peroxygen-based technologies and full-service chemical programs, specifically for the treatment of water, wastewater, soil, and air. Over the past 20+ years, USP has emerged as the industry leader in providing performance-driven, full-service odor and corrosion control, solids processing, nutrient removal and disinfection programs for customers across the US and Canada. In total, we presently manage about 350 chemical applications that treat close to 1.0 BGD.

USP specializes in combining our cost effective  $H_2O_2$  based technologies with other, complementary technologies, and integrating them into comprehensive programs using a tested and refined operations management approach. These programs range from the supply of basic  $H_2O_2$  services, to managing our proprietary PRI-SC<sup>®</sup> technology for large collection systems, to the provision of iron salts, peracetic acid, nitrate salts and biofilm removal services. We welcome you to browse our website, <http://www.usptechnologies.com>, which provides a comprehensive technical resource library on hydrogen peroxide and peroxygen technologies, full-service chemical programs and complete environmental treatment solutions.

USP has successfully delivered medium to large scale and single to multi-technology based programs to municipalities throughout the country, including other customers such as San Antonio Water System; City of Glendale, AZ; City of Springfield, MO; JEA (Jacksonville, FL); City of San Diego, CA; City of Phoenix, AZ; City of Orlando, FL and City of Yuma, AZ.

Additionally, USP maintains a highly qualified and experienced team of individuals dedicated to the safe, reliable and cost effective operation and management of hydrogen peroxide programs, which includes the industry's foremost technical applications expertise and equipment system engineering knowledge base. Technical applications assistance also includes engineering recommendations and current site review for responsible care and safety.

Since 2009 USP has demonstrated to the City of Austin that we provide the highest degree of experience, technology and operations capability available in the industry for delivering a reliable and cost effective supply of specialty chemistries, engineered equipment storage and dosing systems and applications assistance. All programs are managed with a high level of transparency and all the resources necessary to ensure the City of Austin's complete satisfaction.





## SECTION 2 – REFERENCES

The following references demonstrate USP's ability to deliver successful Municipal treatment programs, on schedule and within specifications and budget.

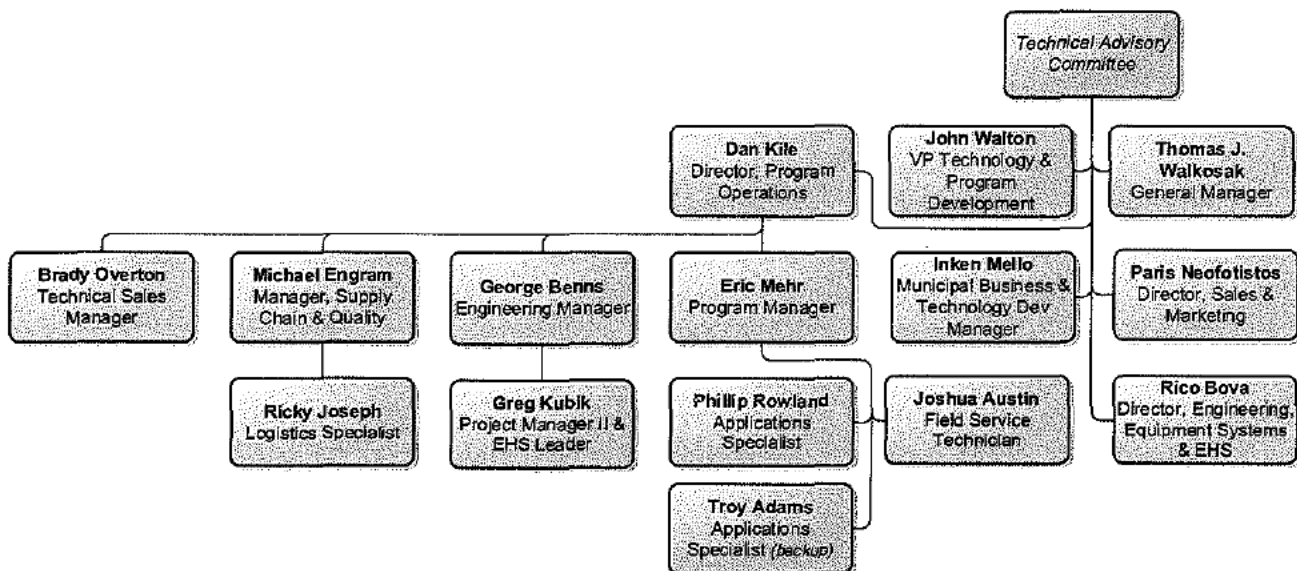
CUSTOMER	CONTACT	PROGRAM SCOPE
San Antonio Water & Sewer, TX	Temple Williamson Dos Rios WWTP Superintendent 3495 Valley Road San Antonio, TX 78221 PH: 713-299-8758 <a href="mailto:Temple.williamson@saws.org">Temple.williamson@saws.org</a>	Full-service biosolids odor control program utilizing H <sub>2</sub> O <sub>2</sub> to control H <sub>2</sub> S on the DAF units and blend tank. Program includes chemical, equipment and technical applications expertise. Ongoing program since 2000.
JEAA Jacksonville, FL	Ryan R. Popko Environmental Manager 4215 Talleyrand Avenue Jacksonville, FL 32206 PH: 904-665-8516 <a href="mailto:popkrr@jea.com">popkrr@jea.com</a>	Full-service 50% hydrogen peroxide & iron odor & corrosion (H <sub>2</sub> S) control program at 25+ sites across Jacksonville. Also includes equipment & services. Ongoing program since 2007.
Trinity River Authority, TX	Bill Cyrus Manager, Technical Services 6500 W. Singleton Blvd. Dallas, TX 75212 PH: 972-331-4309 <a href="mailto:cyrusb@trinityra.org">cyrusb@trinityra.org</a>	Full-service PRI-SC® program on the major trunkline system utilizing 50% hydrogen peroxide. Also includes equipment and services. Ongoing program since 2006.
City of San Diego, CA, Pt. Loma WWTP System	Carlos Nunez Process Control Supervisor 1902 Gatchell Road San Diego, CA 92106 PH: 619-221-8771 <a href="mailto:cnunez@saniego.gov">cnunez@saniego.gov</a>	Full-service PRI-SC®/PRI-CEPT® Service Contract supplying hydrogen peroxide and ferrous chloride in the collection system and the WWTP. Ongoing program since 2005.
City of Springfield, MO	Brian Wirth Plant Superintendent Southwest WWTP 3301 S. FF Highway Springfield, MO 65807 PH: 417-891-1600 x121 <a href="mailto:bwirth@springfieldmo.gov">bwirth@springfieldmo.gov</a>	Full-service PRI-SC® and hydrogen peroxide program including the supply of ferrous chloride, hydrogen peroxide, equipment, and services. Ongoing program since 2006.



## SECTION 3 – CONTACT INFORMATION & PROGRAM TEAM

In support of our full-service programs, USP Technologies is committed to providing a highly qualified and experienced team of individuals with a proven track record of success in working together at programs of similar size and scope. Our team is also dedicated to the safe, reliable and cost effective operation and management of the program to meet the stated specifications and performance objectives. The City of Austin is familiar with all of the following personnel, whose contact information is listed along with an organizational chart and details on their respective roles.

Name, Role	Email	Phone
<b>Eric Mehr</b> , Program Manager	<a href="mailto:emehr@usptechnologies.com">emehr@usptechnologies.com</a>	678-662-3810
<b>Phillip Rowland</b> , Applications Specialist	<a href="mailto:prowland@usptechnologies.com">prowland@usptechnologies.com</a>	214-564-9412
<b>Troy Adams</b> , Applications Specialist (Troy would serve as back-up)	<a href="mailto:tadams@usptechnologies.com">tadams@usptechnologies.com</a>	817-304-6986
<b>Joshua Austin</b> , Field Service Technician	<a href="mailto:jaustin@usptechnologies.com">jaustin@usptechnologies.com</a>	504-912-2607
<b>Greg Kubik</b> , Project Manager	<a href="mailto:gkubik@usptechnologies.com">gkubik@usptechnologies.com</a>	716-435-0257
<b>George Benns</b> , Engineering Manager	<a href="mailto:gbenns@usptechnologies.com">gbenns@usptechnologies.com</a>	716-704-9159
<b>Ricky Joseph</b> , Logistics Specialist	<a href="mailto:rjoseph@usptechnologies.com">rjoseph@usptechnologies.com</a>	404-352-6070
<b>Michael Engram</b> , Supply Chain Manager	<a href="mailto:mengram@usptechnologies.com">mengram@usptechnologies.com</a>	404-352-6070
<b>Brady Overton</b> , Technical Sales Manager	<a href="mailto:boverton@usptechnologies.com">boverton@usptechnologies.com</a>	903-239-3419
<b>Dan Kile</b> , Director Program Operations	<a href="mailto:dkile@usptechnologies.com">dkile@usptechnologies.com</a>	304-726-7074
<b>Inken Mello</b> , Municipal Development Mgr.	<a href="mailto:imello@usptechnologies.com">imello@usptechnologies.com</a>	858-245-7883
<b>Paris Neofotistos</b> , Director Sales & Mkg	<a href="mailto:pneofotistos@usptechnologies.com">pneofotistos@usptechnologies.com</a>	804-814-2345
<b>Rico Bova</b> , Director, Engineering	<a href="mailto:ebova@usptechnologies.com">ebova@usptechnologies.com</a>	312-404-4262
<b>John Walton</b> , VP Technology	<a href="mailto:jwalton@usptechnologies.com">jwalton@usptechnologies.com</a>	404-352-6070
<b>Tom Walkosak</b> , General Manager	<a href="mailto:twalkosak@usptechnoloiges.com">twalkosak@usptechnoloiges.com</a>	404-352-6070





TITLE	ROLE
Program Manager	<ul style="list-style-type: none"> <li>• Primary customer reporting responsibility and overall program management during ongoing operations</li> <li>• Oversee and direct the execution of all application and technical needs</li> <li>• Oversee and monitor program performance and compliance (QA/QC auditing)</li> <li>• Advise alternative solutions to existing problems, incl. troubleshooting applications</li> </ul>
Applications Specialist	<ul style="list-style-type: none"> <li>• Assist the Program Manager in managing day-to-day operations and data analysis</li> <li>• Perform aqueous sampling &amp; data gathering</li> <li>• Periodic system maintenance during or in addition to routine site inspections</li> <li>• Executes preventative maintenance on equipment</li> <li>• Monitors &amp; documents equipment performance Troubleshoots existing system functions</li> <li>• Maintains site cleanliness, responsible for site safety &amp; emergency response</li> </ul>
Field Service Technician	<ul style="list-style-type: none"> <li>• Periodic system maintenance during or in addition to routine site inspections</li> <li>• Executes preventative maintenance on equipment.</li> <li>• Monitors and documents equipment performance and facility information.</li> <li>• Troubleshoots existing system functions</li> <li>• Maintains site cleanliness, responsible for site safety &amp; emergency response</li> </ul>
Technical Sales Manager	<ul style="list-style-type: none"> <li>• Manage all commercial issues during initial program implementation</li> <li>• Make technical application recommendations</li> <li>• Oversee full service program and coordinate commercial portion during initial program implementation</li> <li>• Resource for additional treatment needs</li> </ul>
Engineering & Operations Manager	<ul style="list-style-type: none"> <li>• Lead for execution of equipment submittals, fabrication, installation, plant integration and start-up</li> <li>• Supports the execution of program operations, service and technical needs relative to program requirements</li> <li>• Coordinates troubleshooting related to equipment / telemetry systems</li> <li>• Supports/advises field &amp; equipment service technicians</li> <li>• Oversees safety training and program compliance</li> <li>• Provides support on regulatory issues or interpretations</li> </ul>
Project Leader	<ul style="list-style-type: none"> <li>• Project coordination</li> <li>• System pre-installation inspection</li> <li>• Lead system installation team on site</li> <li>• Equipment start-up</li> </ul>
Logistics Specialist	<ul style="list-style-type: none"> <li>• Provides regular and frequent interface with chemical supplier – partners to ensure reliable chemical inventory</li> <li>• Daily inventory monitoring and delivery scheduling</li> <li>• Monitor systems and provide advance notification of out of spec situations</li> <li>• Communicate delivery variances in schedule</li> </ul>
Manager, Supply Chain & Quality	<ul style="list-style-type: none"> <li>• Monitors and manages USP distribution fleet service and terminal performance</li> <li>• Manages ChemWatch Control Center employees and supports logistics activities</li> <li>• Primary resource for invoicing and chemical delivery reconciliation</li> <li>• Integrates program with commercial objectives and customer invoicing</li> </ul>



TITLE	ROLE
Engineering & HSE Manager	<ul style="list-style-type: none"> <li>• Oversees safe system implementation &amp; commissioning</li> <li>• Site safety analysis</li> <li>• Manager &amp; administrator of USP's Health, Safety &amp; Environmental program</li> <li>• System design, compliance &amp; security issues management</li> <li>• Manages USP fabrication facility in Grand Island, NY</li> </ul>
VP of Technology and Program Development	<p><b><i>Technical Advisory Committee</i></b></p> <ul style="list-style-type: none"> <li>• Ensure the corporate level commitment of resources required to successfully operate the program, meet contractual obligations, and satisfy customer needs</li> <li>• Provide high level program and project management and oversight</li> <li>• Provide commercial support and response to account and contractual issues</li> <li>• Ensure technology selection is optimized and current</li> <li>• Provide oversight and regular review of treatment and operational performance and compliance goals</li> </ul>
Regional Business Director	
Director, Industrial Business & Technology Development	
General Manager	



## SECTION 4 – HEALTH, SAFETY & QUALITY

### Health Safety and Environmental Program

USP understands that Work Place safety is core and foremost for every program it operates and takes it very seriously, going to great lengths to ensure a safe environment for both our customers and team members. A copy of our current HS&E program can be provided at any time. The 300+ page document starts with a general overview and then details each of the policies and programs we follow. Our HS&E Program Table of Contents is provided in Appendix A. As the City specifically requested our Confined Space & Injury/Illness Prevention detail, these programs are contained within Appendix B.

With regards to safety, USP Technologies is proud of our safety record and efforts to make safety a priority on every job site. OSHA logs and any safety policies or procedures mentioned in the following text will be readily made available upon request.

USP is committed to the establishment and execution of work practices to guide the installation and operation of USP engineered chemical management and delivery systems in a safe and environmentally conscious manner. The USP Technologies Health Safety and Environmental Program and supporting work place procedures and policies provide a foundation with which to achieve this goal and when combined with customer site-specific standards ensure a safe and effective use of USP chemicals and services. We strive for the following operational measures:

- No reportable spills
- No product outages
- No (unscheduled) downtime
- No reportable injuries

The following outlines USP's dedication to safety and quality. It is how we assure the above four operational measures are met.

### Safety Communication Plan

USP has adopted a culture of safety that is weaved into every facet of our organization. From monthly safety-focused meetings, use of daily Job Safety Analysis (JSA's) at every site, utilizing safety as a KPI (key performance indicator), adoption of regional safety committees, direct company-wide reporting of safety issues as Lessons Learned and focus on safety during project kick-off meetings.

An integral component of communication is training. USP has both a detailed internal and client training program. All employees and contractors are rigorously trained in all facets of their job responsibilities. Training is completed upon hiring, throughout the year and during annual refresher courses. Furthermore, if a client requires our employees have specific training and/or certification to work on-site, that is completed as well. Our internal (employee/contractor) training procedure flowchart as well as further detail on our training program is available upon request.



In addition to internal training, all of our client's selected employees are trained on the safe handling of our systems at start-up and during refresher training, which is completed on a regular basis or as needed. Training is completed via presentation and on-site. Our Equipment & Delivery Orientation Program, H2O2 Safety Presentation are available for review at any time.

### Quality

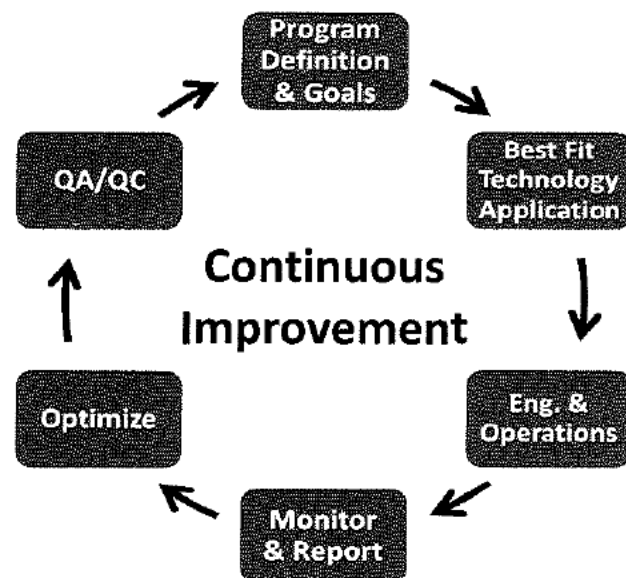
It is our objective at USP Technologies to be the Quality Leader in the preparation, delivery, and service of comprehensive program solutions to meet our customers' individual needs and expectations. To achieve this objective, we will control and assure our program quality through all stages of development and installation, ordering, material procurement, and program delivery using a Quality Management System (QMS).

USP will continually improve the effectiveness and suitability of the Quality Management System by collecting and analyzing appropriate data to identify improvements enhancing our system's efficiency. USP's executive management commitment coupled with the involvement and support of all personnel will ensure we meet our objective.

At USP, we are dedicated to maintaining and building upon our high level of customer satisfaction with our programs and product solutions through both our employees' efforts and quality management in all our processes and programs. To achieve this, we are committed to:

- Managing our performance against defined objectives, through our Corporate Performance Management processes
- Involving all USP employees in establishing and achieving our quality objectives
- Meeting or exceeding statutory and regulatory requirements
- Continuous improvement of our processes, services, programs, and quality management system

USP's Quality Management System is a system implemented throughout the company to ensure we effectively implement the processes necessary to meet the customer's requirements by supplying the right product at the right time in the right place. The QMS also ensures we are constantly reviewing our processes so we can monitor for continuous improvement opportunities. USP has a Quality Manual that fully details the above and will be provided upon request.





## **SECTION 5 – SAFETY DATA SHEET**

The following pages contain the 50% hydrogen peroxide Safety Data Sheet from our designated primary supplier.



## SECTION 6 – SPILL RESPONSE PLAN

USP takes spill prevention and response to mitigate major and minor spills very seriously. The following outlines our spill response program:

**Spill Prevention** – USP engineered storage and dosing systems are self-contained and fully alarmed. Any spills (leaks to the ground from the dosing line) would be handled according to the chemical spill procedure.

**Spill Containment** – USP chemical storage systems are double walled and constructed of heavy-duty, high-density linear polyethylene. The external tank is sized to provide 110% containment capacity for the internal tank contents. Each unit comes equipped with fill line, inspection ports, overflow pipe, and breather vents. A level transmitter feeds the ChemWatch™ monitor for tank level display and for inventory management. Each dosing module is housed inside an environmental enclosure with an internal sump for spill containment and to protect critical system components from the elements. Any spills inside the dose skid will be contained by the sump. The sump is fitted with leak detection sensors which will send an alarm to USP personnel and the local Technician, who will respond accordingly to any alarms.

**Environmental Response** – USP's response is as follows:

- Client personnel should notify the Program Manager, even for small spills and leaks.
- Contact USP at the numbers in the Phone List below.
- USP personnel will moderate any spills or leaks utilizing proper Personal Protective Equipment. USP will contain the spill, stop the leak and remediate the site.

### Emergency / Odor Complaint Response Plan

USP has a dedicated emergency contact phone system that operates **24/7, 365 days a year** and is a call tree designed to allow customers to speak to a live and highly trained USP employee that can respond to emergency situations. That phone number is **855.877.4262**. In addition, USP provides contact numbers of all the key members of the program team:

Should an emergency situation occur, our clients shall utilize the Emergency telephone line as well as contact the Program Manager. If the Program Manager cannot be reached, then the Project Manager should be contacted. In the event of an odor complaint, the Program Manager or the Applications Engineer should be contacted. Full plans will be provided upon request.



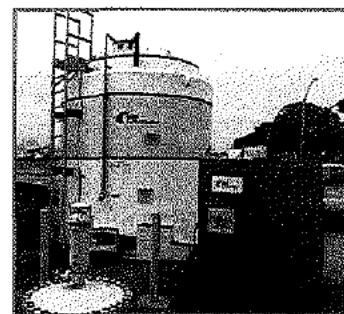
## SECTION 7 – ENGINEERING SUBMITTAL

USP produces safe and reliable custom engineered liquid chemical storage and dosing equipment systems. Each system is tailored to the specific application and includes containment, chemically compatible parts and all safety devices necessary for performance-driven chemical dosing.

As current incumbent for the City of Austin's 50% Hydrogen Peroxide Program, which includes equipment, USP plans to maintain the engineered storage and handling equipment systems already on-site as evidenced in the Bid Specification, Attachment C. Should any new systems be required, they will conform to the following specifications & drawings. USP has also provided information on our ChemWatch system for dose monitoring and inventory control.

### Storage Tank System

USP's standard double contained high-density polyethylene (HDPE) storage tanks have capacities of 3K gallons, 6K gallons or 8K gallons. The 6K gallon vessel is available with heat tracing for chemicals and climates where necessary. USP can supply other tank sizes including drums and totes based on usage, space availability, logistics and other relevant factors.



### Dosing Module & Controls

USP's standard dosing module consists of pump(s), flowmeter, valves and ancillary equipment mounted within a protective enclosure.

#### a) Integrated Dosing Module Features

##### Controls

- Flow
- Tank Level
- Wireless 4G LTE Telemetry

##### Safety

- Leak Detection
- Pressure Management
- Secondary Containment



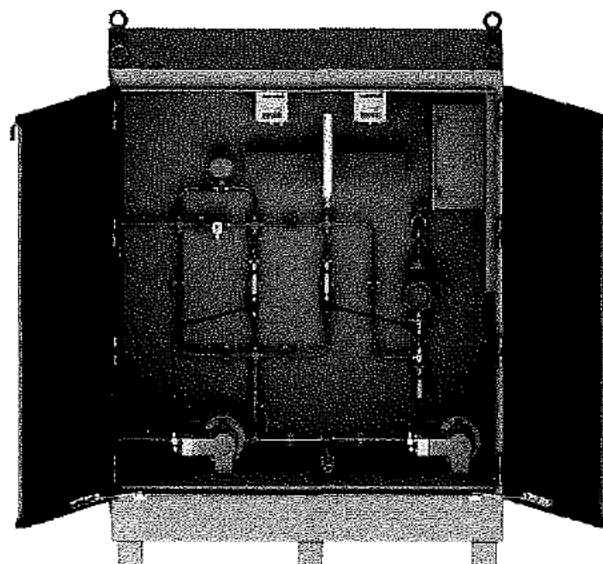
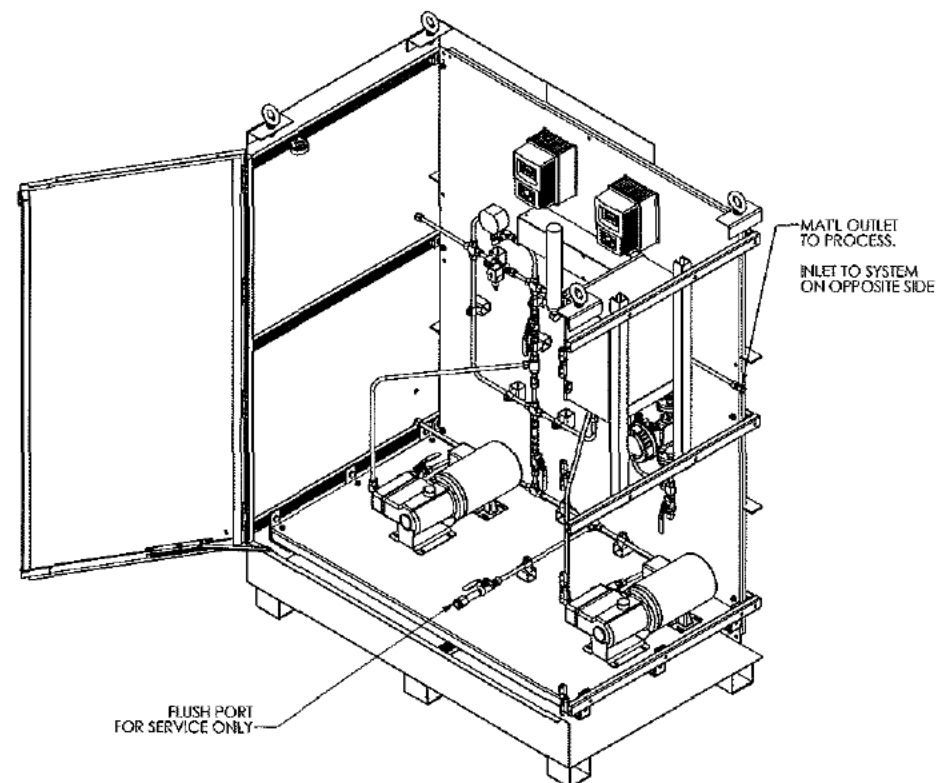
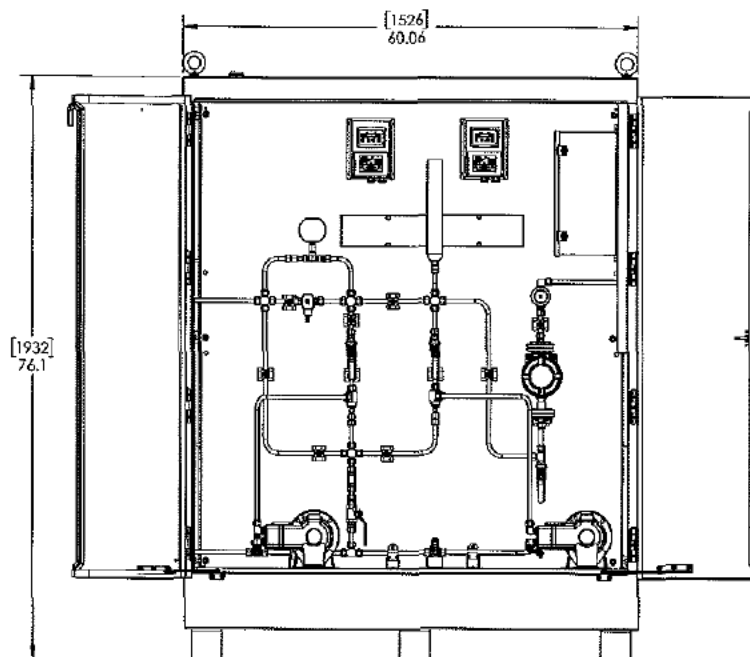
#### b) Standard Dosing Modules

Standard Name	Chemicals	Flow range (GPH)	Pump	Flowmeter	Materials	Enclosure	Tank Options	Drawing #
STD-A	Hydrogen Peroxide PAA	0.1 - 10	Grundfos	Endress-Hausser 5H1B04-15R9/0	Stainless Steel	Steel NEMA 3R	3K, 6K, 8K	1120v_A
STD-B	Hydrogen Peroxide PAA	2 - 20	Prominent Sigma/1 Basic 07065	Endress-Hausser 5H1B04-15R9/0	Stainless Steel	Steel NEMA 3R	3K, 8K	1120v_B
STD-C	Hydrogen Peroxide PAA	12 - 100	Grundfos	Endress-Hausser 5H1B04-15R9/0	Stainless Steel	Steel NEMA 3R	3K, 6K	1120v_C









RIGHT DOOR, TOP AND SIDE  
HIDDEN FOR CLARITY

TYPICAL SYSTEM DATA	
SIZE	77"X61"X36" (196cmX155cmX91cm)
ELECTRICAL*	120vac/2@20 AMPS(EA)/60Hz
WEIGHT	1150lbs/522kg
	* TWO CIRCUITS (20A EA.)

UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN INCHES  
DIMENSIONS ARE IN MILLIMETERS

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DIMENSIONS ARE IN MILLIMETERS

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**USP**  
technologies

1375 PEACHTREE STREET, SUITE 300N, ATLANTA, GA 30309  
HV5-SST, 1/2" SS 2PID MS ENCLOSURE

1/8" ANGULAR PROJECTION

1/8" ANGULAR PROJECTION

1/8" ANGULAR PROJECTION

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1/8" ANGULAR PROJECTION

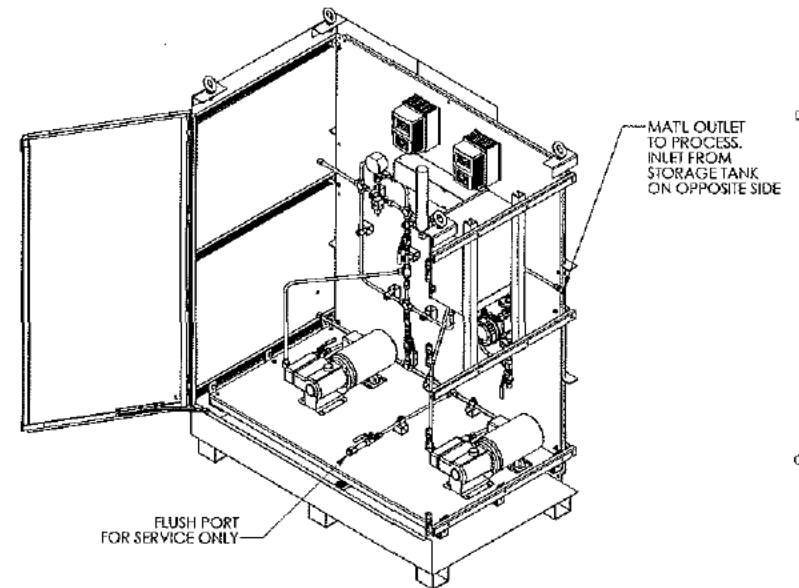
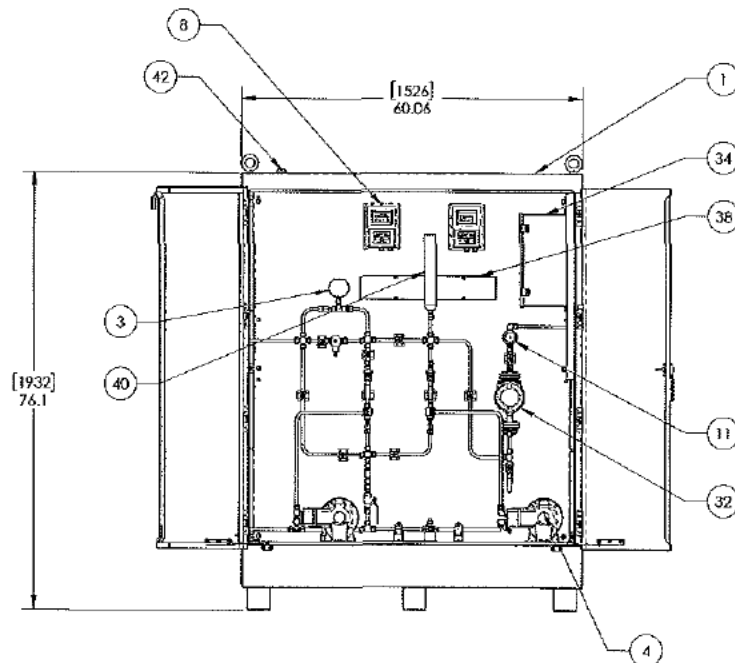
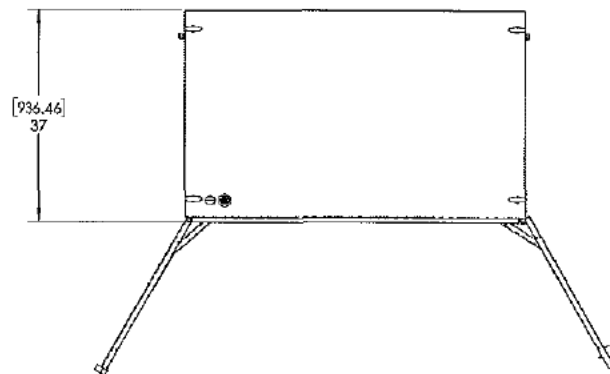
1/8" ANGULAR PROJECTION

1/8" ANGULAR PROJECTION

1/8" ANGULAR PROJECTION

1/8" ANGULAR PROJECTION





RIGHT DOOR, TOP AND SIDE  
HIDDEN FOR CLARITY

ITEM NO.	DESCRIPTION	QTY.
42	VENT, BREATHER ENCLOSURE M40X1.5 ABS	1
40	SAMPLE CYLINDER SINGLE END, 16.91 oz FOR PULSATION DUMP	1
38	WIREWAY W/O KNOCKOUTS	1
34	ACS, STANDARD (COMPLETE)	1
32	FLOWMETER, FH-SST-5/16"	1
11	BPVC, 1/2" NPT PROM SS	1
8	VFD, 1.5HP, NEMA 4X	2
4	PUMP, WANNER HEAD ONLY 3.0 GPM SS	2
3	GAUGE, PRESSURE DIGI TRANSMIT N4X	1
1	ENCLOSURE-LARGE ENCLOSURE 3R, 12.72H X 40W X 36D 09-GRAY	1

UNLESS OTHERWISE SPECIFIED:

300 PSI VIBRATION

WARRANTY 12 MONTHS AND 100,000 HOURS

FOR PARTS 12 MONTHS

REWORKING RATE \$1.00/H

EXEMPTIONS APPLY AS SPECIFIED:

2 YEAR: 100%

1 YEAR: 100%

5 YEAR: 100%

REMOVAL OF ALL PARTS AND/OR

REMOVAL OF ALL PARTS AND/OR

REMOVAL OF ALL PARTS AND/OR

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SolidWorks/PROE ENGINEERING

2018-01-22

2018-01-22

2018-01-22

2018-01-22

2018-01-22

2018-01-22

2018-01-22

2018-01-22



1375 PEACHTREE STREET, SUITE 2006, ATLANTA, GA 30309

DESCRIPTION

HVS-SST, 1/2" SS 2P1D MS ENCLOSURE

1120v3\_C

REV A

SCALE: 1:8 SHEET 2 OF 8 SEE C

MASS: 1254.97 LBS

CURRENT STATUS: NOT VALUED



# LEGEND

20-XXX  
PIPING SIZE (INCHES) -- PROCESS FLOW DESIGNATION  
(ARROW INDICATES FLOW DIRECTION)

I -- INSTRUMENTATION SIGNAL

PC -- PROCESS CONTROL SYSTEM DATA HIGHWAY (SOFTWARE OR CONTROL NETWORK)

F -- FOUNDATION FIELDBUS

S -- SERIAL NETWORK

DIGITAL SIGNAL

A -- ANALOG SIGNAL

## FIELD MOUNTED INSTRUMENT

### COMPUTER FUNCTION

INTERLOCK LOGIC  
PER CONTROL DESCRIPTION

MOTOR CONTROLLER  
OR STARTER

FOUNDATION  
FIELDBUS INTERFACE

RS485 SERIAL  
INTERFACE

## RIO

REMOTE I/O  
INTERFACE

PLC INTERFACE  
INTERFACE

CHECK VALVE

BUTTERFLY VALVE

REGULATED SIDE  
PRESSURE CONTROL

PRESSURE  
RELIEF VALVE

## M

BALL VALVE  
MOTORIZED ACTUATOR  
PNEUMATIC ACTUATOR  
SOLENOID ACTUATOR  
PNEUMATIC ACTUATOR

PNEUMATIC ACTUATOR  
WITH POSITIONER  
HAND ACTUATOR

PULSE DAMPENER  
(ACCUMULATOR)

REDUCER /  
EXPANDER

## METERING FLAMP

### PUMP

### FLANGE

### PIPE DRAIN

### STATIC MIXER

### COLUMN INDICATOR

## PROCESS DIRECTION OR SIGNAL FLOW

### AIR VENT

### NEEDLE VALVE

### MAGNETIC FLOW METER

### FLOW METER / ROTAMETER

### VERTICAL TANK

AAL ANALYSIS ALARM LOW  
AALL ANALYSIS ALARM LOW LOW  
AE ANALYSIS ELEMENT  
AI ANALYSIS INDICATOR  
AIT ANALYSIS INDICATING TRANSMITTER  
BV BALL VALVE  
CV CHECK VALVE  
D DRAIN  
DGS DEGASSING VALVE  
FAH FLOW ALARM HIGH  
FAL FLOW ALARM LOW  
FALL FLOW ALARM LOW LOW  
FE FLOW ELEMENT  
FI FLOW INDICATOR  
FIC FLOW INDICATING CONTROL  
FIT FLOW INDICATING TRANSMITTER  
FSL FLOW SWITCH LOW  
FV BUTTERFLY VALVE  
HS HAND SWITCH  
IE CURRENT ELEMENT  
IAH CURRENT ALARM HIGH  
IAL CURRENT ALARM LOW  
JC POWER LEVEL CONTROL  
JIC POWER LEVEL INDICATING CONTROL  
LAH LEVEL ALARM HIGH  
LAL LEVEL ALARM LOW  
LE LEVEL SWITCH ELEMENT  
U LEVEL INDICATOR  
LIT LEVEL INDICATING TRANSMITTER  
LR OFF-LOCAL-REMOTE SWITCH FUNCTION  
MS MOTOR STATUS  
NV NEEDLE VALVE  
OC OPEN-CLOSE SWITCH FUNCTION  
OR ORIFICE  
POC POWER DISTRIBUTION CENTER  
PDI PRESSURE DIFFERENTIAL INDICATOR / GAGE  
PI PRESSURE INDICATOR / GAGE  
PMP PUMP

PIT PRESSURE INDICATING TRANSMITTER  
RAL UV INTENSITY ALARM LOW  
RALL UV INTENSITY ALARM LOW LOW  
RE UV INTENSITY ELEMENT  
RI UV INTENSITY INDICATOR  
RIT UV INDICATING TRANSMITTER  
RT UV TRANSMITTER  
SCC SYSTEM CONTROL CENTER  
SMX STATIC MIXER  
SPC SKID PACER CONTROL  
TAH TEMPERATURE ALARM HIGH  
TAHH TEMPERATURE ALARM HIGH HIGH  
TAL TEMPERATURE ALARM LOW  
TALL TEMPERATURE ALARM LOW LOW  
TE TEMPERATURE ELEMENT  
TI TEMPERATURE INDICATOR  
TIT TEMPERATURE INDICATING TRANSMITTER  
TSH TEMPERATURE SWITCH HIGH  
TSHH TEMPERATURE SWITCH HIGH HIGH  
TT TEMPERATURE TRANSMITTER  
TVN TWO WAY VALVE NORMALLY CLOSED  
UVP ULTRAVIOLET PROCESSED  
UVC ULTRAVIOLET CHAMBER  
UVI ULTRAVIOLET TRANSMITTANCE  
UVU ULTRAVIOLET UNPROCESSED  
VL LAMP INDICATOR STATUS  
VL LAMP STATUS  
XA PUMP FAILURE ALARM  
YC CONTROL ENABLE  
ZA POSITION ALARM  
ZC POSITION CONTROLLER  
ZI POSITION INDICATION  
ZIC POSITION INDICATING CONTROLLER  
ZLC LIMIT SWITCH CLOSED  
ZSC POSITION SWITCH CLOSED  
ZSD POSITION SWITCH OPEN  
ZI POSITION TRANSMITTER

UNLESS OTHERWISE SPECIFIED:  
DO NOT SCALE DIMENSIONS  
DIMENSIONS ARE IN INCHES  
TOLERANCES APPLY AS SHOWN BELOW  
FINISHES: 303  
FINISHES: 304  
FINISHES: 316  
FINISHES: 316L  
FINISHES: 321  
FINISHES: 321L  
FINISHES: 321H  
FINISHES: 321H1  
FINISHES: 321H2  
FINISHES: 321H3  
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FINISHES: 321H100

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1375 PEACHTREE STREET, SUITE 300N, ATLANTA, GA 30309

DESCRIPTION  
HVS-SSI, 1/2" SS 2P1D MS ENCLOSURE

1120V3\_C

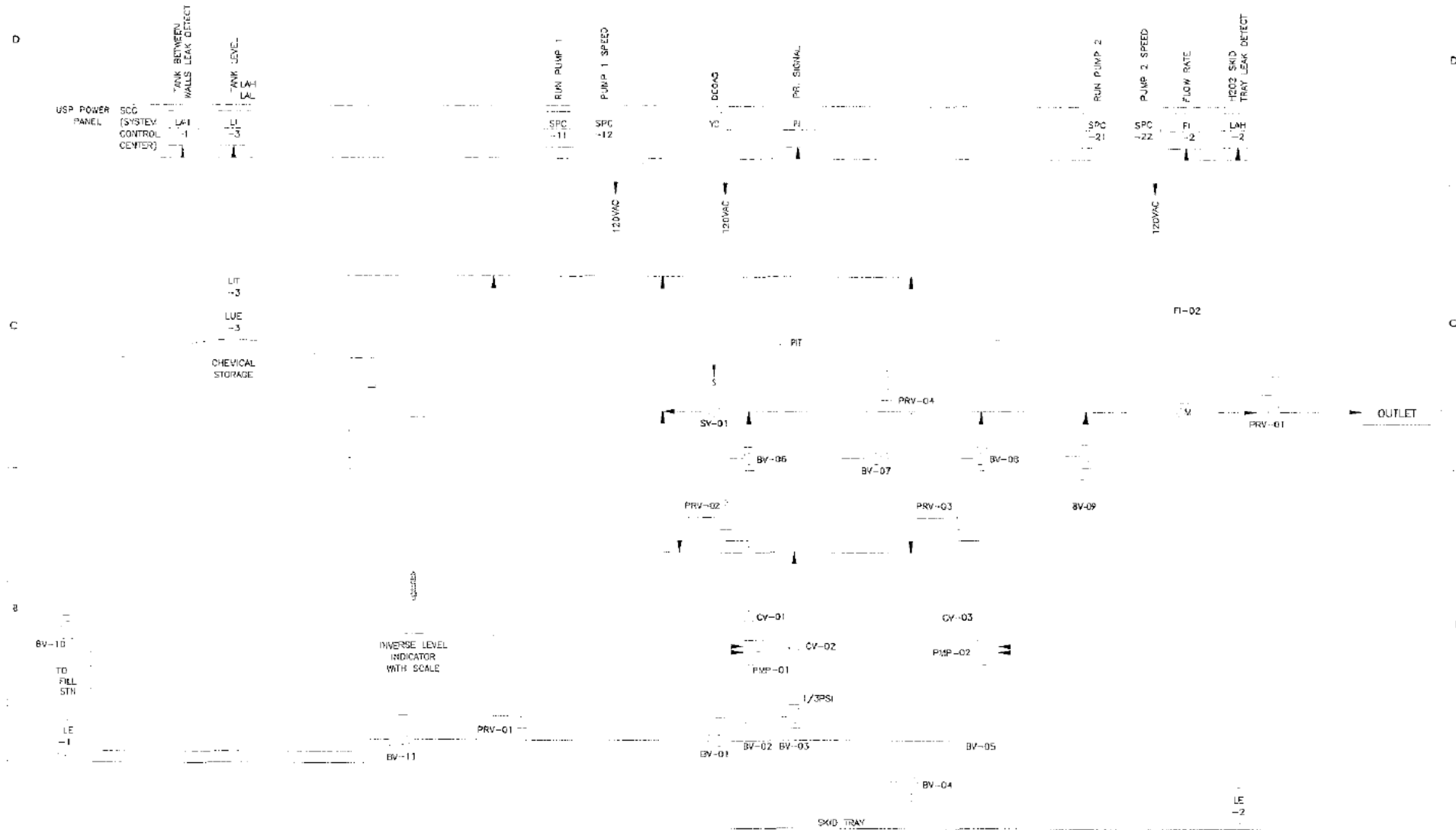
SCALE: 1:5 SHEET 7 OF 8 SEE C

CURRENT STATUS: NOT VAULTED

## NOTES:

1/ NOT TO SCALE





UNLESS OTHERWISE SPECIFIED:  
 EXCEPT FOR THE FOLLOWING:  
 MATERIALS AND METHODS SHALL BE AS SPECIFIED IN THE  
 DRAWINGS AND THE NOTES.  
 TO BE USED WITH THE FOLLOWING:  
 1. F.P.C. 1.00  
 2. F.P.C. 1.00  
 3. F.P.C. 1.00  
 4. F.P.C. 1.00  
 5. F.P.C. 1.00  
 6. F.P.C. 1.00  
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 98. F.P.C. 1.00  
 99. F.P.C. 1.00  
 100. F.P.C. 1.00



1375 PEACHTREE STREET, SUITE 300N, ATLANTA, GA 30309

855.019.01

HVS-SST, 1/2" SS 2" ID MS ENCLOSURE

1120Y3 C

SCALE: 1/8" = 1'-0" SHEET 8 OF 8 SIZE C

MASS: DA

CURRENT STATUS: NOT VAULTED



## Technical Data for USP Technologies ChemWatch ACS Monitor / Controller™

The Chemwatch ACS™ is utilized in conjunction with the USP Technologies pumping skid to give the maximum versatility in control and reporting functions. The modular design allows for easy expandability in the event custom engineering is required. The versatile controller can also be integrated into many SCADA/DCS systems. The system actually consists of two major components: the power distribution panel and the ACS controller.

### Technical Specifications

#### Power Distribution Panel –

- Enclosure – NEMA 4X polycarbonate
- Power requirements – 120Vac, 60Hz, 20A service required (depends on pump size)
- Two output relays
- Through-door disconnect switch
- IEC branch-rated circuit breakers
- Power Supply (for controller) – 24VDC 3.75A
- UL-508 certification

#### ACS Controller –

- Enclosure – NEMA 4X polycarbonate
- All low voltage (24VDC) supplied from power distribution panel
- Internal circuit breaker for incoming 24V power
- T-Box PLC RTU
- Digital inputs – 4 (expandable)
- Digital outputs – 4 (expandable)
- Analog inputs – 8 (expandable) – 4-20mA
- Analog outputs – 8 (expandable) – 4-20mA
- Typical functions programmed into system:
  - Tank level
  - Pump speed
  - Peroxide de-gas
  - Profiled pump rates (24hrs/7day variations)
  - Historical measurements
  - Real-time date/time event recording
  - Status indications (leak detection, pump fault)
- Alarms and alerts may be sent via e-mail and/or SMS
- Communication – Web-based Virtual Privacy Network via cellular connection to PLC within the controller. Optional methods of communication via telephone landline or RS-232/Modbus 485 to customer network.
- Optional touch screen HMI available for local control
- Functionality and number of screens available for monitor/control depend upon option
- Other expansion capabilities also include temperature (RTD, thermocouple), 0-10V analog, and high-speed counters



## FUNCTIONALITY OF CHEMWATCH ACS™

The ChemWatch ACS (Advanced Control System)™ has a number of features that make it a robust and highly functional control system:

1. PLC control modules
2. Eight (8) analog inputs (tank levels, pump health, flow, etc.)
3. Eight (8) analog outputs (pumps speed)
4. Four (4) digital inputs (pump pause, etc)
5. Four (4) digital outputs (de-gas solenoid, etc.)
6. Virtual Privacy Network (VPN) security for web-based monitor/interaction for customer and program manager
7. Graphics to demonstrate tank levels and pump speeds (on websites)
8. Easier connection for external connections (sensors, pumps, etc)
9. E-mail and/or SMS alerts to alarm conditions

### Physical aspects

The following are some notable physical features of ChemWatch ACS™

1. NEMA 4X polycarbonate enclosure
2. Low voltage design (only 24vdc within panel)
3. Circuit breakers/fusing to ensure protection/isolation
4. Easily-identified terminal strips for quick and accurate connection to external equipment
5. Separate power distribution panel for high-voltage (120vac) with disconnect switch and UL-508 certification.
6. Additional I/O possible through expansion modules
7. Communication to internet via cellular or landline connection
8. Easy integration to customer SCADA via I/O or other with communication interfaces (RS485 Modbus or RS232)

### Functionality

One of the primary focus points of the ChemWatch ACS™ is the ease of use by all parties. Each site would have an access page in which a secured log-in must be entered and accepted via the VPN. If the VPN is not accessed properly, then there would be no interfacing with the ChemWatch ACS™ (in fact, no screen could be viewed).

### Data Storage/Recall

Critical data such as tank level are kept internally in the PLC memory with the level recorded every fifteen minutes for the past 10 days. Accessing the website page, the level can be viewed on an x-y chart showing the values and also downloaded in a \*.csv or \*.txt format to maintain weekly histories. The same can be accomplished with other measurements (such as flow if a meter is incorporated into the system).

### Reliability

Programmable Logic Controllers (PLCs) are designed for rugged industrial applications. Utilizing PLCs as the heart of the ChemWatch ACS™ makes this a reliable system. By incorporating a more robust power supply (24VDC 90W), the chances of loading are reduced as well.



## **SECTION 8 – MATERIAL DISTRIBUTION POINTS**

USP will utilize the following two hydrogen peroxide terminals for this project. Both are located within 200 miles of the City of Austin.

**Main:**

Solvay Chemicals  
1130 Independence Pkwy, Gate 1  
LaPorte, TX 77571

**Alternate:**

PeroxyChem  
12000 Bay Area Blvd.  
Pasadena, TX 77507



## SECTION 9 – APPLICATION & TECHNOLOGY OVERVIEW

USP specializes in these municipal treatment areas should the City of Austin wish to explore other solutions within the collection system or wastewater treatment plant:

### Integrated Full-Service Wastewater Solutions

- Best-Fit Technology Selection
- Process Assessment & Modeling
- Program Optimization & Management
- Engineered Storage & Dosing Systems
- System Operation & Maintenance
- Inventory Management

### Sulfide Odor & Corrosion Control Programs

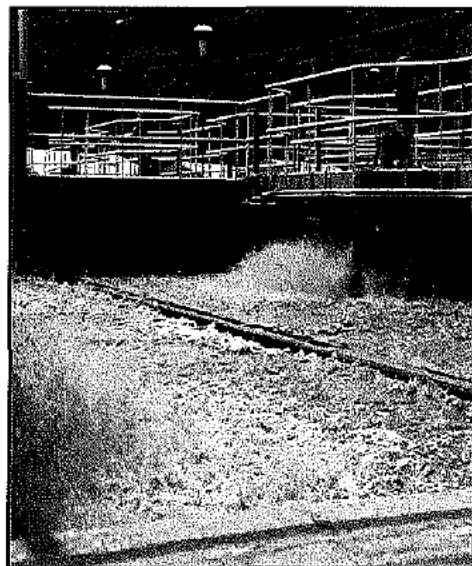
- Collection Systems
- Trunk Line Expertise, Tributary Control
- Headworks
- Primary Clarifiers
- Biosolids Odor Control

### Treatment Plant Process Enhancement

- Primary Clarification
- Anaerobic Digestion
- Biosolids Dewatering
- Nutrient Removal
- PRI-CEPT® & PRIDE™ for Fe-S-P management
- Supplemental Dissolved Oxygen Solutions
- Disinfection

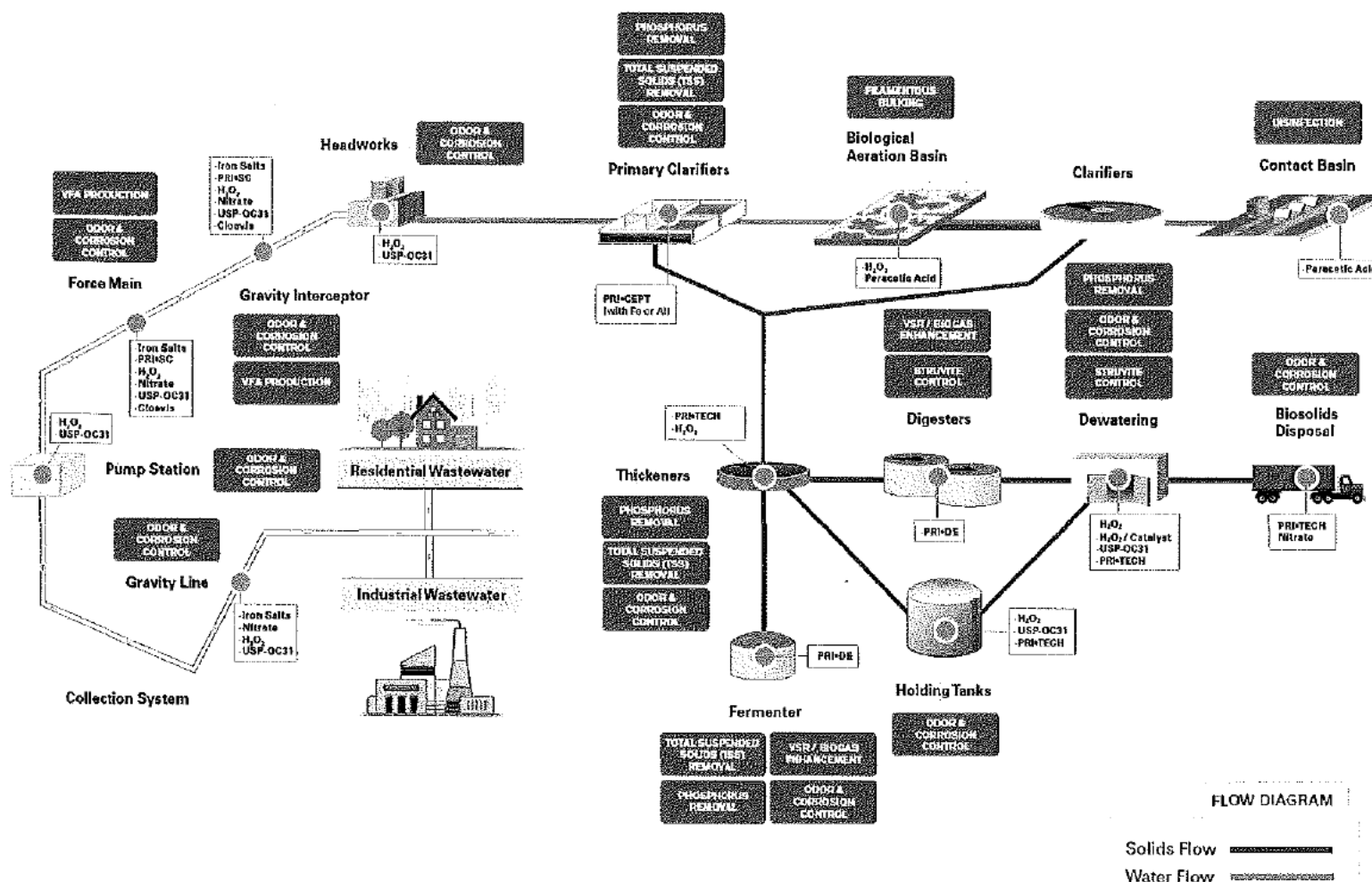
### Multi-Technology Chemical Options

- Hydrogen Peroxide - 27%, 35% & 50%
- Iron Salts -  $\text{FeCl}_2$ ,  $\text{FeCl}_3$ ,  $\text{FeSO}_4$ , etc.
- PRI-SC® & PRI-TECH® -  $\text{H}_2\text{O}_2$  Regenerated Iron Salts
- Calcium or Sodium Nitrate Salts
- Peracetic Acid
- Clovis Biofilm Removal Service
- pH and/or Alkalinity Control Chemicals
- Oxidants including Permanganates & Chlorites





# Muniverse™ Wastewater Treatment Programs





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## APPENDIX A – HS&E PROGRAM & POLICY TABLE OF CONTENTS





## **Health Safety and Environment Policy, Program and Procedure Manual**

### **Statement**

*This manual works in conjunction with the USP HSE Program Overview document and is designed incorporate all current USP Technologies Health Safety and Environment Policies, Programs and Procedures into one document. Note that some materials contained herein reference Trojan Technologies or Trojan UV, USP's parent company. These materials have been adopted into the USP Technologies HSE Program.*

*USP Technologies (USP) is committed to the establishment and execution of work practices to guide the installation and operation of our chemical storage and handling systems in a safe and environmentally conscientious manner. The USP Technologies Health Safety and Environment Program and supporting work place procedures and policies provide a foundation with which to achieve this goal and when combined with customer site-specific standards ensure the safe and effective use of USP chemicals and services.*

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## **APPENDIX B – CONFINED SPACE & INJURY/ILLNESS PREVENTION PROGRAMS**



## **Confined Space Program**

This is the USP Technologies Confined Space Program. It meets all OSHA requirements and applies to all our work operations.

The USP Office of Health Safety and Environment will be responsible for overall direction of the Safety Program.

### **Introduction**

This is the company's Permit-Required Confined Space Program. It has been adopted to meet the requirements of **29 CFR 1910.146**, the OSHA standard that was adopted in order to protect employees in general industry from the hazards of entry into permit-required confined spaces. All our affected employees have been advised of our adoption of this written program. The program will be available for inspection by our employees and their authorized representatives upon request.

Not all confined spaces are hazardous. If a space is potentially hazardous, entry into it requires an Entry Permit. If entry to the space does not pose a hazard, no entry permit is required. There are three kinds of places that are sometimes regarded as confined spaces. The OSHA standard contains definitions for each of them:

1. Confined Space,
2. Permit-Required Confined Space, and
3. Non-Permit Confined Space.

This program contains definitions for each of these three terms, as well as all of the terms defined in the OSHA standard. In order to avoid any misunderstanding, readers of this written program should refer to those definitions whenever one of the terms that are defined there is used in this program.

### **Confined Space**

Whenever anyone is required to work in a boiler, cupola, degreaser, furnace, hopper, pipeline, pit, pumping station, reaction or process vessel, septic tank, sewage digester, sewer, silo, storage bin or tank, ship's hold, utility vault, v.a.t or similar enclosure, that person is probably working in a confined space.

Confined spaces can be hazardous due to atmospheric conditions and fires and also because of the threat of electrocution, crushing, entrapment, falling objects, falls, difficult entry and exit, insufficient maneuverability, eye hazards, temperature extremes, noise, vibration, and stress from excess exertion.



A Confined space is a place that has the following characteristics:

- Limited openings for entry and exit
- Poor natural ventilation
- Not designed for continuous worker occupancy

### **Limited Openings for Entry and Exit**

Confined space openings are limited primarily by size or location. Openings are usually small in size, perhaps as small as 18 inches in diameter, and are difficult to move through easily. Small openings may make it very difficult to get needed equipment in or out of the spaces, especially protective equipment such as respirators needed for entry into spaces with hazardous atmospheres, or life-saving equipment when rescue is needed. However, in some cases, openings may be very large, for example, open-topped spaces such as pits, degreasers, excavations, and ship's holds. Access to open-topped spaces may require the use of ladders, hoists, or other devices, and escape from such areas may be very difficult in emergency situations.

### **Poor Natural Ventilation**

Because air may not move in and out of confined spaces freely due to the design, the atmosphere inside a confined space can be very different from the atmosphere outside. Deadly gases may be trapped inside, particularly if the space has been used to store or process chemicals or organic substances that may decompose. There may not be enough oxygen inside the confined space to support life, or the air could be so oxygen-rich that it is likely to increase the chance of fire or explosion if a source of ignition is present.

### **Not Designed for Continuous Worker Occupancy**

Most confined spaces are not designed for workers to enter and work in them on a routine basis. They are designed to store a product, enclose materials and processes, or transport products or substances. Therefore, occasional worker entry for inspection, maintenance, repair, cleanup, or similar task is often difficult and dangerous due to chemical or physical hazards within the space.

A confined space found in the workplace may have the three characteristics covered above, which can complicate working in and around confined spaces as well as rescue operations during emergencies.

### **Definitions**

Acceptable entry conditions means the conditions that must exist in a 'permit space' to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

Attendant means an individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant's duties assigned in the employer's permit space program.



Authorized entrant means an employee who is authorized by the employer to enter a permit space.

Blanking or blinding means the absolute closure of a pipe, line, or duct by the fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.

Confined space means a space that:

1. Is large enough and so configured that an employee can bodily enter and perform assigned work;
2. Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and
3. Is not designed for continuous employee occupancy.

Double block and bleed means the closure of a line, duct, or pipe by closing and locking or tagging two inline valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.

Emergency means any occurrence (including any failure of hazard control or monitoring equipment) or event internal or external to the permit space that could endanger entrants.

Engulfment means the surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.

Entry means the action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

Entry Permit means the written document that is provided by the employer to allow and control entry into a permit space and contains the information specified in paragraph (f) of the OSHA standard, **29 CFR 1910.146 (f)**.

Entry supervisor means the person (such as the employer, foreman, or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required. An entry supervisor also may serve as an 'attendant' or as an 'authorized entrant', as long as that person is trained and equipped as required by this written program for each role they fill. Also the duties of 'entry supervisor' may be passed from one individual to another during the course of an entry operation.

Hazardous atmosphere means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury or acute illness from one or more of the following causes:

- Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL).



- Airborne combustible dust at a concentration that meets or exceeds its LFL. This concentration may be approximated as a condition in which the dust obscures vision at a distance of 5 feet (1.52 m) or less.
- Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent.
- Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in Subpart G, Occupational Health and Environmental Control, or in Subpart Z, Toxic and Hazardous Substances, of the OSHA General Industry standards (**29 CFR Part 1910**) and which could result in employee exposure in excess of its dose or permissible exposure limit. An atmospheric concentration of any substance that is not capable of causing death, incapacitation, impairment of ability to self-rescue, injury, or acute illness due to its health effects is not covered by this provision.
- Any other atmospheric condition that is immediately dangerous to life or health.

For air contaminants for which OSHA has not determined a dose or permissible exposure limit, other sources of information, such as Material Safety Data Sheets (MSDS) that comply with the Hazard Communication Standard, **29 CFR 1910.1200**, published information and internal documents can provide guidance in establishing acceptable atmospheric conditions.

Hot work permit means the employer's written authorization to perform operations capable of providing a source of ignition (for example riveting, welding, cutting, burning, and heating).

Immediately dangerous to life or health (IDLH) means any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space. Some materials (hydrogen fluoride gas and cadmium vapor for example) may produce immediate transient effects that, even if severe, may pass without medical attention, but are followed by sudden, possibly fatal collapse 12 to 72 hours after exposure. The victim 'feels normal' from recovery from transient effects until collapse. Such materials in hazardous quantities are considered to be 'immediately' dangerous to life or health.

Inserting means the displacement of the atmosphere in a permit space by a noncombustible gas (such as nitrogen) to such an extent that the resulting atmosphere is noncombustible.

Isolation means the process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as: blanking or blinding; misaligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy; or blocking or disconnecting all mechanical linkages.

Line breaking means the intentional opening of a pipe, line, or duct that is or has been carrying flammable, corrosive, or toxic material, an inert gas, or any fluid at a volume, pressure or temperature capable of causing injury.

Non-permit confined space means a confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain, any hazard capable of causing death or serious physical harm.

OSHA standard means the rules and regulations set forth in the OSHA 'permit-required confined space' standard that is codified in **29 CFR 1910.146**.



Oxygen deficient atmosphere means an atmosphere containing less than 19.5 percent oxygen by volume.

Oxygen enriched atmosphere means an atmosphere containing more than 23.5 percent oxygen by volume.

Permit-required confined space (permit space) means a confined space that has one or more of the following characteristics:

1. Contains or has a potential to contain a hazardous atmosphere;
2. Contains a material that has the potential for engulfing an entrant;
3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
4. Contains any other recognized serious safety or health hazard.

Permit-required confined space program (permit space program) means the employer's overall program for controlling, and, where appropriate, for protecting employees from, permit space hazards and for regulating employee entry into permit spaces.

Permit system means the employer's written procedure for preparing and issuing permits for entry and for returning the permit space to service following termination of entry.

Prohibited condition means any condition in a permit space that is not allowed by the entry permit during the period when entry is authorized.

Rescue service means the personnel designated to rescue employees from permit spaces.

Retrieval system means the equipment (including a retrieval line, chest or full-body harness, wristlets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit spaces.

Testing means the process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space. Testing enables employers both to devise and implement adequate control measures for the protection of authorized entrants and to determine if acceptable entry conditions are present immediately prior to, and during, entry.

## **Evaluation of Confined Spaces**

In order to protect employees from confined space hazards, it is first necessary to identify each place that constitutes a confined space under the applicable OSHA standard, and adopt appropriate protective measures for employees who may be affected by the resulting hazard.

The evaluation that we conducted revealed confined spaces that is subject to OSHA regulation. There are also spaces that do not qualify as confined spaces under applicable OSHA standards. If there are future changes in the use or configuration of any such space that might increase the hazards to entrants, the space will be re-evaluated and, if necessary, reclassified as a Permit-Required Confined Space. When and if that happens, no one will be permitted to enter until all appropriate OSHA requirements have been satisfied.



Information on the OSHA-regulated confined spaces has been provided to potentially exposed employees either personally or by the posting of danger signs. This information includes:

1. The existence of the confined space
2. Its location
3. The danger it poses

In those situations where the confined space is a 'Permit-Required Confined Space' and the information is provided by the posting of a sign, the sign will read:

**DANGER**

**PERMIT-REQUIRED CONFINED SPACE**

**DO NOT ENTER**

In those situations where a confined space has been identified that will not be entered by our employees, measures have been taken that will prevent employee entry. In the event it is ever necessary for anyone else to enter such a space (such as employees of an outside contractor), we will first observe the requirements of **29 CFR 1910.146 (c)(8)**.

**Non-Permit Confined Spaces**

The following procedures apply where work is to be performed in a space that qualifies as a confined space only because of its actual or potential hazardous atmosphere (see the definition of the term 'hazardous atmosphere' in **29 CFR 1910.146 (b)**).

Monitoring and inspection to establish that forced air ventilation alone is sufficient to maintain the space safe for entry will develop data. If an initial entry to such a space is necessary in order to obtain that data, that entry will be performed in full compliance with all OSHA requirements for:

1. Permit-Required Confined Spaces - **29 CFR 1910.146 (d)**
2. Permit System - **29 CFR 1910.146 (e)**
3. Entry Permits - **29 CFR 1910.146 (f)**
4. Training - **29 CFR 1910.146 (g)**
5. Authorized Entrants Duties - **29 CFR 1910.146 (h)**
6. Attendants Duties - **29 CFR 1910.146 (i)**
7. Entry Supervisors Duties - **29 CFR 1910.146 (j)**
8. Rescue and Emergency Services - **29 CFR 1910.146 (k)**

Documentation should be made available to each employee who enters the confined space. Entry into a confined space is permitted only under the following conditions:

- Any conditions making it unsafe to remove an entrance cover shall be eliminated before the cover is removed.



- When entrance covers are removed, the opening shall be promptly guarded by a railing, temporary cover, or other temporary barrier that will prevent an accidental fall through the opening and that will protect each employee working in the space from foreign objects entering the space.
- Before an employee enters the space, the internal atmosphere shall be tested, with a calibrated direct-reading instrument, for the following conditions in the order given:
  1. Oxygen content,
  2. Flammable gases and vapors, and
  3. Potential toxic air contaminants.

There may be no hazardous atmosphere within the space whenever any employee is inside the space.

Continuous forced air ventilation will be used as follows:

- An employee may not enter the space until the forced air ventilation has eliminated any hazardous atmosphere;
- The forced air ventilation shall be so directed as to ventilate the immediate areas where an employee is or will be present within the space, and shall continue until all employees have left the space;
- The air supply for the forced air ventilation shall be from a clean source and may not increase the hazards in the space;
- The atmosphere within the space shall be periodically tested as necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere.

If a hazardous atmosphere is detected during entry:

1. Each employee shall leave the space immediately;
2. The space shall be evaluated to determine how the hazardous atmosphere developed; and
3. Measures shall be implemented to protect employees from the hazardous atmosphere before any subsequent entry takes place.

It must be verified that the space is safe for entry and that the conditions listed above have been satisfied through a written certification that contains the date, the location of the space, and the signature of the person providing the certification. The certification must be made before entry and shall be made available to each employee entering the space.

### **Reclassification of Spaces**

When there are changes in the use or configuration of a non-permit confined space that might increase the hazards to entrants, we will reevaluate that space and, if necessary, reclassify it as a permit-required confined space.

When space that we have classified as a Permit-Required Confined Space may be reclassified as Non-Permit Confined Space, the following procedures will apply:



1. If the permit space poses no actual or potential atmospheric hazards and if all hazards within the space are eliminated without entry into the space, the permit space may be reclassified as a non-permit confined space for as long as the non-atmospheric hazards remain eliminated.
2. If it is necessary to enter the permit space to eliminate hazards, such entry shall be performed in conformance with all OSHA requirements.
3. The basis for determining that all hazards in a permit space have been eliminated must be documented through a certification that contains the date, the location of the space, and the signature of the person making the determination. The certification shall be made available to each employee entering the space.
4. If hazards arise within a space that has been declassified to a non-permit space, each employee in the space shall exit the space. We will then reevaluate the space and determine whether it must be reclassified as a permit space.
5. Any employee who believes that any space to which they may have access or exposure is not properly classified under the confined space classifications mentioned above must immediately advise their supervisor of that fact so that we can reevaluate our prior determination and, if necessary, make the appropriate reclassification.

## **Outside Contractors**

In the event that we arrange for an outside contractor to perform any work that involves Permit-Required Confined Space entry, we will do so in conformance with the following requirements:

- Inform the contractor that the workplace contains permit spaces and that permit space entry is allowed only through compliance with a Written Permit-Required Confined Space Program meeting the requirements of the OSHA standard;
- Apprise the contractor of the elements, including the hazards identified and our experience with the space, that make the space in question a permit space;
- Apprise the contractor of any precautions or procedures that we have implemented for the protection of employees in or near those permit-spaces where the contractor's personnel will be working;
- Coordinate entry operations with the contractor, when both our personnel and the contractor's personnel will be working in or near permit spaces; and
- Debrief the contractor at the conclusion of the entry operations regarding the permit space program that the contractor followed and any hazards confronted or created in permit spaces during the contractor's entry operations.

It will be the responsibility of each such outside contractor to comply with the OSHA confined space requirements and to do the following:

1. Obtain any available information regarding the permit space hazards and entry operations.
2. Coordinate entry operations when both our personnel and the contractor's personnel will be working in or near permit spaces.
3. Inform us of the permit space program that the contractor will follow and of any hazards confronted or created in permit spaces, either through a debriefing or during the entry operation.

## **Permit-Required Confined Space Requirements**



Every measure that is needed in order to prevent unauthorized entry into a Permit-Required Confined Space must be taken, and those measures must be strictly enforced at all times. The hazards of each such space must be identified and evaluated before employees enter it.

The following steps must be taken in order to provide for safe Permit-Required Confined Space entry operations:

- Specify acceptable entry conditions;
- Isolate the permit space;
- Purge, inert, flush, or ventilate the permit space as necessary to eliminate or control atmospheric hazards;
- Provide pedestrian, vehicle, or other barriers as necessary to protect entrants from external hazards; and
- Verify that conditions in the permit space are acceptable for entry throughout the duration of an authorized entry.

The following equipment must be provided to employees (at no cost to them):

1. Testing and monitoring equipment needed to comply with **29 CFR 1910.146 (d)(5)**;
2. Ventilating equipment needed to obtain acceptable entry conditions;
3. Communications equipment that is necessary to enable the attendant to monitor entrant status and alert entrants to the need for evacuation;
4. Personal protective equipment (insofar as feasible engineering and work practice controls do not adequately protect employees);
5. Lighting equipment needed to enable employees to see well enough to work safely and to exit the space quickly in an emergency;
6. Equipment, such as ladders, needed for safe ingress and egress by authorized entrants;
7. Rescue and emergency equipment that may be needed, except to the extent that the equipment is provided by rescue services; and
8. Any other equipment that is necessary for safe entry into and rescue from Permit-Required Confined Space.

Conditions in the space must be evaluated as follows when entry operations are being conducted. Test the conditions in the permit space in order to determine if acceptable entry conditions exist before entry is authorized to begin, except that, if isolation of the space is infeasible because the space is large or is part of a continuous system (such as a sewer), pre-entry testing shall be performed to the extent feasible before entry is authorized and, if entry is authorized, entry conditions shall be continuously monitored in the areas where authorized entrants are working.

Test or monitor the permit space as necessary to determine if acceptable entry conditions are being maintained during the course of entry operations; and when testing for atmospheric hazards, test first for oxygen, then for combustible gases and vapors, and then for toxic gases and vapors.

Atmospheric testing conducted in accordance with Appendix B of the OSHA standard, **29 CFR 1910.146** would be considered as satisfying the above requirements. For permit space operations in sewers, atmospheric testing conducted in accordance with the OSHA standard's Appendix B, as supplemented by Appendix E, would be considered as satisfying the above requirements.



There must be at least one attendant outside the space into which entry has been authorized throughout the duration of the entry operations.

The OSHA standard permits attendants to be assigned to monitor more than one permit space provided the duties described in **29 CFR 1910.146 (i)** of the OSHA standard can be effectively performed for each permit space that is monitored. Likewise, attendants may be stationed at any location outside the permit space to be monitored as long as the **29 CFR 1910.146 (i)** duties can be effectively performed for each permit space that is monitored.

Ordinarily we will not permit a single attendant to simultaneously monitor more than one confined space but, in the event that circumstances exist where it would be safe to do so, the person who authorizes that practice must first: (a) develop specific means and methods that will enable the attendant to respond to an emergency that affects any one or more of those spaces without distraction from those duties of the attendant that are specified in **29 CFR 1910.146 (i)**, and (b) make certain that the attendant, and all other affected persons, understands and can carry out those specific means and methods should such an emergency occur.

Before any confined space entry begins, the particular persons who will have active roles in the operation must be designated (for example, 'authorized entrants', 'attendants', and 'entry supervisors', as well as those responsible for testing or monitoring the atmosphere in the confined space). The person in charge of the operation must make sure that each such person knows and understands their duties and that they have successfully completed the training that is required under **29 CFR 1910.146(g)** of the OSHA standard.

#### Procedures for Permit Confined Spaces:

1. Procedures for summoning rescue and emergency services.
2. Procedures for rescuing entrants from confined spaces.
3. Procedures for providing emergency services to rescued employees.
4. Procedures for preventing unauthorized personnel from attempting a rescue.
5. A system for the preparation, issuance, use and the cancellation of 'Entry Permits'.
6. Procedures to coordinate entry operations when employees of more than one employer are working simultaneously as authorized entrants in a permit space, so that employees of one employer do not endanger the employees of any other employer.
7. Procedures (such as closing off a permit space and canceling the permit) that are necessary for concluding the entry after entry operations have been completed.

Those procedures and systems must be known and they must be strictly and properly observed in all of our Permit-Required Confined Space operations.

Our confined space entry operations and procedures will be reviewed whenever we have any reason to believe that the measures taken under this written program may not protect employees. We will revise the program to correct deficiencies found to exist before subsequent entries are authorized.

Examples of circumstances requiring the review of this written program are: any unauthorized entry of a permit space, the detection of a permit space hazard not covered by an entry permit, the detection of a condition prohibited by the permit, the occurrence of an injury or near-miss during entry, a change in the use or configuration of a permit space, and employee complaints about the effectiveness of our program.



The purpose of the review and revision process mentioned above will be to ensure that employees participating in confined space entry operations are protected from the hazards associated with such operations. That review and revision process will include consideration of all canceled Entry Permits for the preceding 12-month period. Canceled entry permits will be retained.

The OSHA standard permits a single annual review covering all entries that were performed during a 12-month period. If no entry is performed during a 12-month period, no review is required.

## **The Entry Permit System**

We have adopted a system that requires execution of a written Entry Permit before any entry to a permit-required confined space will be authorized. The Entry Permit will include (but will not be limited to) the following:

- Specification of acceptable entry conditions.
- Isolation of the confined space.
- The purging, inserting, flushing or ventilating of the confined space as needed in order to eliminate or control the atmospheric hazards.
- Erection and placement of such pedestrian barriers, vehicle barriers or other barriers as may be necessary to protect entrants from external hazards.
- Verification that conditions in the confined space is acceptable for entry throughout its duration.

Appendix D of the OSHA standard **29 CFR 1910.146** contains examples of permits whose elements are considered to comply with the above requirements. Before entry begins, the entry supervisor identified on the permit shall sign the entry permit to authorize entry.

The completed permit shall be made available at the time of entry to all authorized entrants by posting it at the entry portal or by some other equally effective means, so that the entrants can confirm that pre-entry preparations have been completed.

The duration of the permit may not exceed the time required to complete the assigned task or job identified on the permit.

The Entry Supervisor must terminate entry and cancel the entry permit when:

- The entry operations covered by the entry permit have been completed; or
- A condition that is not allowed under the entry permit arises in or near the permit space.

Each canceled Entry Permit will be retained for at least 1 year to facilitate the review of this written permit-required confined space program. That is required by **29 CFR 1910.146 (d)(14)**. Any problems that are encountered during an entry operation shall be noted on the pertinent entry permit so that appropriate revisions to this written program can be made.

Each Entry Permit must contain the following information:

1. The confined space to be entered.
2. The purpose of the entry.
3. The date and the authorized duration of the Entry Permit.



4. The Authorized Entrants within the confined space, by name or by such other means (for example, through the use of rosters or tracking systems) as will enable the attendant to determine quickly and accurately, for the duration of the permit, which authorized entrants are inside the confined space. This requirement may be met by inserting a reference on the entry permit as to the particular means that is used (such as a roster or tracking system) to keep track of the authorized entrants within the confined space.
5. The personnel, by name, currently serving as Attendants.
6. The individual, by name, currently serving as Entry Supervisor, with a space for the signature or initials of the entry supervisor who originally authorized entry.
7. The hazards of the space to be entered.
8. The measures that were used before entry in order to isolate the confined space and to eliminate or control its hazards. Those measures can include the lockout or tagging of equipment and procedures for purging, inserting, ventilating, and flushing permit spaces.
9. The acceptable entry conditions.
10. The results of initial and periodic tests performed under **29 CFR 1910.146 (d)(5)** of the OSHA standard, accompanied by the names or initials of the testers, and by an indication of when the tests were performed.
11. The rescue and emergency services that can be summoned and the means (such as the equipment to use and the numbers to call) for summoning those services.
12. The communication procedures used by authorized entrants and attendants to maintain contact during the entry.
13. Equipment, such as personal protective equipment, testing equipment, communications equipment, alarm systems, and rescue equipment, to be provided in order to comply with the requirements of the OSHA standard.
14. Any other information whose inclusion is necessary, given the circumstances of the particular confined space, in order to ensure the employee safety.
15. Any additional permits, such as for hot work that have been issued and which authorize work in the confined space.

## **Training Requirements**

We have adopted an employee training program so that all employees whose work involves confined spaces will acquire the understanding, knowledge and skills necessary for the safe performance of their assigned duties.

Training will be provided to each affected employee:

- Before the employee is first assigned duties that involved confined spaces;
- Before there is a change in assigned duties;
- Whenever there is a change in permit space operations that presents a hazard about which an employee has not previously been trained;
- Whenever we have any reason to believe either that there are deviations from the confined space entry procedures required by the OSHA standard or that there are inadequacies in the employee's knowledge or use of those procedures.

The training must be conducted in a manner that will establish employee proficiency in the duties required by the OSHA standard. It will also introduce new or revised procedures, as necessary, in order to accomplish full compliance with the OSHA standard.



Upon its completion, we will execute a written certification that the training required by the OSHA standard has been accomplished. The certification shall contain each employee's name, the signatures or initials of the trainers, and the dates of training. The certification will be available for inspection by employees and their authorized representatives.

### **Duties of Authorized Entrants**

All persons who are 'Authorized Entrants' into confined spaces must:

- Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
- Properly use equipment as required by **29 CFR 1910.146 (d)(4)** of the OSHA standard
- Communicate with the attendant as necessary in order to enable the attendant to monitor entrant status and to enable the attendant to alert entrants of the need to evacuate the space
- Alert the attendant whenever:
  - The entrant recognizes any warning sign or symptom of exposure to a dangerous situation, or
  - The entrant detects a prohibited condition
- Exit from the permit space as quickly as possible whenever:
  - An order to evacuate is given by the attendant or the entry supervisor
  - The entrant recognizes any warning sign or symptom of exposure to a dangerous situation
  - The entrant detects a prohibited condition
  - An evacuation alarm is activated

### **Duties of Attendants**

All persons who serve as confined space 'Attendants' must:

- Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- Be aware of possible behavioral effects of hazard exposure in 'authorized entrants'.
- Continuously maintain an accurate count of authorized entrants in the confined space and ensure that the means used to identify authorized entrants on the Entry Permit accurately identifies each person who is in the confined space.
- Remain outside the confined space during entry operations until relieved by another attendant. In the event that attendant entry to the confined space is allowed for rescue purposes, attendants may enter the confined space to attempt a rescue if they have been trained and equipped for rescue operations as required by **29 CFR 1910.146 (k)(1)** of the OSHA standard and if they have been relieved as attendants by someone who assumes the attendant's required duties.
- Communicate with authorized entrants as necessary in order to monitor entrant status and to alert entrants of the need to evacuate the space.
- Monitor activities inside and outside the space to determine if it is safe for entrants to remain in the space, and order the authorized entrants to evacuate the permit space immediately under any of the following conditions:
  - If the attendant detects a prohibited condition;



- If the attendant detects behavioral effects of hazard exposure in an authorized entrant;
  - If the attendant detects a situation outside the space that could endanger the authorized entrants; or
  - If the attendant cannot effectively and safely perform all the duties required under **29 CFR 1910.146 (i)** of the OSHA standard.
- Summon rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards.
- Take the following actions when unauthorized persons approach or enter a permit space while entry is underway:
  - Warn the unauthorized persons that they must stay away from the permit space;
  - Advise the unauthorized persons that they must exit immediately if they have entered the permit space; and
  - Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space;
  - Perform non-entry rescues as specified by the employer's rescue procedure.
- Perform no duties that might interfere with the attendant's primary duty to monitor and protect the authorized entrants.

### **Duties of Entry Supervisor**

Each person who serves as an Entry Supervisor must:

- Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
- Verify by checking that the appropriate entries have been made on the entry permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin;
- Terminate the entry and cancel the permit as required by **29 CFR 1910.146(e)(5)**;
- Verify that rescue services are available and that the means for summoning them are operable;
- Remove unauthorized individuals who enter or who attempt to enter the confined space during entry operations;
- Determine, whenever responsibility for a confined space entry operation is transferred and at intervals dictated by the hazards and operations performed within the space that entry operations remain consistent with the terms of the entry permit and that acceptable entry conditions are maintained.

### **Rescue and Emergency Services**

Whenever any of our employees are authorized to enter a confined space in order to perform rescue services, the following requirements must be observed:

- Each such employee must be provided with, and be trained to use properly, the personal protective equipment and rescue equipment necessary for making rescues from confined spaces.
- Each such employee must be trained to perform the assigned rescue duties and must also have received the training required of 'authorized entrants.'
- Each such employee must practice making confined space rescues at least once every 12 months, by means of simulated rescue operations in which they remove dummies, manikins,



or actual persons from the actual permit spaces or from representative confined spaces. Representative confined spaces must simulate the types of permit spaces from which rescue is to be performed with respect to opening size, configuration, and accessibility.

- Each such employee must be trained in basic first-aid and in cardiopulmonary resuscitation (CPR). At least one member of the rescue service holding current certification in first aid and in CPR must be available.

Whenever we arrange to have outside services (such as the fire department or an emergency rescue provider) perform confined space rescue, we will:

1. Inform the rescue service of the hazards they may confront when called on to perform rescue at our facility, and
2. Provide the rescue service with access to all confined spaces from which rescue may be necessary so that the rescue service can develop appropriate rescue plans and practice rescue operations.

### **Non-Entry Rescue**

In order to facilitate non-entry rescue, appropriate retrieval systems or methods (see the definition of retrieval system in **29 CFR 1910.146 (b)**) must be used whenever an authorized entrant enters a confined space, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant.

The retrieval systems and methods must meet the following requirements:

1. Each authorized entrant must use a chest or full body harness, with a retrieval line attached at the center of the entrant's back near shoulder level, or above the entrant's head. Wristlets may be used in lieu of the chest or full body harness if it can be demonstrated that the use of a chest or full body harness is infeasible or creates a greater hazard and that the use of wristlets is the safest and most effective alternative.
2. The other end of the retrieval line shall be attached to a mechanical device or fixed point outside the confined space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary.
3. A mechanical device must be available to retrieve personnel from vertical type confined spaces more than 5 feet deep.

In the event that an injured entrant is exposed to a substance for which a Safety Data Sheet (SDS) or other similar written information is required to be kept at the worksite, that SDS or written information shall be made available to the medical facility treating the exposed entrant.



## **Injury and Illness Prevention Program**

This is the USP Technologies Injury and Illness Prevention Program. It applies to all our work operations.

The USP Office of Health Safety and Environment will be responsible for overall direction of the Safety Program.

### **Introduction**

The objective of our company's Injury and Illness Prevention Program is to preserve the health and lives of employees through the prevention of injuries and illnesses, and the promotion of safe and healthful work conditions and practices as the key element in day-to-day company operations. Both management commitment and employee responsibility are necessary if we are to accomplish that goal.

The company has existing safety processes and a number of safety rules and special programs. It has issued this Injury and Illness Prevention Program in order to observe legal requirements and to further improve safety on the job. This Program includes important and worthwhile objectives. We are firmly committed to the accomplishment of those objectives. We must have equal commitment from our employees if this Program is to be successful. Each employee must assume their personal responsibility for safety, both to themselves and to their fellow workers.

The first step on the road to the success of this Program must be recognition of the fact that prevention of injury or illness and control of accidents is the result of management and employees working together for a common objective. The leadership for such an effort must, however, originate with management. The degree to which every level of management accepts this responsibility will determine the success or failure of the entire program. There is a direct relationship between injury/illness prevention and the continued success and well-being of any organization. An awareness of that basic fact is also essential for building and maintaining an effective prevention program.

Many injuries and work-related diseases could have been prevented by common sense attention to basic safety practices. Prevention means less injury and suffering. This program is designed to prevent injuries and illnesses before they happen but, if they should happen, to take whatever action is necessary to make sure that they don't happen again.

### **Program Responsibility**

The person with overall responsibility for implementation of this Program is the company's Safety Leader.



## **Code of Safe Practices**

All Executive, Administrative and Supervisory employees shall be responsible for the general administration of safety rules and practices and for their observance in the work areas and jobs that are under their control. Whenever any such person is unsure about required safety rules or procedures, he must consult with the safety director or a source that can provide the correct answer.

Each supervisor shall be responsible for planning the job; applying the correct safety methods and equipment; seeing that employees are equipped with proper and adequate tools and safety devices; making sure that all needed precautions and protections are taken; watching and guiding the work in progress; knowing what action to take in emergencies; seeing that employees are capably supervised, and either providing for appropriate employee training or ascertaining that the employees already possess the necessary training, education, skills and qualification to perform their assigned tasks in a safe and healthful manner.

All work will be performed in accordance with all applicable Federal, state and local occupational safety and health laws, rules and regulations.

Each employee must know the basic rules set forth in this Program as well as the specific laws, rules and safe practices that apply to his/her own job. Employees also have the responsibility of using good judgment and common sense on all jobs, and at all times during their employment with this company.

Each employee has the responsibility of keeping his/her mind on the job at hand, for knowing the proper methods of safely performing the work required by the job, and for doing so at all times.

Each employee shall comply with the occupational safety and health standards and all rules, regulations and orders applicable to his/her own actions and conduct.

Employees shall not do work for which they are not qualified, nor work which is not performed in accordance with law and applicable safety methods and conditions, nor shall any employee expose himself or anyone else to hazard at any time.

Whenever any employee is uncertain of anything mentioned in this Program, the safe methods and procedures for performing any work, or believes that he is not fully qualified for any job assignment, he must immediately report that fact to his supervisor. Questions or problems that cannot be satisfactorily answered or resolved between the supervisor and the affected employee shall be referred up the supervisory channel for investigation and resolution.

Every employee (including staff and supervisors) must immediately report to his/her supervisor:

1. Anything that they believe to be an occupational safety or health hazard, and
2. Any injury or illness that they think is the result of working at this company.

The Safety Director shall act as the company's representative in the day-to-day coordination of company safety activities. Unless such responsibility is assigned or delegated to someone else pursuant to this Program, he will be responsible for: knowing applicable safety and health laws and regulations and the appropriate means and methods for maintaining a safe and healthful workplace, advising both management and employees thereon when necessary or desired, maintaining safety records, accident investigation, safety award programs, safety meeting coordination, interpretation of



safety rules, arranging for on-the-job employee medical treatment when necessary, specifications for safety and protective equipment, and safety requirements for tools.

## **Training Requirements**

In order to ensure that safe and healthful work practices are observed at all times, our company policy requires that each employee must have the necessary skills, training and education for his job, and that regular inspections and observations of the work be conducted in order to identify and recognize those employees who are complying with safe and healthful work practices as well as identify and instruct and/or discipline those employees who are not doing so.

Supervisors must be familiar with the job safety and health hazards to which employees under their immediate direction and control may be exposed. They will be provided with whatever training is necessary to accomplish that requirement.

Each supervisor shall ensure that, at the time this program is first adopted, all employees under his/her immediate direction and control are aware of all hazards of the job and are able to properly perform each of their job assignments in accordance with all applicable health and safety requirements and protective measures. Any employee who is not able to do so will be provided with whatever instruction or training is necessary. This rule applies equally to persons who are supervisors.

Newly hired employees and employees who are given new or different job assignments but who have not had the training and education necessary for their new jobs, must be provided with appropriate education and training consistent with the rule stated above, prior to beginning work.

Training will be provided whenever:

1. New substances, processes, procedures or equipment are introduced to the workplace that produce a new hazard;
2. A new or previously unrecognized hazard is disclosed; and
3. The statements, action or conduct of any employee of the company demonstrates that additional instruction education or training is necessary or desirable.

## **Heat Stress**

The USP cognizant Project Manager shall have the authority and responsibility for implementing the provisions of the Heat Stress program at the worksite. The scope and detail of mitigation factors (shade structure, water sourcing, etc.) shall be discussed in the project plan and included in the daily JSA.

### **Procedures for the Provision of Water**

- Drinking water containers (of five to 10 gallons each) will be brought to the site, so that at least two quarts per employee are available at the start of the shift. All workers whether working individually or in smaller crews, will have access to drinking water.
- Paper cone rims or bags of disposable cups and the necessary cup dispensers will be made available to workers and will be kept clean until used.
- As part of the Effective Replenishment Procedures, the water level of all containers will be checked periodically (e.g. every hour, every 30 min), and more frequently when the



temperature rises. Water containers will be refilled with cool water, when the water level within a container drops below 50 percent. Additional water containers (e.g. five gallon bottles) will be carried, to replace water as needed.

- Water will be fresh, pure, and suitably cool and provided to employees free of charge. Supervisors will visually examine the water and pour some on their skin to insure that the water is suitably cool. During hot weather, the water must be cooler than the ambient temperature but not so cool as to cause discomfort.
- Water containers will be located as close as practicable to the areas where employees are working (given the working conditions and layout of the worksite), to encourage the frequent drinking of water. If field terrain prevents the water from being placed as close as possible to the workers, bottled water or personal water containers will be made available, so that workers can have drinking water readily accessible.
- Since water containers are smaller than shade structures, they can be placed closer to employees than shade structures. Placing water only in designated shade areas or where toilet facilities are located is not sufficient. When employees are working across large areas, water will be placed in multiple locations. For example, on a multi-story construction site, water should be placed in a safely accessible location on every floor where employees are working.
- All water containers will be kept in sanitary condition. Water from non-approved or non-tested water sources (e.g., untested wells) is not acceptable. If hoses or connections are used, they must be governmentally approved for potable drinking water systems, as shown on the manufactures label.
- Daily, workers will be reminded of the location of the water coolers and of the importance of drinking water frequently. When the temperature exceeds or is expected to exceed 80 degrees Fahrenheit, brief 'tailgate' meetings will be held each morning to review with employees the importance of drinking water, the number and schedule of water and rest breaks and the signs and symptoms of heat illness.
- Audible devices (such as whistles or air horns) will be used to remind employees to drink water.
- When the temperature equals or exceeds 95 degrees Fahrenheit or during a heat wave, pre-sift meetings before the commencement of work to encourage employees to drink plenty of water, and remind employees of their right to take a cool-down rest when necessary will be conducted. Additionally, the number of water breaks will be increased. Supervisors/foreman will lead by example and workers will be reminded throughout the work shift to drink water.
- Individual water containers or bottled water provided to workers will be adequately identified to eliminate the possibility of drinking from a co-workers container or bottle.

#### Procedures for Access to Shade

- Shade structures will be opened and placed as close as practical to the workers, when the temperature equals or exceeds 80 degrees Fahrenheit. When the temperature is below 80 degrees Fahrenheit, access to shade will be provided promptly, when requested by an employee. Note: The interior of a vehicle may not be used to provide shade unless the vehicle is air-conditioned and the air conditioner is on.



- Enough shade structures will be available at the site, to accommodate all of the employees who are on such a break at any point in time. During meal periods there will be enough shade for all of the employees who choose to remain in the general area of work or in areas designated for recovery and rest periods. (Employers may rotate employees in and out of meal periods, as with recovery and rest periods.)
- Daily, workers will be informed of the location of the shade structures and will be encouraged to take a five minute cool-down rest in the shade. An employee who takes a preventative cool-down rest break will be monitored and asked if he/she is experiencing symptoms of heat illness and in no case will the employee be ordered back to work until signs or symptoms of heat illness have abated. (see also the section on Emergency Response for additional information)
- Shade structures will be relocated to follow along with the crew and they will be placed as close as practical to the employees, so that access to shade is provided at all times. All employees on a recovery, rest break or meal period will have full access to shade so they can sit in a normal posture without having to be in physical contact with each other.
- In situations where trees or other vegetation are used to provide shade (such as in orchards), the thickness and shape of the shaded area will be evaluated, before assuming that sufficient shadow is being cast to protect employees.
- In situations where it is not safe or feasible to provide access to shade (e.g., during high winds), a note will be made of these unsafe or unfeasible conditions, and of the steps that will be taken to provide shade upon request.
- For non-agricultural employers, in situations where it is not safe or feasible to provide shade (mobile equipment and vehicle hazards, high winds), a note will be made of these unsafe or unfeasible conditions, and of the steps that will be taken to provide alternative cooling measures but with equivalent protection as shade.

#### Procedures for Monitoring the Weather

- The supervisor will be trained and instructed to check in advance the extended weather forecast. Weather forecasts can be checked with the aid of the internet (<http://www.nws.noaa.gov/>), or by calling the National Weather Service phone numbers, or by checking the Weather Channel TV Network. The work schedule will be planned in advance, taking into consideration whether high temperatures or a heat wave is expected. This type of advance planning should take place all summer long.
- Prior to each workday, the forecasted temperature and humidity for the worksite will be reviewed and will be compared against the National Weather Service Heat Index to evaluate the risk level for heat illness. Determination will be made of whether or not workers will be exposed at a temperature and humidity characterized as either “extreme caution” or “extreme danger” for heat illnesses. It is important to note that the temperature at which these warnings occur must be lowered as much as 15 degrees if the workers under consideration are in direct sunlight.
- Prior to each workday, the supervisor will monitor the weather (using <http://www.nws.noaa.gov/> or with the aid of a simple thermometer, available at most hardware stores) at the worksite. This critical weather information will be taken into consideration, to determine, when it will be



necessary to make modifications to the work schedule (such as stopping work early, rescheduling the job, working at night or during the cooler hours of the day, increasing the number of water and rest breaks).

- A thermometer will be used at the jobsite to monitor for sudden increases in temperature, and to ensure that once the temperature exceeds 80 degrees Fahrenheit, shade structures will be opened and made available to the workers. In addition, when the temperature equals or exceeds 95 degrees Fahrenheit, additional preventive measures such as the High Heat Procedures will be implemented.

#### Procedures for Handling a Heat Wave

For purposes of this section only, "heat wave" means any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least ten degrees Fahrenheit higher than the average high daily temperature in the preceding five days.

- During a heat wave or heat spike, the work day will be cut short or rescheduled (example conducted at night or during cooler hours).
- During a heat wave or heat spike, and before starting work, tailgate meetings will be held, to review the company heat illness prevention procedures, the weather forecast and emergency response. In addition, if schedule modifications are not possible, workers will be provided with an increased number of water and rest breaks and will be observed closely for signs and symptoms of heat illness.
- Each employee will be assigned a "buddy" to be on the lookout for signs and symptoms of heat illness and to ensure that emergency procedures are initiated when someone displays possible signs or symptoms of heat illness.

#### High Heat Procedures

High Heat Procedures are additional preventive measures that this company will use when the temperature equals or exceeds 95 degrees Fahrenheit.

- Effective communication by voice, direct observation (applicable for work crews of 20 or fewer), mandatory buddy system, or electronic means will be maintained, so that employees at the worksite can contact a supervisor when necessary. If the supervisor is unable to be near the workers (to observe them or communicate with them), then an electronic device, such as a cell phone or text messaging device, may be used for this purpose if reception in the area is reliable.
- Frequent communication will be maintained with employees working by themselves or in smaller groups (keep tabs on them via phone or two-way radio), to be on the lookout for possible symptoms of heat illness. The employee(s) will be contacted regularly and as frequently as possible throughout the day, since an employee in distress may not be able to summon help on his or her own.
- Effective communication and direct observation for alertness and/or signs and symptoms of heat illness will be conducted frequently. When the supervisor is not available, a designated alternate responsible person must be assigned, to look for signs and symptoms of heat illness. If a supervisor, designated observer, or any employee reports any signs or symptoms of heat



illness in any employee, the supervisor or designated person will take immediate action commensurate with the severity of the illness (see Emergency Response Procedures).

- Employees will be reminded constantly throughout the work shift to drink plenty of water and take preventative cool-down rest break when needed.

### Procedures for Acclimatization

Acclimatization is the temporary and gradual physiological change in the body that occurs when the environmentally induced heat load to which the body is accustomed is significantly and suddenly exceeded by sudden environmental changes. In more common terms, the body needs time to adapt when temperatures rise suddenly, and an employee risks heat illness by not taking it easy when a heat wave strikes or when starting a new job that exposes the employee to heat to which the employee's body hasn't yet adjusted.

Inadequate acclimatization can be significantly more perilous in conditions of high heat and physical stress. Employers are responsible for the working conditions of their employees, and they must act effectively when conditions result in sudden exposure to heat their employees are not used to.

- The weather will be monitored daily. The supervisor will be on the lookout for sudden heat wave(s), or increases in temperatures to which employees haven't been exposed to for several weeks or longer.
- During a heat wave or heat spike, the work day will be cut short (example 12 p.m.), will be rescheduled (example conducted at night or during cooler hours) or if at all possible cease for the day.
- New employees, or those employees who have been newly assigned to a high heat area will be closely observed by the supervisor or designee for the first 14 days. The intensity of the work will be lessened during a two-week break-in period (such as scheduling slower paced, less physically demanding work during the hot parts of the day and the heaviest work activities during the cooler parts of the day (early- morning or evening). Steps taken to lessen the intensity of the workload for new employees will be documented.
- The supervisor, or the designee will be extra-vigilant with new employees and stay alert to the presence of heat related symptoms.
- New employees will be assigned a "buddy" or experienced coworker to watch each other closely for discomfort or symptoms of heat illness.
- During a heat wave, all employees will be observed closely (or maintain frequent communication via phone or radio), to be on the lookout for possible symptoms of heat illness.
- Employees and supervisors will be trained on the importance of acclimatization, how it is developed and how these company procedures address it.

### Procedures for Emergency Response

- Prior to assigning a crew to a particular worksite, workers and the foreman will be provided a map of the site, along with clear and precise directions (such as streets or road names, distinguishing features and distances to major roads), to avoid a delay of emergency medical services.



- Prior to assigning a crew to a particular worksite, efforts will be made to ensure that a qualified and appropriately trained and equipped person is available at the site to render first aid if necessary.
- Prior to the start of the shift, a determination will be made of whether or not a language barrier is present at the site and steps will be taken (such as assigning the responsibility to call emergency medical services to the foreman or an English speaking worker) to ensure that emergency medical services can be immediately called in the event of an emergency.
- All foremen and supervisors will carry cell phones or other means of communication, to ensure that emergency medical services can be called. Checks will be made to ensure that these electronic devices are functional prior to each shift.
- When an employee is showing symptoms of possible heat illness, steps will be taken immediately to keep the stricken employee cool and comfortable once emergency service responders have been called (to reduce the progression to more serious illness). Under no circumstances will the affected employee be left unattended.
- At remote locations such as rural farms, lots or undeveloped areas, the supervisor will designate an employee or employees to physically go to the nearest road or highway where emergency responders can see them. If daylight is diminished, the designated employee(s) shall be given reflective vest or flashlights in order to direct emergency personnel to the location of the worksite, which may not be visible from the road or highway.
- During a heat wave or hot temperatures, workers will be reminded and encouraged to immediately report to their supervisor any signs or symptoms they are experiencing.
- Employees and supervisors training will include every detail of these written emergency procedures.

#### Procedures for Handling a Sick Employee

- When an employee displays possible signs or symptoms of heat illness, a trained first aid worker or supervisor will check the sick employee and determine whether resting in the shade and drinking cool water will suffice or if emergency service providers will need to be called. A sick worker will not be left alone in the shade, as he or she can take a turn for the worse!
- When an employee displays possible signs or symptoms of heat illness and no trained first aid worker or supervisor is available at the site, emergency service providers will be called.
- Emergency service providers will be called immediately if an employee displays signs or symptoms of heat illness (decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior, incoherent speech, convulsions, red and hot face), does not look OK or does not get better after drinking cool water and resting in the shade. While the ambulance is in route, first aid will be initiated (cool the worker: place the worker in the shade, remove excess layers of clothing, place ice pack in the armpits and groin area and fan the victim). Do not let a sick worker leave the site, as they can get lost or die before reaching a hospital!
- If an employee does not look OK and displays signs or symptoms of severe heat illness(decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior, incoherent speech, convulsions, red and hot face), and the worksite is located more



than 20 minutes away from a hospital, call emergency service providers, communicate the signs and symptoms of the victim and request Air Ambulance.

#### Procedures for Employee and Supervisory Training

To be effective, training must be understood by employees and given in a language the employees understand. All employers must maintain records of the training showing the date of training, who performed the training, who attended training and subject(s) covered.

- Supervisors will be trained prior to being assigned to supervise other workers. Training will include this company's written procedures and the steps supervisors will follow when employees' exhibit symptoms consistent with heat illness.
- Supervisors will be trained on their responsibility to provide water, shade, cool-down rests, and access to first aid as well as the employees' right to exercise their rights under this standard without retaliation.
- Supervisors will be trained in appropriate first aid and/or emergency responses to different types of heat illness, and in addition, that heat illness may progress quickly from mild symptoms and signs to serious and life threatening illness.
- Supervisors will be trained on how to track the weather at the job site (by monitoring predicted temperature highs and periodically using a thermometer). Supervisors will be instructed on, how weather information will be used to modify work schedules, to increase number of water and rest breaks or cease work early if necessary.
- All employees and supervisors will be trained prior to working outside. Training will include all aspects of implementing an effective Heat Illness Prevention Plan including but not limited to; providing sufficient water, providing access to shade, high-heat procedures, emergency response procedures and acclimatization contained in the company's written prevention procedures.
- Employees will be trained on the steps that will be followed for contacting emergency medical services, including how they are to proceed when there are non-English speaking workers, how clear and precise directions to the site will be provided and the importance of making visual contact with emergency responders at the nearest road or landmark to direct them to their worksite.
- When the temperature is expected to exceed 80 degrees Fahrenheit, short 'tailgate' meetings will be held to review the weather report, to reinforce heat illness prevention with all workers, to provide reminders to drink water frequently, to inform them that shade can be made available upon request and to remind them to be on the lookout for signs and symptoms of heat illness.
- New employees will be assigned a "buddy" or experienced coworker to ensure that they understand the training and follow company procedures.

#### **Discipline for Noncompliance**

Disciplinary action will be taken against any employee who fails to observe any established job safety or health rule, practice or order; who fails to comply with any restriction, limitation or obligation imposed by this Program; or who acts in a way that creates, or permits to continue in existence, a condition or practice that is hazardous to himself or herself or to anyone else.



Any foreman, supervisor or official of management, as soon as he/she becomes aware of any such infraction, shall ensure that the following action is initiated:

1. **First Offense:** A written report of the incident shall be made and placed in the employee's personnel file. The employee must undergo additional instruction and/or retraining before he is permitted to continue to work.
2. **Second Offense:** The employee shall be immediately suspended from employment without pay for a period of 5 (Five) days. A written report of the incident shall be made and placed in the employee's personnel file. Upon his return to work, he must undergo additional instruction and/or retraining before he is permitted to resume work.
3. **Third Offense:** The employee shall be immediately terminated.

Any employee who has been disciplined but not terminated under the above rule may have a first or second offense eliminated from their record after 12 (twelve) months without any further infractions.

Any employee or supervisor with job safety or health authority who has failed to properly discharge such responsibility will not be permitted to have such authority any longer. Such authority can only be restored when it can be demonstrated that he or she is once again able to properly discharge such authority.

## **Enforcement**

Each matter covered in this Program is inter-related. Consequently, this Program is enforced by each person's continued compliance with all procedures, rules and regulations; all orders that are applicable to his/her own actions and conduct; and by taking appropriate action when noncompliance occurs.

All reports and instances of noncompliance will include an analysis of the causes or reasons therefore. Whatever action is necessary to prevent similar instances in the future will be promptly put into effect.

## **Communications**

It is company policy to effectively communicate applicable and required health and safety matters to our employees in language that they understand. This policy is carried into effect through education and training as it is needed, meetings whenever they are appropriate, posting and distribution of written communications, and encouraging the immediate reporting of job safety or health hazards and work-related injuries and illnesses.

Each supervisor is responsible for ensuring that each employee or other person under his/her immediate direction or control fully understands the relevant job hazards, and all applicable health and safety requirements, precautions and protective measures.

Any employee who does not understand those hazards, requirements or measures must immediately report that to his superior.

Whenever it is necessary or useful, or required by law, regulation or company policy, a safety meeting will be held to permit the participants to discuss health and safety concerns and receive necessary instruction and training.



The OSHA workplace poster 'Job Safety and Health Protection' (or its state equivalent) will be prominently posted at all times and the annual summary of all recordable injuries and illnesses will be posted from February 1 to March 30th of each year.

No employee shall be discharged, disciplined or discriminated against in any manner for reporting any hazardous condition or practice, or any occupational injury or illness, or complaining of any occupational safety or health conditions or for exercising any legal right.

Employee reports of hazardous conditions or practices, or of infractions of any provision of this Program, may be made anonymously in any manner permitted by law or by an unsigned, written statement mailed or submitted to the safety director or to the company's chief executive officer.

Each employee is encouraged to make suggestions and recommendations for improving job safety and health conditions. They should be submitted to your immediate supervisor or to the safety director. Those who make suggestions or recommendations that are deemed to be helpful or worthwhile will be given suitable recognition and reward.

Each supervisor must be constantly on the lookout for appropriate occasions to recognize and reward those employees who consistently observe the job safety and health rules and requirements in such a way that they can be an example for others, and to identify deserving employees. Programs to carry this rule into effect will be developed by the safety director. Each supervisor will consult with the safety director on all recognition and award activities, programs and suggestions.

### **Worksite Analysis and Inspections**

We recognize that no policy, rule or requirement can be fully effective unless it is observed. The company therefore requires that frequent and regular analysis and inspection of workplace conditions and practices be conducted, that hazards be reported immediately, and that they be promptly corrected or abated.

At the time this Program is first adopted, and at least annually thereafter, the Safety Director or such person or persons as he may select or designate, or such outside consultants as may be chosen by the company or assigned by OSHA or one of its approved consultation programs, shall conduct a worksite analysis for the purpose of identifying all existing hazards, all conditions, practices and operations that create hazards, and all areas where hazards may develop.

The worksite analysis will include a review and analysis of all relevant injury/illness, medical, insurance, accident, and related records in order to identify job injury and illness patterns as well as any apparent trends relating to particular departments, processes, operations, employees, occupations and work stations.

Regular inspections of hazards will be conducted and will include:

1. Each supervisor must maintain surveillance of the work under his immediate control as well as the employees and others performing and assisting in the work.
2. Each employee must be constantly on alert for potential hazards and must immediately report them to his immediate supervisor.
3. As soon as he/she is notified, or becomes aware, of a hazardous condition or practice, each supervisor must take the appropriate investigatory and hazard abatement actions required by this Program.



4. A special inspection will be promptly conducted by the supervisor responsible for the area, condition, equipment, substance, material, employee or process concerned, upon receipt of any report of a potential hazard. He or she is responsible for obtaining additional assistance when it is necessary in order to identify the source or cause of the hazard or to effect appropriate corrective action.
5. The safety director will conduct both regular and unannounced inspections either personally or by someone designated by him.
6. Special inspections will also be conducted as necessary and whenever they may be desired by the company's insurance carrier or any others, official concern for ensuring a safe and healthful workplace.

### **Injury/Illness and Accident Investigations**

All accidents and 'near miss' incidents that occur on our premises (whether or not they result in employee injury or illness) and all reports of work-related injury or illness to a company employee must be investigated.

The immediate supervisor of any employee who is reported to have sustained a work-related injury or illness is responsible for assuring that it is promptly investigated. The supervisor shall report each accident to the safety director and if the safety director gives his approval, the supervisor may conduct the investigation personally or may assign another person (or persons) to conduct all or part of any such investigation.

The safety director has overall responsibility for the prompt investigation of each accident and 'near miss' incident that occurs on the premises. He shall make sure that an appropriate investigation has been (or is being) conducted or will either conduct the investigation personally or have it conducted by some person designated by him or authorized by this Program or by applicable law or regulation.

Each such investigation will include the execution of such written reports, interviews, statements and questionnaires as may be required by the company, by this Program, by concerned insurance carriers, or by local, state or federal law or regulation.

### **Hazard Abatement**

The purpose of the rules and procedures for conducting worksite analysis, surveillance, inspections and investigations, as well as making prompt reports of hazards, is the corrections of hazardous conditions and practices before they cause injury, illness or additional damage. Our company policy is one of prompt hazard abatement in every situation.

The supervisor in charge of, or responsible for, the area, process, condition, equipment, substance, material or employee that (or who) is the cause, source or location of the hazard, is responsible for effecting its immediate abatement by correcting the condition, removing employees and all others from the zone of danger, suspending all work, or by any other method that will ensure that the condition will not cause injury or illness (or any additional injury or illness if any has already occurred).

When the supervisor is unable to effect immediate abatement of such a hazard, he shall promptly obtain the needed assistance from whatever source is able to furnish it.

No person, except those engaged in, and properly trained and equipped for, necessary rescue and medical procedures or correction of the condition constituting the hazard, is permitted to enter or



remain present in any place where a hazardous condition exists that is likely to cause death or serious physical harm.

## **Records and Reports**

It is company policy to obtain and keep written, electronic and/or photographic reports, records and other documents of the steps taken to implement and maintain this Program, of work-related injuries and illnesses, hazardous substances and conditions, employee training and qualifications, disciplinary actions, investigations, inspections, and other matters, in order to comply with all applicable laws and regulations, establish and document accountability, serve as a useful reference, and delineate a benchmark for auditing.

Consistent with applicable Constitutional and statutory doctrine and privacy requirements, the company will create, maintain and furnish or supply, as required, all records, documents, reports, notices or warnings required by applicable federal, state or local law or regulation, as well as those that are requested either by any such authority, by a concerned insurance carrier or by any appropriate company official.

A written or photographic record shall be made of all employee training activities and required safety meetings that will show as a minimum the calendar date or dates thereof, the name of employees participating, and the purpose or reason for which it was conducted including the type of training and the training provider. Those records will be retained for three years.

Written reports of job safety and health hazards shall be retained. Each such report will be investigated and a written report shall be made of the results of the investigation and the action taken on the report.

A record of each worksite analysis shall be maintained. Each such record will be retained for 3 years. It shall include the name of the person or persons who participated in it, the calendar date or dates of its conduct, each area, process or other aspect of the work that it covered, the deficiencies noted (if any), the corrective action taken (if necessary), and the plans and recommendations for improvements in workplace safety and health programs, practices and conditions.

Records shall be made (and kept for 3 years) of the scheduled and periodic inspections that are conducted in order to identify unsafe conditions and work practices. Each such record shall show, as a minimum, the name of the person or persons conducting the inspection, the unsafe conditions and practices identified (if any), and the action taken to correct or abate those unsafe conditions and practices if necessary.

Records, reports, documents and other matters that are required by this program to be written or in writing, may be recorded electronically or photographed or kept in some other fashion so long as the data is readily available.



## Attachment A – Existing Chemical Feed Sites and Estimated Feed Rates

Existing Chemical Feed Sites and Estimated Feed Rates are shown below. Estimated feed data is provided for informational purposes only. The Contractor is responsible for sizing equipment and optimizing the feed rate to meet the treatment goals in Section 5 of the specifications.

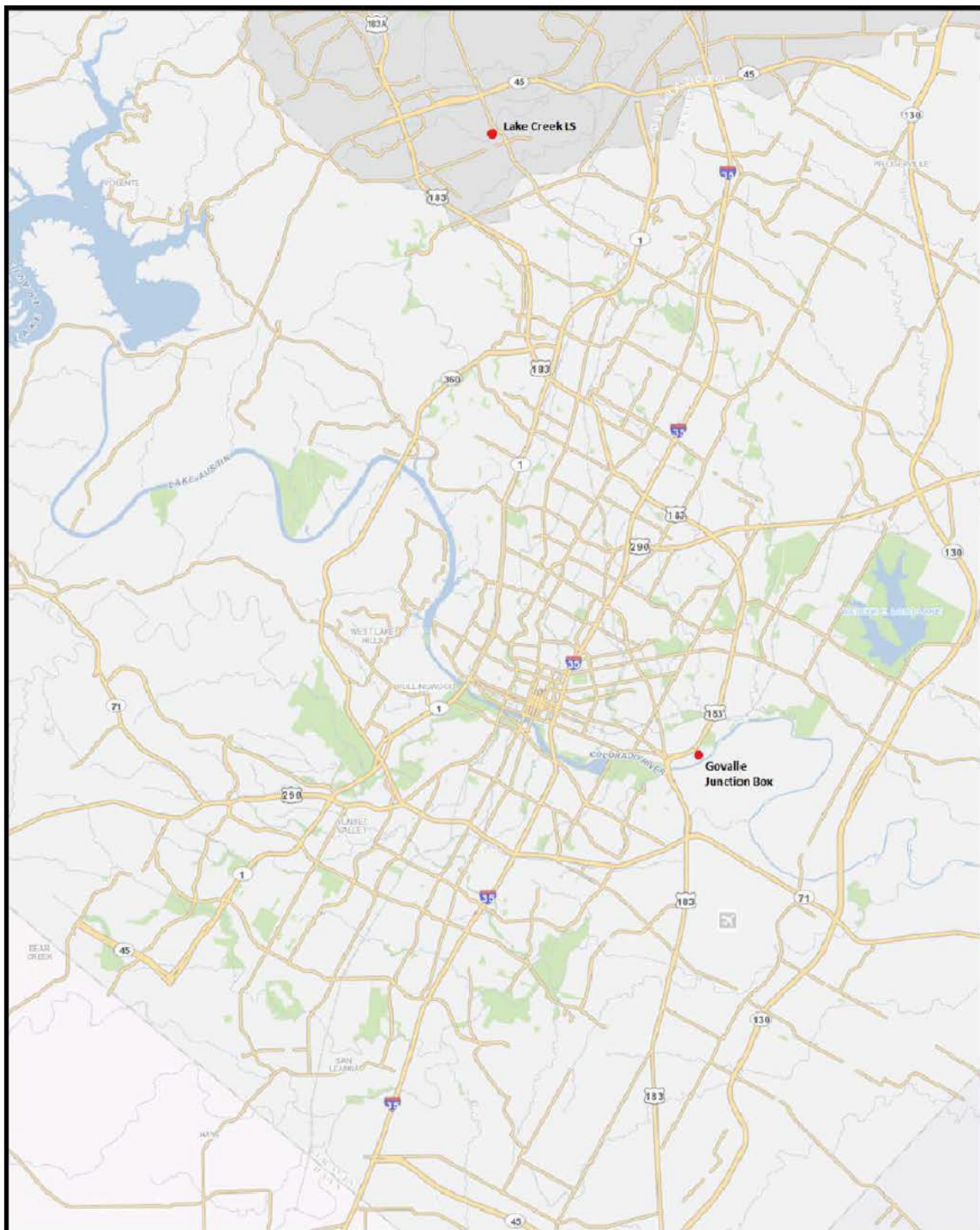
Facility Name	Asset ID	Address	Historical Feed Data Gallons per Day		
			Max.	Min.	Avg
Govalle Junction Box	MH 209685	911 Linger Ln Austin, Texas 78721	150	75	110
Lake Creek LS	LS-059	8601 W Parmer Ln Austin, Texas 78729	200	50	165
<b>TOTAL DAILY FEED RATE</b>			<b>350</b>	<b>125</b>	<b>275</b>

Note: Minimum flows could be zero when the flows are shut down.

Quantities listed are estimates for bid purposes only;  
actual usage may be more or less on an as needed basis.



## Attachment B – Location Map





## Attachment C – Pictures of each chemical feed site

**Site #1 – Govalle Junction Box (MH 209685)**  
911 Linger Ln, Austin, Texas 78721





Site #2 – Lake Creek Lift Station (LS-059)  
8601 W Parmer Ln, Austin, Texas 78729









## Attachment D – Certificate of Analysis

 <b>SOLVAY</b>		<b>SOLVAY CHEMICALS, Inc.</b>		<b>CERTIFICATE OF ANALYSIS</b> SOLVAY CHEMICALS, Inc.	
<b>Customer</b> USP TECHNOLOGIES 900 CIRCLE 75 PARKWAY SUITE 1330 ATLANTA GA 30339			<b>Certificate recipient</b> CITY OF AUSTIN GOVALLE PLANT 911 LINGER LANE AUSTIN TX 78721		
<b>Transport</b>	4107263051	<b>Batch number</b>	50808D08HB		
<b>Delivery note</b>	87522716 900001	<b>Order</b>	4258104 000010		
<b>Shipping date</b>	08/18/2015	<b>Customer ref.</b>	AUST150811-2		
<b>Packaging</b>	1 CARGO TANK	<b>Transport ID</b>	T-5025		
<b>INTEROX® TECHNICAL GRADE 50 HYDROGEN PEROXIDE</b>					
<b>Batch number</b> 50808D08HB / <b>Quantity</b>		44,240.000 LB			
<b>Characteristics</b>	<b>Units</b>	<b>Value</b>	<b>Specification</b>		
Assay	%	50.8	50.0 - 51.0		
Apparent pH		1.5	1.0 - 3.0		
Appearance	-	Clear solution			
<div style="border: 1px solid black; padding: 5px; text-align: center;">NSF - 60</div> <p>Maximum Use Level: 16.1 mg/L</p>					
<b>Supplier :</b> SOLVAY CHEMICALS, Inc. 3333 Richmond 77098-3099 Houston, TX Tel: 713 525-6500 · Fax: 713 525-7808			<b>Approved by</b> Dr. Jean Marie Collard Analytical Services Laboratory Manager Solvay Chemicals, Inc. 1130 Independence Parkway South La Porte, TX 77571 Phone: 713-307-3857		
Issued at LA PORTE on 08/14/2015 at 02:22 PM					



## Attachment E - Bill of Lading

<b>STRAIGHT BILL OF LADING - SHORT FORM - NOT NEGOTIABLE</b> RECEIVED: subject to the classification and tariffs in effect on the date of issue of this Bill of Lading.		<b>Page:</b> 1 OF 1	<b>B/L DATE:</b> 08/18/2015
<b>From: SHIPPER:DPM</b> SOLVAY CHEMICALS, INC. 1130 INDEPENDENCE PARKWAY SOUTH LA PORTE TX 77571		<b>CARRIER MUST SHOW SHIPPER'S</b> SHIPPER'S B/L# ON ALL No. <b>4107263051</b> B/L FREIGHT BILLS <b>FREIGHT TERMS TO BE</b> <b>PREPAID IF CHARGES ARE</b> <b>TO BE COLLECT, WRITE OR</b> CPU - customer <b>STAMP "COLLECT"</b> pick up (USA)	
<b>To: Ship To and Destination - (mail or street address of consignee - for purposes of notification only)</b> CITY OF AUSTIN GOVALLE PLANT 911 LINGER LANE AUSTIN TX 78721		<b>Send Freight Bill To:</b> USP TECHNOLOGIES ATTN: Freight Payables 900 CIRCLE 75 PARKWAY SUITE 1330 ATLANTA GA 30339	
<b>Pickup No:</b> 4268104		<b>CUSTOMER'S PURCHASE ORDER NO.</b> <b>AUST150811-2</b>	
FOR US AND CANADIAN TRANSPORT EMERGENCIES CALL CHEMTREC 800-424-9300 OR FOR INTERNATIONAL CALLS: 703-527-3887 SUBSCRIBER # CCN20482 FOR MEXICAN TRANSPORT EMERGENCIES CALL SETIQ: 01-800-00-214-00 (CONTRACT # 11649)			
<b>Route/Carrier:</b> QUALITY CARRIERS INC		<b>Contract No:</b>	
<b>Seal Nos</b> 6635, 10636		<b>Car or Vehicle No.:</b> T-5025	
<b>Delivery date:</b> 08/19/2015		<b>Delivery time:</b> 08:00	
<b>No. &amp; Type Packages</b>	<b>HM</b>	<b>Description of Articles, Special Marks and Exceptions</b>	<b>Net weight (LB)</b> (Sub to Corr.)
1 CARGO TANK	X	UN 2014 , HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS, 5.1 (8), II Placards offered , ERG Guide # 140	44,240
PACKING LIST 61604 1 CARGO TANK		INTEROX® TECHNICAL GRADE 50 HYDROGEN PEROXIDE BULK  [NSF - 60] Maximum Use Level: 16.1 mg/L 08:00 Batch # → 50808D08HB - 44,240 LB NMFC Class:  Emergency Response Info. - Refer to ERG Guide # above. U.S. DOT HAZMAT REGISTRATION NUMBER 052914 550 013W Please contact Solvay at 800-443-2785 with any delivery changes.	44,240
<b>Total Gross Wt.:</b> 71460		<b>Total Tare Wt.:</b> 27220	<b>Total Net Wt.:</b> 44,240
Note: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding.			
<b>SECTION 7</b> Subject to Section 7 of conditions of applicable Bill of Lading, if this shipment is to be delivered to the Consignee without recourse on the Consignor, the Consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payments of freight and all other lawful charges.		<b>PER:</b> Mark Gehle Signature of Consignor	
This is to certify that the above - named materials are properly classified, described, packaged, marked, labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, and that Emergency Instructions have been provided. <b>Shipper: SOLVAY CHEMICALS, INC.</b> <b>PER:</b>		<b>Carrier: QUALITY CARRIERS INC</b> <b>PER:</b>	
The property described, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked consigned and destined as indicated, which said carrier (the word carrier being understood through this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classification in effect on the date hereof, if this is a rail or water shipment or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with the terms and conditions of the said bill of lading, including those set forth in the classification or tariff which governs the transportation of the shipment and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.			
<b>PERMANENT POST OFFICE ADDRESS OF SHIPPER: 27328 HOUSTON TX 77227-73281B266C3458</b>			
White - ORIGINAL      Yellow - Carrier      Pink - Customer      Gold - EXTRA			



## AUSTIN WATER UTILITY

### \*\*\*\*\*NOTICE OF CHEMICAL DELIVERY\*\*\*\*\*

CHEMICAL VENDOR NAME: \_\_\_\_\_

TRUCKING COMPANY NAME: \_\_\_\_\_

COMPANY CONTACT PHONE: \_\_\_\_\_ DATE OF THIS NOTICE: \_\_\_\_\_

TYPE OF CHEMICAL TO BE DELIVERED: \_\_\_\_\_

#### DELIVERY INFORMATION:

DESTINATION: \_\_\_\_\_ TIME DELIVERY LEFT COMPANY: \_\_\_\_\_

ESTIMATED ARRIVAL TIME: \_\_\_\_\_

#### TRUCK DESCRIPTION:

MAKE: \_\_\_\_\_ MODEL: \_\_\_\_\_ COLOR: \_\_\_\_\_

TRUCK (front) LICENSE PLATE #: \_\_\_\_\_ TANK SECURITY SEAL #: \_\_\_\_\_

TRUCK / TANKER #: \_\_\_\_\_ / \_\_\_\_\_

#### DRIVER & COMMERCIAL DRIVER'S LICENSE (CDL) INFORMATION:

\_\_\_\_\_  
DRIVER NAME

\_\_\_\_\_  
(not necessary at this time)  
DRIVER CDL NUMBER & EXPIRATION DATE

\_\_\_\_\_  
DRIVER CONTACT PHONE

CDL ENDORSEMENT ON LICENSE? YES NO  
Circle One

CDL ENDORSEMENT CODE: H or X or N  
Circle One

(This section for AWU use only)

Actual arrival time: \_\_\_\_\_ Is CDL endorsement code appropriate for this vehicle\*? YES NO  
Circle One

I have verified the information submitted on this form with actual conditions at delivery:

AWU Staff Signature: \_\_\_\_\_ Printed Name: \_\_\_\_\_

\*Endorsement letters: N = Required for tanker vehicle  
H = Required for transporting hazardous materials that require display of placards on truck/trailer  
X = Combines N and H; Required for operating tanker vehicles carrying hazardous materials

This form should be retained and submitted with the related payment materials to AWU Accounts Payable.

NOTE: THIS FORM SHALL BE FAXED TO DELIVERY LOCATION SITE SUPERVISOR WHEN DRIVER HAS BEEN DISPATCHED FOR DELIVERY TO AUSTIN WATER UTILITY DELIVERY SITE. PLEASE CALL (512) 972-0310 WITH ANY QUESTIONS OR CONCERNS REGARDING THIS FORM.

{AWU REVISED 09/15/2013ss, Form 2013c}



# CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.  
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

## OFFICE USE ONLY CERTIFICATION OF FILING

Certificate Number:  
2018-408575

Date Filed:  
09/27/2018

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

US Peroxide LLC  
Atlanta, GA United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

City of Austin - Purchasing Office

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

MA 2200 NA180000190  
50% Hydrogen Peroxide Solution, Feed System Installation, and Maintenance Services; IFB 2200 SLW1004

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary
	US Peroxide, LLC	Atlanta, GA United States	X	

5 Check only if there is NO Interested Party. ☐

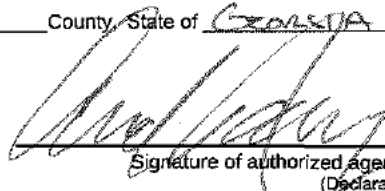
## 6 UNSWORN DECLARATION

My name is Andrew Nankov, and my date of birth is [REDACTED].

My address is 1616 Pecos Ave NE #A7, Atlanta, GA, 30324, USA.  
(street) (city) (state) (zip code) (country)

I declare under penalty of perjury that the foregoing is true and correct.

Executed in Fulton County, State of Georgia, on the 27<sup>th</sup> day of Sept, 2018.  
(month) (year)



Signature of authorized agent of contracting business entity  
(Declarant)