



LEXINGTON

Lexington-Fayette Urban County Government

Lexington, Kentucky
Horse Capital of the World

Division of Procurement

Date of Issue: March 12, 2026

INVITATION TO BID #27-2026 Advanced Oxidation Technology Odor Control Chemicals

Bid Opening Date: March 26, 2026

Bid Opening Time: 2:00 PM

Address: All bids must be submitted on line at <https://lexingtonky.ionwave.net/>

Type of Bid: Price Contract

Pre Bid Meeting: N/A

Pre Bid Time: N/A

Address: N/A

Sealed bids will ONLY be received online at <https://lexingtonky.ionwave.net/> until **2:00 PM**, prevailing local time on **3/26/2026**. Bids must be submitted/uploaded by the above-mentioned date and time.

Bids are to include all shipping, handling and associated fees to the point of delivery (unless otherwise specified in the bid documents below) located at: Fayette and Jessamine Counties

<input checked="" type="checkbox"/> Bid Specifications Met _____ Exceptions to Bid Specifications. <i>Exceptions shall be itemized and attached to bid proposal submitted.</i>	<p align="center">Check One:</p> <p align="center">Proposed Delivery:</p> <p align="center">14 days after acceptance of bid.</p>
<p>Procurement Card Usage—The Lexington-Fayette Urban County Government may be using Procurement Cards to purchase goods and services and also to make payments. Will you accept Procurement Cards? _____ Yes <input checked="" type="checkbox"/> No</p>	

To expedite award, the forms in this document should be completed and uploaded with your bid.

Submitted by: SOURCE TECHNOLOGIES, LLC.

Firm Name
157 VENTURE CT, STE 7

Address
LEXINGTON, KY 40511
City, State & Zip

Bid must be signed: Michael Ingram
Signature of Authorized Company Representative – Title

MICHAEL J ENGRAM
Representative's Name (Typed or printed)

859-223-1444
Area Code -- Phone – Extension
admin@sourcetechnologiesllc.com
E-Mail Address

The Affidavit in this bid must be completed before your firm can be considered for award of this contract.

AFFIDAVIT

Comes the Affiant, MICHAEL J ENGRAM, and after being first duly sworn under penalty of perjury as follows:

1. His/her name is MICHAEL J ENGRAM and he/she is the individual submitting the bid or is the authorized representative of SOURCE TECHNOLOGIES, LLC. the entity submitting the bid (hereinafter referred to as "Bidder")
2. Bidder will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the bid is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.
3. Bidder will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.
4. Bidder has authorized the Division of Procurement to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.
5. Bidder has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Bidder will not violate any provision of the campaign finance laws of the Commonwealth.
6. Bidder has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."
7. Bidder acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further, Affiant sayeth naught. Michael J Engram 03252026

STATE OF GEORGIA

COUNTY OF CLARKE

The foregoing instrument was subscribed, sworn to and acknowledged before me by Christina C Hutton on this the 25th day of MARCH, 2026

My Commission expires: MARCH 11, 2028



NOTARY PUBLIC, STATE AT LARGE, CLARKE COUNTY, GEORGIA

Please refer to Section II. Bid Conditions, Item "U" prior to completing this form.

I. GREEN PROCUREMENT

A. ENERGY

The Lexington-Fayette Urban County Government is committed to protecting our environment and being fiscally responsible to our citizens.

The Lexington-Fayette Urban County Government mandates the use of Energy Star compliant products if they are available in the marketplace (go to www.Energystar.gov). If these products are available, but not submitted in your pricing, your bid will be rejected as non-compliant.

ENERGY STAR is a government program that offers businesses and consumers energy-efficient solutions, making it easy to save money while protecting the environment for future generations.

Key Benefits

These products use 25 to 50% less energy
Reduced energy costs without compromising quality or performance
Reduced air pollution because fewer fossil fuels are burned
Significant return on investment
Extended product life and decreased maintenance

B. GREEN SEAL CERTIFIED PRODUCTS

The Lexington-Fayette Urban County Government is also committed to using other environmentally friendly products that do not negatively impact our environment. Green Seal is a non-profit organization devoted to environmental standard setting, product certification, and public education.

Go to www.Greenseal.org to find available certified products. These products will have a reduced impact on the environment and on human health. The products to be used must be pre-approved by the LFUCG prior to commencement of any work in any LFUCG facility. If a Green Seal product is not available, the LFUCG must provide a signed waiver to use an alternate product. Please provide information on the Green Seal products being used with your bid response.

C. GREEN COMMUNITY

The Lexington-Fayette Urban County Government (LFUCG) serves as a principal, along with the University of Kentucky and Fayette County Public Schools, in the Bluegrass Partnership for a Green Community. The Purchasing Team component of the Partnership collaborates on economy of scale purchasing that promotes and enhances environmental initiatives. Specifically, when applicable, each principal is interested in obtaining best value products and/or services which promote environment initiatives via solicitations and awards from the other principals.

If your company is the successful bidder on this Invitation For Bid, do you agree to extend the same product/service pricing to the other principals of the Bluegrass Partnership for a Green Community (i.e. University of Kentucky and Fayette County Schools) if requested?

Yes X No _____

II. Bid Conditions

- A. No bid may be withdrawn for a period of sixty (60) days after the date and time set for opening.
- B. No bid may be altered after the date and time set for opening. In the case of obvious errors, the Division of Procurement may permit the withdrawal of a bid. The decision as to whether a bid may be withdrawn shall be that of the Division of Procurement.
- C. Acceptance of this proposal shall be enactment of an Ordinance by the Urban County Council.
- D. The bidder agrees that the Urban County Government reserves the right to reject any and all bids for either fiscal

- or technical reasons, and to award each part of the bid separately, all parts to one vendor or all parts to multiple vendors.
- E. Minor exceptions may not eliminate the bidder. The decision as to whether any exception is minor shall be entirely that of the head of the requisitioning Department or Division and the Director of the Division of Procurement. The Urban County Government may waive technicalities and informalities where such waiver would best serve the interests of the Urban County Government.
 - F. Manufacturer's catalogue numbers, trade names, etc., where shown herein are for descriptive purposes and are to guide the bidder in interpreting the standard of quality, design, and performance desired, and shall not be construed to exclude proposals based on furnishing other types of materials and/or services. However, any substitution or departure proposed by the bidder must be clearly noted and described; otherwise, it will be assumed that the bidder intends to supply items specifically mentioned in this Invitation for Bids.
 - G. The Urban County Government may require demonstrations of the materials proposed herein prior to acceptance of this proposal.
 - H. Bids must be submitted on this form and must be signed by the bidder or his authorized representative. Unsigned bids will not be considered.
 - I. Bids must be submitted prior to the date and time indicated for opening. Bids submitted after this time will not be considered.
 - J. All bids mailed must be submitted in the Ion Wave online portal at <https://lexingtonky.ionwave.net/>
 - K. Bidder is requested to show both unit prices and lot prices. In the event of error, the unit price shall prevail.
 - L. A certified check or Bid Bond in the amount of XX percent of the bid price must be attached hereto. This check must be made payable to the Lexington-Fayette Urban County Government, and will be returned when the material and/or services specified herein have been delivered in accordance with specifications. In the event of failure to perform within the time period set forth in this bid, it is agreed the certified check may be cashed and the funds retained by the Lexington-Fayette Urban County Government as liquidated damages. Checks of unsuccessful bidders will be returned when the bid has been awarded.
 - M. The delivery dates specified by bidder may be a factor in the determination of the successful bidder.
 - N. Tabulations of bids received may be mailed to bidders. Bidders requesting tabulations must enclose a stamped, self-addressed envelope with the bid.
 - O. The Lexington-Fayette Urban County Government is exempt from Kentucky Sales Tax and Federal Excise Tax on materials purchased from this bid invitation. Materials purchased by the bidder for construction projects are not tax exempt and are the sole responsibility of the bidder.
 - P. All material furnished hereunder must be in full compliance with OSHA regulations.
 - Q. If more than one bid is offered by one party, or by any person or persons representing a party, all such bids shall be rejected.
 - R. Signature on the face of this bid by the Bidder or his authorized representative shall be construed as acceptance of and compliance with all terms and conditions contained herein.
 - S. The Entity (regardless of whether construction contractor, non-construction contractor or supplier) agrees to provide equal opportunity in employment for all qualified persons, to prohibit discrimination in employment because of race, color, religion, sex (including pregnancy, sexual orientation or gender identity), national origin, disability, age, genetic information, political affiliation, or veteran status.
 - T. The Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) requires that any county, city, town, school district, water district, hospital district, or other political subdivision of the state shall include in directly or indirectly publicly funded contracts for supplies, materials, services, or equipment hereinafter entered into the following provisions:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age or national origin;*
- (2) The contractor will state in all solicitations or advertisements for employees placed by or on behalf of the contractors that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age or national origin;*
- (3) The contractor will post notices in conspicuous places, available to employees and applicants for employment, setting forth the provisions of the non-discrimination clauses required by this section; and*
- (4) The contractor will send a notice to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding advising the labor union or workers' representative of the contractor's commitments under the nondiscrimination clauses.*

The contractor is required to comply to the Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560 to KRS 45.640)

- U. Any party, firm or individual submitting a proposal pursuant to this invitation must be in compliance with the requirements of the Lexington-Fayette Urban County Government regarding taxes and fees before they can be considered for award of this invitation and must maintain a "current" status with regard to those taxes and fees throughout the term of the contract. The contractor must be in compliance with Chapter 13 from the Code of Ordinances of the Lexington-Fayette Urban County Government. The contractor must be in compliance with Ordinance 35-2000 pursuant to contractor registration with the Division of Building Inspection. If applicable, said business must have a Fayette County business license.

Pursuant to KRS 45A.343 and KRS 45A.345, the contractor shall

- (1) Reveal any final determination of a violation by the contractor within the previous five year period pursuant to KRS Chapters 136 (corporation and utility taxes), 139 (sales and use taxes), 141 (income taxes), 337 (wages and hours), 338 (occupational safety and health of employees), 341 (unemployment and compensation) and 342 (labor and human rights) that apply to the contractor; and*
- (2) Be in continuous compliance with the above-mentioned KRS provisions that apply to the contractor for the duration of the contract.*

A contractor's failure to reveal the above or to comply with such provisions for the duration of the contract shall be grounds for cancellation of the contract and disqualification of the contractor from eligibility for future contracts for a period of two (2) years.

- V. Vendors who respond to this invitation have the right to file a notice of contention associated with the bid process or to file a notice of appeal of the recommendation made by the Director of Procurement resulting from this invitation.

Notice of contention with the bid process must be filed within 3 business days of the bid/proposal opening by (1) sending a written notice, including sufficient documentation to support contention, to the Director of the Division of Procurement or (2) submitting a written request for a meeting with the Director of Procurement to explain his/her contention with the bid process. After consulting with the Commissioner of Finance the Chief Administrative Officer and reviewing the documentation and/or hearing the vendor, the Director of Procurement shall promptly respond in writing findings as to the compliance with bid processes. If, based on this review, a bid process irregularity is deemed to have occurred the Director of Procurement will consult with the Commissioner of Finance, the Chief Administrative Officer and the Department of Law as to the appropriate remedy.

Notice of appeal of a bid recommendation must be filed within 3 business days of the bid recommendation by (1) sending a written notice, including sufficient documentation to support appeal, to the Director, Division of Procurement or (2) submitting a written request for a meeting with the Director of Procurement to explain

his appeal. After reviewing the documentation and/or hearing the vendor and consulting with the Commissioner of Finance and the Chief Administrative Officer, the Director of Procurement shall in writing, affirm or withdraw the recommendation.

III. Procurement Contract Bid Conditions

- A. The terms of this agreement shall be for one **(1)** year from the date of acceptance of this contract by the Lexington-Fayette Urban County Government. This agreement may be automatically extended for an additional **3- (1)** year renewal. This contract may be canceled by either party thirty (30) days after delivery by canceling party of written notice of intent to cancel to the other contracting party.
- B. Price Changes **(Space Checked Applies)**
 - (XXX)1. Prices quoted in response to the Invitation shall be firm prices for the first 365 days of the Procurement Contract. After 365 days, prices may be subject to revision and such changes shall be based on general industry changes. Revision may be either increases or decreases and may be requested by either party. There will be no more than one (1) price adjustment per year. Requests for price changes shall be received in writing at least twenty (20) days prior to the effective date and are subject to written acceptance before becoming effective. Proof of the validity of a request for revision shall be responsibility of the requesting party. The Lexington-Fayette Urban County Government shall receive the benefit of any decline that the seller shall offer his other accounts.
 - () 2. No provision for price change is made herein. Prices are to be firm for the term of this contract.
 - () 3. See bid specifications.
- C. If any contract item is not available from the vendor, the Lexington-Fayette Urban County Government, at its option, may permit the item to be back-ordered or may procure the item on the open market.
- D. All invoices must bear reference to the Lexington-Fayette Urban County Government Purchasing document numbers which are being billed.
- E. This contract may be canceled by the Lexington-Fayette Urban County Government if it is determined that the Bidder has failed to perform under the terms of this agreement, such cancellation to be effective upon receipt of written notice of cancellation by the Bidder.
- F. No substitutions for articles specified herein may be made without prior approval of the Division of Procurement.

EQUAL OPPORTUNITY AGREEMENT

Standard Title VI Assurance

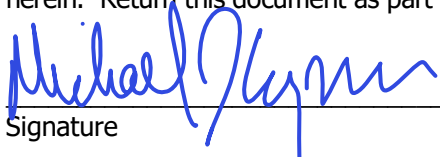
The Lexington Fayette-Urban County Government, (hereinafter referred to as the "Recipient") hereby agrees that as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation, it will comply with Title VI of the Civil Rights Act of 1964, 78Stat.252, 42 U.S.C. 2000d-4 (hereinafter referred to as the "Act"), and all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, (49 CFR, Part 21) Nondiscrimination in Federally Assisted Program of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964 (hereinafter referred to as the "Regulations") and other pertinent directives, no person in the United States shall, on the grounds of race, color, national origin, sex, age (over 40), religion, sexual orientation, gender identity, veteran status, or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance from the U.S. Department of Transportation, including the Federal Highway Administration, and hereby gives assurance that will promptly take any necessary measures to effectuate this agreement. This assurance is required by subsection 21.7(a) (1) of the Regulations.

The Law


- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Section 503 of the Rehabilitation Act of 1973 states: *The Contractor will not discriminate against any employee or applicant for employment because of physical or mental disability.*
- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.



Signature



Name of Business

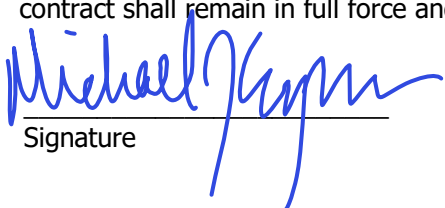
GENERAL PROVISIONS OF BID CONTRACT

By signing the below, bidder acknowledges that it understands and agrees with the following provisions related to its bid response and the provision of any goods or services to LFUCG upon selection by LFUCG pursuant to the bid request:

1. Bidder shall comply with all Federal, State & Local regulations concerning this type of service or good. All applicable state laws, ordinances and resolutions (including but not limited to Section 2-33 (Discrimination due to sexual orientation or gender identity) and Chapter 13 (Licenses and Regulations) of the Lexington-Fayette Urban County Government Code of Ordinances, and the regulations of all authorities having jurisdiction over the project shall apply to the contract, and shall be deemed to be incorporated herein by reference.
2. Failure to submit ALL forms and information required by LFUCG may be grounds for disqualification.
3. Addenda: All addenda and IonWave Q&A, if any, must be considered by the bidder in making its response, and such addenda shall be made a part of the requirements of the bid contract. Before submitting a bid response, it is incumbent upon bidder to be informed as to whether any addenda have been issued, and the failure of the bidder to cover any such addenda may result in disqualification of that response.
4. Bid Reservations: LFUCG reserves the right to reject any or all bid responses, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
5. Liability: LFUCG is not responsible for any cost incurred by bidder in the preparation of its response.
6. Changes/Alterations: Bidder may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the bid response, and received by LFUCG prior to the scheduled closing time for receipt of bids, will be accepted. The bid response when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of bid response".
7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from any bidder.
8. Bribery Clause: By his/her signature on its response, bidder certifies that no employee of his/hers, any affiliate or subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.
9. Additional Information: While not necessary, the bidder may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the bid response. Additional documentation shall not serve as a substitute for other documentation which is required by the LFUCG to be submitted with the bid response.
10. Ambiguity, Conflict or other Errors: If a bidder discovers any ambiguity, conflict, discrepancy, omission or other error in the bid request of LFUCG, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
11. Agreement to Bid Terms: In submitting its bid response, the bidder agrees that it has carefully examined the specifications and all provisions relating to LFUCG's bid request, including but not limited to the bid contract. By submission of its bid response, bidder states that it understands the meaning, intent and requirements of LFUCG's bid request and agrees to the same. The successful bidder shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to bidder shall be authorized for services, expenses, or goods reasonably covered under these provisions that the bidder omits from its bid response.
12. Cancellation: LFUCG may unilaterally terminate the bid contract with the selected bidder(s) at any time, with or without cause, by providing at least thirty (30) days advance written notice unless a different advance written notice period is negotiated prior to contract approval. Payment for services or goods received prior to termination shall be

made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

13. Assignment of Contract: The selected bidder(s) shall not assign or subcontract any portion of the bid contract with LFUCG without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
14. No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this bid proposal or bid contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
15. Authority to do Business: Each bidder must be authorized to do business under the laws of the Commonwealth of Kentucky and must be in good standing and have full legal capacity to provide the goods or services specified in the bid proposal. Each bidder must have all necessary right and lawful authority to submit the bid response and enter into the bid contract for the full term hereof including any necessary corporate or other action authorizing the bidder to submit the bid response and enter into this bid contract. If requested, the bidder will provide LFUCG with a copy of a corporate resolution authorizing this action and/or a letter from an attorney confirming that the proposer is authorized to do business in the Commonwealth of Kentucky. All bid responses must be signed by a duly authorized officer, agent or employee of the bidder.
16. Governing Law: This bid request and bid contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this matter, the bidder agrees that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division and that the bidder expressly consents to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to these matters or any rights or obligations arising thereunder.
17. Ability to Meet Obligations: Bidder affirmatively states that there are no actions, suits or proceedings of any kind pending against bidder or, to the knowledge of the bidder, threatened against the bidder before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of bidder to perform its obligations under this bid response or bid contract, or which question the legality, validity or enforceability hereof or thereof.
18. Price Discrepancy: When applicable, in case of price discrepancy, unit bid price written in words will prevail followed by unit price written in numbers then total amount bid per line item.
19. Bidder understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Bidder is an independent contractor at all times related to the bid response or bid contract.
20. Contractor [or Vendor or Vendor's Employees] will not appropriate or make use of the Lexington-Fayette Urban County Government (LFUCG) name or any of its trade or service marks or property (including but not limited to any logo or seal), in any promotion, endorsement, advertisement, testimonial or similar use without the prior written consent of the government. If such consent is granted LFUCG reserves the unilateral right, in its sole discretion, to immediately terminate and revoke such use for any reason whatsoever. Contractor agrees that it shall cease and desist from any unauthorized use immediately upon being notified by LFUCG.
21. If any term or provision of this bid contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.


Signature

03252026
Date



LEXINGTON

MINORITY BUSINESS ENTERPRISE PROGRAM

Sherita Miller, MPA, CPSD
Minority Business Enterprise Liaison
Division of Procurement
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507
smiller@lexingtonky.gov
859-258-3323

OUR MISSION: The mission of the Minority Business Enterprise Program (MBEP) is to facilitate the full participation of minority and women owned businesses in the procurement process and to promote economic inclusion as a business imperative essential to the long- term economic viability of Lexington-Fayette Urban County Government.

To that end the urban county council adopted and implemented Resolution 272-2024 – a Certified Minority and Women Business Enterprise seventeen percent (17%) minimum goal including minimum subgoals of five percent (5%) for Minority Business Enterprises (MBE) and a subgoal of twelve percent (12%) for Women Business Enterprises (WBE); a three (3%) minimum goal for Certified Veteran-Owned Small Businesses and/or Certified Service- Disabled Veteran Owned Businesses; and a goal of utilizing Disadvantaged Business Enterprises (DBE), where applicable, for government contracts.

The resolution states the following definitions shall be used for the purposes of reaching these goals:

Certified Disadvantaged Business Enterprise (DBE) – a business in which at least fifty-one percent (51%) is owned, managed and controlled by a person(s) who is socially and economically disadvantaged as define by 49 CFR subpart 26.

Certified Minority Business Enterprise (MBE) – a business in which at least fifty-one percent (51%) is owned, managed and controlled by an ethnic minority (i.e. Black American, Asian American, Hispanic American, Native American)

Certified Women Business Enterprise (WBE) – a business in which at least fifty-one percent (51%) is owned, managed and controlled by a woman.

Certified Veteran-Owned Small Business (VOSB) – a business in which at least fifty-one percent (51%) is owned, managed and controlled by a veteran who served on active duty with the U.S. Army, Air Force, Navy, Marines or Coast Guard.

Certified Service -Disabled Veteran Owned Small Business (SDVOSB) – a business in which at least fifty-one percent (51%) is owned, managed and controlled by a disabled veteran who served on active duty with the U.S. Army, Air Force, Navy, Marines or Coast Guard.

The term “Certified” shall mean the business is appropriately certified, licensed, verified, or validated by an organization or entity recognized by the Division of Procurement as having the appropriate credentials to make a

determination as to the status of the business.

The following certifications are recognized and accepted by the MBEP:

Kentucky Transportation Cabinet (KYTC), Disadvantaged Business Enterprise (DBE)
Kentucky Minority and Women Business Enterprise (MWBE)
Women's Business Enterprise National Council (WBENC)
National Women Business Owners Corporation (NWBOC)
National Minority Supplier Development Council (NMSDC)
Tri-State Minority Supplier Development Council (TSMSSDC)
U.S. Small Business Administration Veteran Small Business Certification (VetCert)
Kentucky Service- Disabled Veteran Owned Small Business (SDVOSB)

To comply with Resolution 272-2024, prime contractors, minority and women business enterprises, veteran owned small businesses, and service-disabled veteran owned small businesses must complete monthly contract compliance audits in the Diverse Business Management Compliance system, <https://lexingtonky.diversitycompliance.com/>

A list of organizations that certify and/or maintain lists of certified businesses (i.e. DBE, MBE, WBE, VOSB and/or SDVOSB) is available upon request by emailing, Sherita Miller, smiller@lexingtonky.gov.



LEXINGTON

LFUCG MWDBE PARTICIPATION FORM

Bid/RFP/Quote Reference # 2A-2026

The MWDBE and/or veteran subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to the Division of Procurement for approval immediately. **Failure to submit a completed form may cause rejection of the bid.**

MWBE Company, Name, Address, Phone, Email	DBE/MBE WBE/VOSB/SDVOSB	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
1. NA				
2.				
3.				
4.				

The undersigned company representative submits the above list of MWDBE and veteran firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Source Technologies, LLC.

Company

03 15 2026

Date

Michael Gypser

Company Representative

VP of Supply Chain

Title



LEXINGTON

LFUCG MWDBE SUBSTITUTION FORM

Bid/RFP/Quote Reference # 27-2026

The substituted MWDBE and/or veteran subcontractors listed below have agreed to participate on this Bid/RFP/Quote. These substitutions were made prior to or after the job was in progress. These substitutions were made for reasons stated below and are now being submitted to the Division of Procurement for approval. By the authorized signature of a representative of our company, we understand that this information will be entered into our file for this project. **Note: Form required if a subcontractor is being substituted on a contract.**

SUBSTITUTED DBE/MBE/WBE/VOSB Company Name, Address, Phone, Email	DBE/MBE/WBE/VOSB/SDVOSB Formally Contracted/ Name, Address, Phone, Email	Work to Be Performed	Reason for the Substitution	Total Dollar Value of the Work	% Value of Total Contract
1. N/A					
2.					
3.					
4.					

The undersigned acknowledges that any misrepresentation may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Source Technologies, LLC

Company

0325 2026

Date

Michael Jeyar

Company Representative

VP of Supply Chain

Title



DOCUMENTATION REQUIRED FOR GOOD FAITH EFFORTS AND OUTREACH PLANS

As affirmed in Resolution Number 272-2024, the Urban County Council has adopted an annual aspirational goal of utilizing at least seventeen percent (17%) of public funds spend from certain discretionary agreements with certified Minority Business Enterprises (MBEs) and certified Woman Business Enterprises (WBEs); utilizing at least three percent (3%) of public funds from certain discretionary agreements with Certified Veteran-Owned Small Business and Certified Service-Disabled Veteran-Owned Small Businesses (VOSBs); and utilizing Disadvantaged Business Enterprises (DBEs) where applicable. Bidders should make every effort to achieve these goals.

Therefore, as an element of the responsiveness of the bid, all Bidders are required to submit documentation of their good faith and outreach efforts to ensure all businesses, including small and disadvantaged businesses such as minority-, woman-, and veteran-owned businesses, have an equal opportunity to compete for and participate in the performance of any subcontracts resulting from this procurement. Examples of good faith and outreach efforts that satisfy this requirement to encourage the participation of, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs include:

1. Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women, and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs to participate.
2. Attended LFUCG Procurement Economic Inclusion Outreach event(s) within the past year to meet new small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs to partner with on LFUCG contracts and procurements.
3. Attended pre-bid/pre-proposal meetings that were scheduled by LFUCG to inform small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs of subcontracting opportunities.
4. Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs.
5. Requested a list of certified small, DBE, MBE, WBE, VOSB and/or SDVOSB subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).
6. Contacted organizations that work with small, DBE, MBE, WBE, and VOSB companies for assistance in finding certified DBEs, MBEs, WBEs, VOSB and/or SDVOSBs to work on this project. Those contacted and their responses must be a part of the bidder's outreach efforts documentation.
7. Sent written notices, by certified mail, email, or facsimile, to qualified, certified small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.
8. Followed up initial solicitations by contacting small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs via tailored communications to determine their level of interest.

9. Provided the interested small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs with adequate and timely information about the plans, specifications, and requirements of the contract.
10. Selected portions of the work to be performed by small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs in order to increase the likelihood of subcontracting participation. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate small, DBE, MBE, WBE, VOSB and/or SDVOSB participation, even when the prime contractor may otherwise perform these work items with its own workforce.
11. Negotiated in good faith with interested small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs, not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection must be so noted in writing with a description as to why an agreement could not be reached.
12. Included documentation of quotations received from interested small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs that were not used due to uncompetitive pricing or were rejected as unacceptable and/or copies of responses from firms indicating that they would not be submitting a bid.
 - a. Bidder has to submit sound reasons why the quotations were considered unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a small business', DBE's MBE's, WBE's, VOSB's and/or SDVOSB's quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy the participation goals.
13. Made an effort to offer assistance to or refer interested small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal.
14. Made efforts to expand the search for small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs beyond the usual geographic boundaries.
15. Other – any other evidence that the bidder submits that may demonstrate that the bidder has made reasonable efforts to include small, DBE, MBE, WBE, VOSB and/or SDVOSB participation.

Bidder must document, with specificity, each of the efforts it made to include small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs as subcontractors in the procurement, including the date on which each effort was made, the medium through which each effort was made, and the outcome of each effort.

Note: Failure to submit the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement which is subject to review by the MBE Liaison. Documentation of Good Faith and Outreach Efforts must be submitted with the Bid, regardless of the proposed level of small, DBE, MBE, WBE, VOSB and/or SDVOSB participation in the procurement. If the Good Faith and Outreach Effort documentation is not submitted with the bid response, the bid may be rejected.

OUTREACH EFFORTS EVALUATION

Outreach efforts demonstrated by the bidder or respondent will be evaluated on a pass/fail basis.

ATTACHMENT A – SMALL AND DISADVANTAGED, MINORITY-, WOMEN-, AND VETERAN-OWNED BUSINESS OUTREACH PLAN

Proposer Name: Source Technologies LLC. Date: 03 25 2026
Project Name: ITB#27-2026 Project Number: ITB #27-2026
Contact Name: Michael Engram Telephone: 770.307.6813
Email: mengram@sourcetechnologiesllc.com

The mission of the Minority Business Enterprise Program is to facilitate the full participation of disadvantaged businesses, minority-, women-, veteran-, and service-disabled veteran-owned businesses in the procurement process and to promote economic inclusion as a business imperative essential to the long-term economic viability of Lexington-Fayette Urban County Government.

To that end, small and disadvantaged businesses, including minority-, woman-, veteran-, and service-disabled veteran-owned businesses, must have an equal opportunity to be utilized in the performance of contracts with public funds spent from certain discretionary agreements. By submitting its offer, Bidder/Proposer certifies that it has taken, and if there are further opportunities will take, reasonable steps to ensure that small and disadvantaged businesses, including minority-, woman-, veteran-, and service-disabled veteran-owned businesses, are provided an equal opportunity to compete for and participate in the performance of any subcontracts resulting from this procurement.

The information submitted in response to this clause will not be considered in any scored evaluation. Failure to submit this form may cause the bid or proposal to be rejected.

Is the Bidder/ Proposer a certified firm? Yes No

If yes, indicate all certification type(s):

DBE MBE WBE SBE VOSB/SDVOSB

and supply a copy of the certificate and/or certification letter if not currently listed on the city's Minority Business Enterprise Program's (MBEP) certified list.

1. Include a list of firms that Bidder/ Proposer has had a contractual relationship with within the last two years that are minority-owned, woman-owned, veteran-owned or small businesses, regardless of their certification status.

Source Technologies, LLC.

2. Does Bidder/Proposer foresee any subcontracting opportunities for this procurement?

Yes No

If no, please explain why in the field below. Do not complete the rest of this form and submit this first page with your bid and/or proposal. (Click or tap here to enter text.) *Service can perform all needed service as a certified SBE*

If yes, please complete the following pages and submit all pages with your bid and/or proposal.

Describe the steps Bidder/Proposer took to solicit small and disadvantaged businesses, including MBEs, WBEs, VOSBs, and SDVOSBs, for subcontracting opportunities for this procurement.

3. Check the good faith and outreach efforts the Bidder/Proposer used to encourage the participation of small and disadvantaged businesses including, MBEs, WBEs, VOSBs and SDVOSBs:

- Bidder placed advertisements in search of prospective small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs for the solicitation.
- Bidder attended LFUCG Procurement Economic Inclusion Outreach event(s) within the past year.
- Bidder attended pre-bid and/or pre-proposal meetings for this solicitation.
- Bidder sponsored an Economic Inclusion Outreach event.
- Bidder requested a list of certified small, DBE, MBE, WBE, VOSB and/or SDVOSB subcontractors or suppliers from LFUCG.
- Bidder contacted organizations that work with small, DBE, MBE, WBE, VOSB and/or SDVOSB companies.
- Bidder sent written notices to certified small, DBE, MBE, WBE, VOSB and SDVOSB businesses.
- Bidder followed up to initial solicitations with interested small, DBE, MBE, WBE, VOSB and/or SDVOSB.
- Bidder provided small, DBE, MBE, WBE, VOSB and/or SDVOSB businesses interested in performing the solicited work with prompt access to the plans, specifications, scope of work, and requirements of the solicitation.

- Bidder made efforts to segment portions of the work to be performed by small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs, including dividing sub-bid/partnership opportunities into economically feasible units/parcels, to facilitate participation.
- Bidder negotiated in good faith with interested small, DBE, MBE, WBE, VOSB and/or SDVOSB businesses.
- Bidder provided adequate rationale for rejecting any small business', DBEs, MBEs, WBEs, VOSBs or SDVOSBs for lack of qualifications.
- Bidder offered assistance in obtaining bonding, insurance, financial, equipment, or other resources to small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs, in an effort to assist them in meeting project requirements.
- Bidder made efforts to expand the search for small businesses, DBEs MBEs, WBEs, VOSBs and/or SDVOSBs beyond the usual geographic boundaries.
- Bidder made other reasonable efforts to include small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs participation.

4. Bidder/Proposer must include documentation, including the date each effort was made, the medium through which each effort was made, and the outcome of each effort with this form, regardless of the level of small, DBE, MBE, WBE, VOSB and/or SDVOSB participation. Examples of required documentation include copies of email communications, copies of newspaper advertisements, or copies of quotations received from interested small businesses, DBEs, MBEs, WBEs, VOSBs or SDVOSBs.

KY Women of water Chairmanship 2025-2026
 NC Women of water 11/2025
KY Women of water Yoga 08/2025 *KY Women of water 02/2026*

For detailed information regarding outreach efforts that satisfy the MBE Program’s requirements, please see “Documentation Required for Good Faith Efforts and Outreach Plans” page.

Note: The Bidder/Proposer must be willing to report the identity of each subcontractor and the value of each subcontract to MBEP if awarded a contract from this procurement.

Failure to submit the documentation requested may be cause for rejection of the bid. Bidders may include any other documentation deemed relevant to this requirement, which is subject to review by the MBE Liaison. Documentation of Good Faith and Outreach Efforts must be submitted with the bid, regardless of the proposed level of SBEs, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs participation in the procurement. If the Good

Faith and Outreach Effort Form and associated documentation is not submitted with the bid response, the bid may be rejected.

The undersigned acknowledges that all information is accurate. Any misrepresentations may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and claims.

Source Technologies, LLC.

Michael J. Engman

Company 03 25 2026

Company Representative

Date

Title VP of Supply Chain

RISK MANAGEMENT PROVISIONS INSURANCE AND INDEMNIFICATION

INDEMNIFICATION AND HOLD HARMLESS PROVISION

(1) It is understood and agreed by the parties that Contractor hereby assumes the entire responsibility and liability for any and all damages to persons or property caused by or resulting from or arising out of any act or omission on the part of Contractor or its employees, agents, servants, owners, principals, licensees, assigns or subcontractors of any tier (hereinafter "CONTRACTOR") under or in connection with this agreement and/or the provision of goods or services and the performance or failure to perform any work required thereby.

(2) CONTRACTOR shall indemnify, save, hold harmless and defend the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, volunteers, and successors in interest (hereinafter "LFUCG") from and against all liability, damages, and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees that are in any way incidental to or connected with, or that arise or are alleged to have arisen, directly or indirectly, from or by CONTRACTOR's performance or breach of the agreement and/or the provision of goods or services provided that: (a) it is attributable to personal injury, bodily injury, sickness, or death, or to injury to or destruction of property (including the loss of use resulting therefrom), or to or from the negligent acts, errors or omissions or willful misconduct of the CONTRACTOR; and (b) not caused solely by the active negligence or willful misconduct of LFUCG.

(3) In the event LFUCG is alleged to be liable based upon the above, CONTRACTOR shall defend such allegations and shall bear all costs, fees and expenses of such defense, including but not limited to, all reasonable attorneys' fees and expenses, court costs, and expert witness fees and expenses, using attorneys approved in writing by LFUCG, which approval shall not be unreasonably withheld.

(4) These provisions shall in no way be limited by any financial responsibility or insurance requirements, and shall survive the termination of this agreement.

(5) LFUCG is a political subdivision of the Commonwealth of Kentucky. CONTRACTOR acknowledges and agrees that LFUCG is unable to provide indemnity or otherwise save, hold harmless, or defend the CONTRACTOR in any manner.

FINANCIAL RESPONSIBILITY

BIDDER/CONTRACTOR understands and agrees that it shall, prior to final acceptance of its bid and the commencement of any work, demonstrate the ability to assure compliance with the above Indemnity provisions and these other risk management provisions.

INSURANCE REQUIREMENTS

YOUR ATTENTION IS DIRECTED TO THE INSURANCE REQUIREMENTS BELOW, AND YOU MAY NEED TO CONFER WITH YOUR INSURANCE AGENTS, BROKERS, OR CARRIERS TO DETERMINE IN ADVANCE OF SUBMISSION OF A RESPONSE THE AVAILABILITY OF THE INSURANCE COVERAGES AND ENDORSEMENTS REQUIRED HEREIN. IF YOU FAIL TO COMPLY WITH THE INSURANCE REQUIREMENTS BELOW, YOU MAY BE DISQUALIFIED FROM AWARD OF THE CONTRACT.

Required Insurance Coverage

BIDDER/CONTRACTOR shall procure and maintain for the duration of this contract the following or equivalent insurance policies at no less than the limits shown below and cause its subcontractors to maintain similar insurance with limits acceptable to LFUCG in order to protect LFUCG against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONTRACTOR. The cost of such insurance shall be included in any bid:

<u>Coverage</u>	<u>Limits</u>
General Liability (Insurance Services Office Form CG 00 01)	\$1 million per occurrence, \$2 million aggregate or \$2 million combined single limit
Commercial Automobile Liability (Insurance Services Office Form CA 0001)	combined single, \$1 million per occurrence
Worker's Compensation	Statutory
Employer's Liability	\$100,000.00
Excess/Umbrella Liability	\$1 million per occurrence

The policies above shall contain the following conditions:

- a. All Certificates of Insurance forms used by the insurance carrier shall be properly filed and approved by the Department of Insurance for the Commonwealth of Kentucky (DOI). LFUCG shall be named as an additional insured in the General Liability Policy and Commercial Automobile Liability Policy using the Kentucky DOI approved forms.
- b. The General Liability Policy shall be primary to any insurance or self-insurance retained by LFUCG.

c. The General Liability Policy shall include a Products and Completed Operations endorsement or Premises and Operations Liability endorsement unless it is deemed not to apply by LFUCG.

d. LFUCG shall be provided at least 30 days advance written notice via certified mail, return receipt requested, in the event any of the required policies are canceled or non-renewed.

e. Said coverage shall be written by insurers acceptable to LFUCG and shall be in a form acceptable to LFUCG. Insurance placed with insurers with a rating classification of no less than Excellent (A or A-) and a financial size category of no less than VIII, as defined by the most current Best's Key Rating Guide shall be deemed automatically acceptable.

Renewals

After insurance has been approved by LFUCG, evidence of renewal of an expiring policy must be submitted to LFUCG, and may be submitted on a manually signed renewal endorsement form. If the policy or carrier has changed, however, new evidence of coverage must be submitted in accordance with these Insurance Requirements.

Deductibles and Self-Insured Programs

IF YOU INTEND TO SUBMIT A SELF-INSURANCE PLAN IT MUST BE FORWARDED TO LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT, DIVISION OF RISK MANAGEMENT, 200 EAST MAIN STREET, LEXINGTON, KENTUCKY 40507 NO LATER THAN A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE RESPONSE DATE. Self-insurance programs, deductibles, and self-insured retentions in insurance policies are subject to separate approval by Lexington-Fayette Urban County Government's Division of Risk Management, upon review of evidence of BIDDER/CONTRACTOR's financial capacity to respond to claims. Any such programs or retentions must provide LFUCG with at least the same protection from liability and defense of suits as would be afforded by first-dollar insurance coverage. If BIDDER/CONTRACTOR satisfies any portion of the insurance requirements through deductibles, self-insurance programs, or self-insured retentions, BIDDER/CONTRACTOR agrees to provide Lexington-Fayette Urban County Government, Division of Risk Management, the following data prior to the final acceptance of bid and the commencement of any work:

- a. Latest audited financial statement, including auditor's notes.
- b. Any records of any self-insured trust fund plan or policy and related accounting statements.
- c. Actuarial funding reports or retained losses.

- d. Risk Management Manual or a description of the self-insurance and risk management program.
- e. A claim loss run summary for the previous five (5) years.
- f. Self-Insured Associations will be considered.

Safety and Loss Control

CONTRACTOR shall comply with all applicable federal, state, and local safety standards related to the performance of its works or services under this Agreement and take necessary action to protect the life, health and safety and property of all of its personnel on the job site, the public, and LFUCG.

Verification of Coverage

BIDDER/CONTRACTOR agrees to furnish LFUCG with all applicable Certificates of Insurance signed by a person authorized by the insurer to bind coverage on its behalf prior to final award, and if requested, shall provide LFUCG copies of all insurance policies, including all endorsements.

Right to Review, Audit and Inspect

CONTRACTOR understands and agrees that LFUCG may review, audit and inspect any and all of its records and operations to insure compliance with these Insurance Requirements.

DEFAULT

BIDDER/CONTRACTOR understands and agrees that the failure to comply with any of these insurance, safety, or loss control provisions shall constitute default and that LFUCG may elect at its option any single remedy or penalty or any combination of remedies and penalties, as available, including but not limited to purchasing insurance and charging BIDDER/CONTRACTOR for any such insurance premiums purchased, or suspending or terminating the work.

00357187

**BID SPECIFICATIONS
FOR SUPPLY AND SERVICES OF
OXIDATION TECHNOLOGY ODOR CONTROL CHEMICAL
FOR
CONTROLLING HYDROGEN SULFIDE IN SEWER FORCE MAINS**

1.0 GENERAL REQUIREMENTS and SCOPE of WORK

The Lexington-Fayette Urban County Government (LFUCG), through its Division of Water Quality (DWQ), is soliciting competitive bids from qualified vendors for chemical supply and services for the purpose of hydrogen sulfide (H₂S) odor and corrosion control.

The primary goal of this Work is to eliminate odors and corrosion resulting from H₂S in the Lexington-Fayette Urban County Government's (LFUCG's) sanitary sewer force main(s). Under this contract, the successful bidder(s) shall furnish and deliver a chemical product leveraging advanced oxidation technology to control the production and release of gaseous H₂S in the designated sanitary sewer force main(s). The work consists of providing all necessary materials, chemicals, personnel, equipment, and services as specified for odor/corrosion control in LFUCG's South Elkhorn (SELK) force main.

NOTE: If LFUCG chooses to use the supplied chemical for additional force mains or other treatment locations, the equipment and mobilization/demobilization costs would be negotiated separately, but the same chemical volumetric cost would apply. All other conditions of these specifications would apply.

Services shall be provided in a safe, secure, effective, and efficient manner and in accordance with all applicable laws, rules, and regulations.

The contract period shall after the date the bid is accepted by the LFUCG Urban County Council and continue for 12 months with the option for (3) three additional (1) one-year renewals.

Note: LFUCG reserves the right to terminate contract with selected/awarded vendor(s) for failure to meet quality and/or performance requirements as specified within. If contract is terminated, the LFUCG reserves the right to select another qualified responsive bidder/vendor and/or rebid in its entirety.

Bids will be considered for the specified chemical product solution for odor/corrosion control. **Bids based on furnishing any other product will not be considered and will be rejected as non-responsive.**

Note: All questions MUST BE submitted in IonWave.

Safety Data Sheets for all products bid shall be included with the bid documents.

2.0 GENERAL CONDITIONS

The successful bidder (hereafter referenced as vendor) shall furnish material under this specification for the period specified in Section 1.0. The vendor shall indemnify and save harmless the LFUCG from all claims and liabilities of any kind or nature, including cost and expenses arising from or occasioned by an infringement or alleged infringement of patent rights arising from or occasioned by use of material furnished in response to this specification.

3.0 PRODUCT SPECIFICATIONS

The products provided shall be a combination of calcium nitrate, iron and hydrogen peroxide utilizing an advanced oxidation treatment. The products shall meet the following specifications:

STX REDOX Chemistry or approved equal

- Must provide equivalent or demonstrate proof of licensure.
- pH: 6.5-7.85
- Not subject to CERCLA/SARA III reportable quantities
- Not corrosive
- Fe+3 based chemistry not to contain Fe+2 contamination

CTX liquid solution calcium nitrate

- lbs nitrate oxygen/gallon: min 3.5 lbs
- Assay CTX Solution: 69.0-70.0
- Assay CTX as calcium nitrate: 48.3-48.7
- SPG: 1.470-1.472
- pH: 5.5-6.5
- Ca %: 11.4-11.6%

ETX REDOX Chemistry or approved equal

- Must provide equivalent or demonstrate proof of licensure.
- pH: 6.5-7.5 (generic iron salts are pH <1)
- Not subject to CERCLA/SARA III reportable quantities
- Not corrosive
- Fe+3 based chemistry not to contain Fe+2 contamination

NSF HYDROGEN PEROXIDE 50% AQUEOUS SOLN

- ASSAY: 50%-51%
- pH: ≤ 2
- Appearance: clear solution

Products that do not meet these specifications will not be considered.

By submission of their Bid, the vendor guarantees that the product offered will meet the quality standards as specified in these specifications for the term of the contract. The LFUCG reserves the right to conduct periodic checks on the quality of material furnished under this contract or to have the product's quality checked by outside sources at LFUCG's expense to determine if the material furnished is in compliance with these specifications.

4.0 DETAILED APPLICATION

The SELK pump station (located at 2500 Bowman Road, Lexington KY 40513) is shown on the map in **Appendix A**. The force main is a 36-inch diameter ductile iron pipe which is 33,730 feet long that has 24 air relief valves. The detention time in this force main is estimated at roughly 11 hours. Without chemical treatment, this force main can generate H₂S levels over 1,000 ppm. The chemical dosage from the SELK pump station has historically been approximately 250 to 400 gallons/day of calcium nitrate solution. As a point of reference, calcium nitrate annual usages were: 87,920 gallons in 2025 (partial

year); 132,150 gallons in 2024; and 73,600 gallons in 2023, but these dosage rates did not necessarily achieve sufficient H₂S reduction.

The SELK force main discharges into a discharge manhole before flowing by gravity to LFUCG’s West Hickman Wastewater Treatment Plant (WWTP). The WWTP uses an activated sludge process with biological phosphorus removal and a two-stage aeration system. The plant is designed for a flow of 30 MGD but can treat a maximum daily flow of 64 million gallons. The plant’s disinfection process will be converted to ultraviolet (UV) disinfection in 2026. The chemical solution shall not negatively impact system pH and alkalinity or otherwise cause harm to the wastewater treatment processes.

Odor control chemicals have historically/typically only been fed from the SELK pump station, but they may also be fed into the SELK force main from a location near Jessamine County’s Brannon Crossing pump station.

The SELK pump station has six (6) pumps with VFD’s. During the day the pump station consistently runs and alternates pumps every four (4) hours. During low flows (overnight), pumps cycle on & off.

The LFUCG will provide the following:

a. Space:

- SELK PS:
 - A flat paved area for chemical storage tank.
- Brannon Crossing site:
 - A flat gravel area for chemical storage tank.

b. Electrical:

- SELK PS:
 - 480VAC – 3Ø
 - 115VAC – 20A – Single Phase (1 circuit minimum)
- Brannon Crossing site:
 - 115VAC – 20A (circuits available)

c. Flushing water:

- SELK: LFUCG will provide access to potable water via a typical ½” spigot, but any additional water required for safety is the responsibility of the vendor.
- Brannon Crossing site: Flushing water is not available from LFUCG, but water is required at this site to comply with applicable safety requirements. If hydrogen peroxide is to be delivered to this site, vendor is required to provide water for 30-minute flushing as recommended to meet OSHA/EPA standards and any other state or federal regulations.

LFUCG will make no other capital improvements.

5.0 CHEMICAL HANDLING AND DELIVERY

Chemical handling and delivery shall be provided as described:

- a. All chemical handling shall be the vendor’s responsibility to ensure the conditions of the work meet these specifications, but the chemical handling may be subcontracted to a delivery contractor. LFUCG personnel will not be responsible for chemical handling.

- b. The vendor shall be responsible for the proper labeling of storage tanks/vessels in compliance with local, state, and federal requirements. No chemical shall be delivered into any tank or vessel which is not properly labeled.
- c. LFUCG employees may or may not be present during deliveries, but assistance from LFUCG should not be assumed. The delivery person will be expected to notify LFUCG of deliveries but make the deliveries without LFUCG being present at the delivery site. The vendor shall provide their own lock boxes for the delivery person to use at feed sites. A key will be issued by LFUCG for each feed site lock box. Deliveries must be scheduled for Tuesday, Wednesday, or Thursday and no deliveries will be accepted after 2:30 p.m.
- d. The vendor shall be responsible for the safe, clean delivery of the material(s) into the storage tanks and shall be responsible for any damage to the storage tanks and feed systems that is directly attributable to product quality or improper delivery practices. The vendor shall ensure prompt clean-up of any spills made during delivery in accordance with the Spill Prevention Plan. Vendor is responsible for providing all safety equipment/provisions (such as eye wash, safety shower, etc.) as required by applicable safety regulations for the product(s).
- e. Hydrogen Peroxide is a hazardous substance and should be taken very seriously. All transport vehicles shall be equipped with emergency cleanup kits to ensure that no chemical spill becomes a hazard. Vendors shall follow all municipal, state, and federal reporting regulations in the event of a spill containing a reportable chemical.
- f. The specified chemical(s) shall be delivered both on an as-needed basis as determined by the vendor and as requested by authorized LFUCG personnel. Chemical storage must be adequate to ensure sufficient chemical quantities while considering cost effective delivery/transportation cost(s). The vendor is responsible for monitoring tank level(s) and ensuring that there is adequate chemical for a continuous, uninterrupted feed.
- g. Trucks shall comply with all local, state, and federal road and highway weight restrictions and other applicable shipping regulations. All deliveries shall be accompanied by a U.S. Department of Labor Safety Data Sheet (that meets OSHA 29 CFR 1910.1200) for the product. A Certificate of Analysis shall accompany all shipments.
- h. Delivery driver(s) shall have the following requirements and capabilities:
 - Completed all required site-specific safety training
 - Utilize approved site personal protective equipment (PPE)
 - Operate the delivery vehicle safely and in accordance with all local and federal regulations
 - Perform chemical offload following vendor and/or LFUCG SOPs; and,
 - Conduct post-delivery site inspections, maintenance, and data collection as required.
- i. Delivery person shall have the following responsibilities:
 - Delivery of Product
 - Record initial tank level and finished tank level
 - Inspect the feed system (including the chemical line leaving the tank to the point of entering the force main or wet well)
 - Report any potential leaks or problems to both LFUCG and to the vendor; and,
 - Knowledge of appropriate procedures for spill response

- j. Vendor is responsible for providing the appropriate size of truck to meet the site conditions without modifications to the site(s).
- k. Deliveries must be made with a delivery vehicle which is equipped with pump unloading capability to transfer from the truck to the tanks. All hoses and fittings required to unload the truck and fill the tank(s) shall be provided by the vendor.
- l. It is the vendor's responsibility to visit the proposed feed sites to ensure they have the proper equipment to feed from that location. Facility inspections will be by appointment only. Bidder may arrange visits to any of the pump station facilities by emailing Chris Dove at cdove@lexingtonky.gov, or by phone at (859) 608-9615 at least 2 days prior to the date requested.
- m. Each load must be accompanied by a Bill of Lading, a certified weight ticket when applicable, and a Certificate of Analysis listing the specific gravity of the product. A copy of the Bill of Lading with the delivery weight/gallons shall be emailed to Amanda Bauer-Massie, abauermassie@lexingtonky.gov, within 24 hours of delivery.
- n. Vendor shall supply packing slips for each delivery, including the following information:
 - Header including company name, address, phone, contact name and email.
 - Date of Service
 - Delivery Technician Name
 - Service location
 - LFUCG Authorized Personnel
 - LFUCG Purchase Order Number
 - Item description
 - Quantity delivered

6.0 EQUIPMENT

The vendor shall furnish all necessary equipment needed to store and feed chemicals in a safe manner for the application described in these specifications.

All equipment provided by the vendor will remain the property of the vendor and shall be removed from LFUCG property when notified that the equipment is no longer needed.

The vendor shall provide technical service to correct deficient treatment within 24 hours of notice.

Any maintenance of equipment, repairs, or parts needed to make repairs shall be the full responsibility of the vendor. In addition, the vendor shall be responsible for inspecting the pump(s) and tank(s) on a regular monthly basis.

a. Dosing/Feed Equipment

Vendor shall supply peristaltic style pump(s).

Vendor shall submit, with their bid for review and approval by LFUCG, how the chemical dosage will be adjusted and optimized. Necessary equipment for chemical optimization to be provided by vendor.

b. Chemical Piping and Storage Equipment

Vendor shall supply chemical storage tank(s) and discharge piping for each active

feed site. The tank and piping shall be constructed of materials suitable for the specified chemical product(s). The tank materials and construction shall meet the requirements of OSHA and all state and federal regulations.

The discharge piping shall be installed aboveground to allow easy access for servicing. All wetted fittings in contact with hydrogen peroxide shall be compatible for use per manufacturer specifications.

c. Monitoring Equipment

Vendor shall provide and use Odalog or Acrulog H₂S gas monitors, or approved equal, to test H₂S concentrations at the designated control point(s) on a continuous basis. Assume two (2) H₂S monitoring locations for each treated force main.

The H₂S data shall be electronically (remotely) accessible to LFUCG on a continual, real-time basis. The cost of cell service (if needed) shall be the responsibility of the vendor.

7.0 OTHER SERVICES

- a. Vendor shall be responsible for supplying chemicals, making approved feed rate adjustments, operation and maintenance of the equipment, testing and reporting of results. All feed rate adjustments must be requested and approved via electronic communications, text or email, with the designated representative of the LFUCG Division of Water Quality.
- b. Vendor shall be responsible for optimizing chemical doses at all sites to achieve LFUCG target goals. Target goals to be provided by LFUCG Division of Water Quality representative or their designee.
- c. Once per month, if requested by LFUCG staff, the approved vendor shall collect samples of wastewater at a designated point on the force main. The vendor shall perform tests on these samples to determine concentrations of dissolved H₂S.
- d. A monthly report will be sent by email to the LFUCG Division of Water Quality representative before the 10th day of the following month.
- e. Monthly reports shall include:
 - Results of monitoring and sampling
 - Feed rate of chemical and any adjustments to the feed rate during the month
 - Chemical usage over the past month
 - Cumulative chemical usage to date
- f. Monthly meetings shall be held with LFUCG to review the report. Meetings may be held remotely, but vendor will be expected to attend the meeting in person at least quarterly.

8.0 BID EVALUATION

The bid will be evaluated and accepted based on the product's ability to adequately treat the odors and its ability to meet all other requirements of these Specifications.

The following items shall be submitted with the bid in this order:

- a. **Experience.** Documentation showing the vendor has a minimum of three (3) years' experience feeding the proposed chemical(s) to control odors / corrosion due to H₂S

in sewers.

- b. **References.** Three (3) references for which the proposed product(s) has been applied successfully, including the name, email address and telephone number of the person in responsible position.
 - c. **Product specifications:** Provide documentation indicating compliance with all product specifications listed in Section 3.0.
 - d. **Safety Data Sheets** for all proposed chemicals.
 - e. **Spill Prevention Plan** for all proposed chemicals.
 - f. **Storage Equipment.** Narrative description of chemical storage equipment to be provided by vendor.
 - g. **Chemical Dosing.** Narrative description of how the product will be fed including how the chemical dosage will be adjusted and optimized.
 - h. **Personnel.** Name, position title, email address, cell phone number and home office location of the person(s) responsible for providing the services described. Also, the name, position title, email address, cell phone number and location of the backup person.
 - i. **Mobilization / demobilization fee.** Submit lump sum fee for mobilization and demobilization of equipment; also submit cost of chemical storage tanks for SELK PS. This mobilization/demobilization fee will not be considered part of the evaluated bid price. If it is determined that existing tanks at the SELK PS are suitable for use by the vendor for chemical storage, the cost for vendor tanks will be subtracted from the mobilization / demobilization fee.
-

BID PRICE

The unit price contract will be awarded to the responsible bidder with the lowest bid price who is the recognized supplier/vendor of the product offered and whose bid complies with all the provisions of the Bid Documents, provided that the bid price is reasonable and it is in the best interest of the LFUCG to accept it.

The LFUCG reserves the right to reject any or all bids and to waive any informality in bids received whenever such rejections or waiver is in the best interest of the LFUCG.

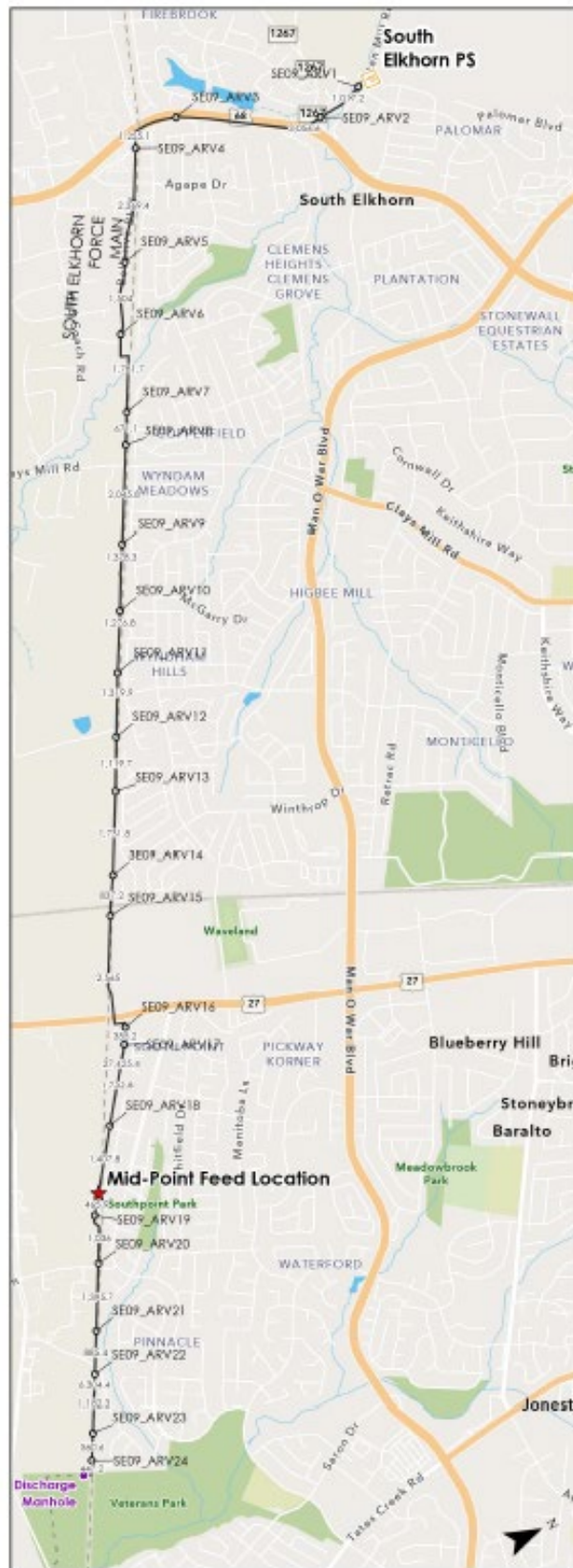
The LFUCG also reserves the right to purchase from multiple vendors if and when it is in the best interest to do so.

We, Source Technologies, LLC. (insert vendor name), propose to furnish the product listed in the table below as a means to eliminate the odor and corrosion associated with H₂S in sewage.

NOTE: Unit Price, as indicated in the table below, MUST BE entered in IonWave.

Product Trade Name	Unit Price FOB Lexington KY (\$ / gallon) in numbers	Unit Price FOB Lexington KY (\$ / gallon) in words
STX ETX	ENTER PRICE IN IONWAVE	STX = Five dollars and eighty seven cents ETX = Four dollars and sixty four cents

APPENDIX A
SOUTH ELKHORN FORCE MAIN MAP



South Elkhorn Force Main

Size	Segment	Length (ft)
36	South Elkhorn PS to Feed Loc.	27,425.4
36	Feed Loc. to Discharge MH	6,304.4



A. Source Technologies, LLC - Experience and Qualifications

Experience

Source Technologies, LLC (Source) was established in 2005 by industry veterans with expertise in municipal wastewater treatment. With a deep understanding of municipal wastewater systems and our thorough analysis process, our mission is to deploy cutting-edge, sustainable technologies to treat hydrogen sulfide (H₂S) in municipal wastewater applications. Under the leadership of our majority owner and CEO, Suzie Richards, we have built a reputation as a provider of the most powerful, comprehensive, and cost-effective odor and corrosion treatment solutions in the municipal wastewater market.

Odor and corrosion challenges in wastewater systems can severely impact treatment facilities and surrounding communities. While hydrogen sulfide (H₂S) is widely recognized by the public for its “rotten egg” odor, utility personnel understand H₂S is far more than a nuisance—it is a highly corrosive agent that can cause extensive damage and pose significant health and safety risks. We take these risks very seriously, adapting and advancing our approach as new data is uncovered.

Our family of products includes advanced oxidation and catalyzed oxygenation technologies, manufactured in the United States to the highest industry standards, which are designed to be “green,” best-in-class, scalable, and easy to operate. We are committed to minimizing the impact of harmful chemicals on both the wastewater systems we treat and the surrounding environment.

For over 20 years, Source has specialized in providing turnkey solutions for municipalities. Our approach to odor and corrosion management is to supply our clients with subject matter experts who provide the necessary data and support to help make the most informed decisions possible. We customize each project through our comprehensive system evaluation. Source takes the guesswork out of our solutions by analyzing system travel times and flow patterns, quantifying total sulfide loading with Hach DR900 colorimeters, monitoring diurnal H₂S patterns using cell-based Acrulogs (formerly known as Odalogs), and transmitting critical data via our proprietary remote monitoring system called iDos. This system offers advanced data logging and precise dosing control, accessible through a free app available on both Apple and Android devices.

Our commitment to technological innovation and exceptional service has driven our company's 300 percent growth since 2021, underscoring our proven ability to meet the diverse needs of municipalities nationwide. Whether transforming odor control programs with our **STX Redox Process™** and **ETX Redox Process™** in areas like Pasco County near Tampa, Florida and the First Utility District of Knox County in Knoxville, Tennessee, or providing headworks treatment on 145 million gallons per day (MGD) of flow at the City of Baltimore's Back River WWTP, Source delivers customized, reliable solutions for every challenge. We pride ourselves on scalability without sacrificing quality, providing excellent service with a trained team of experienced professionals.

Why Source?

Source has an extensive background in advanced chemical and operational solutions. We specialize in the destruction of H₂S in the municipal market using our advanced oxidation **STX Redox Process™** and **ETX Redox Process™**, emphasizing proactive decision-making and innovative approaches to help clients meet and exceed their objectives. Recognizing each client and situation is unique, we are dedicated to identifying the optimal solution for every challenge. This commitment is reflected in our dynamic portfolio of chemical solutions, the diverse expertise of our team, and our exceptional responsiveness to client needs. While vapor phase treatment is a vital part of our service, eliminating sulfide in the liquid phase can reduce, or even eliminate, the need for vapor treatment. A proactive approach to treating H₂S limits damage to infrastructure and results in less capital expenditures.

Source focuses exclusively on treating odor and corrosion in the wastewater industry, leveraging its specialized expertise to recommend and test new solutions tailored to client challenges. We partner with leading chemical manufacturers to deliver high-quality products. Our proprietary chemical solutions are engineered to produce no adverse byproducts during the wastewater treatment process. We also excel at customizing solutions to meet budget constraints, address site-specific challenges, and adapt to evolving client directives. We pride ourselves on being responsive and flexible, listening to concerns, and creating an environment of collaboration. Our service is all-inclusive; we do not charge our clients a labor rate for addressing liquid phase issues. Being prompt is a fundamental pillar of our business model. Vital data gathering is essential and results in better long-term treatment decisions. Our clients receive the benefit of years of experience at their fingertips, without the pressure of additional cost.

Source's exemplary safety record is a testament to our rigorous approach to operational safety. We develop a customer and site specific safety plan to address both client and individual site requirements. Source uses a behavior-based safety program and each employee receives detailed training to manage system start-up and operation. We will also conduct training for any unplanned events like equipment failures, spills, or other potential issues. Source's proprietary chemical systems are environmentally friendly, non-hazardous, organic, pH-neutral products. Our chemistries do not harm beneficial bacteria and are easy to store and handle. We are good stewards of the systems we treat, creating a longer-lasting configuration for each site. Source knows preventative maintenance is the critical component of our service allowing us to safeguard customer assets while also saving our customers time and money. Our equipment is designed for longevity and we collaborate closely with our vendors to ensure we deliver to our standards.

Source is committed to data-driven decision-making and manages existing liquid and vapor odor control sites while exploring system improvements including new feed sites, new feed systems, or comprehensive new treatment programs. Through initial sulfide monitoring, regular testing, and comprehensive geographic studies, we ensure our clients have access to the most reliable data to inform their decisions. We believe when our clients thrive Source has delivered on our goals.

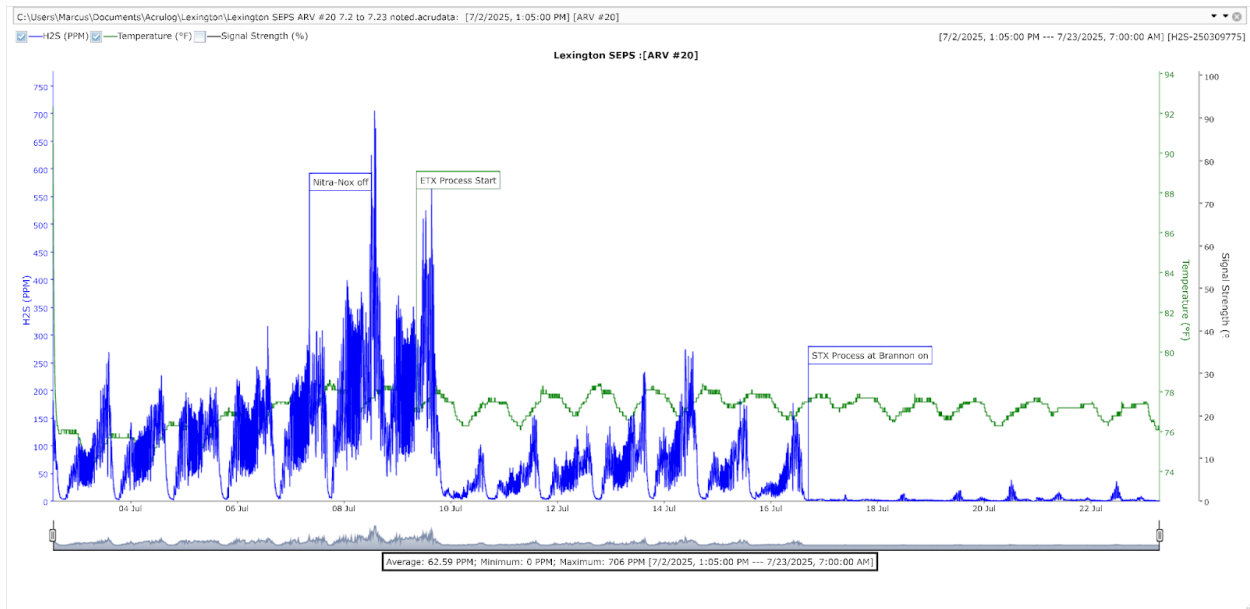
Qualifications - Source and LFUCG

In November 2023, the City of Lexington began receiving numerous odor complaints, originating from the southeast portion of the city near the West Hickman Treatment Plant (WWTP). Webster Environmental Associates (Webster) was retained through an emergency contract to investigate the

cause of the odors and provide recommendations. Subsequent to the emergency contract, Webster was awarded a Professional Services Contract for Odor Control Master Planning in February 2024.

In June 2024, Source was invited to evaluate conditions in the South Elkhorn Force Main and the discharge manhole near the WWTP. Following several weeks of discovery, a two-week pilot of the **ETX Redox Process™** was conducted in September 2024. Due to the extended wastewater retention time from the South Elkhorn Pump Station, Source recommended adding a second treatment location on the forcemain to evaluate the **STX Redox Process™**, which is tailored for end-of-pipe applications. Incorporating this secondary dosing location had the potential to reduce the overall chemical consumption while achieving improved sulfide control at downstream ARVs and the discharge manhole.

After being selected from the the Invitation to Bid #23-2025 Sewer Collection System Odor Control Chemical Pilot Testing, Source conducted a 30-day pilot beginning Wednesday, July 9, 2025, and concluding Wednesday, August 6, 2025. Source's proprietary chemical solutions demonstrated significant effectiveness in reducing hydrogen sulfide concentrations at the chosen testing control point, ARV 20, as well as achieving a 99.1 percent reduction in dissolved sulfides at the Discharge Manhole WH1_944. The results of the pilot can be seen in the image below.



Source is uniquely qualified to partner with LFUCG to provide sewer collection system odor control solutions. Our creative and thorough approach for implementing our full-spectrum portfolio of solutions and technologies ensures the most effective and comprehensive treatment program. Additionally, our close proximity to LFUCG affords our knowledgeable and experienced staff, including engineers and scientists, the ability to deliver the highest level of customer service and rapid response time.

Regional Offices

Corporate Headquarters

Lexington, Kentucky
157 Venture Ct., Suite 9
Lexington, KY 40511
Office: (859) 223-1444

Tennessee Regional Offices

Chattanooga, Tennessee
3227 Wilcox Blvd., Suite 109
Chattanooga, TN 37411
(706) 581-4720

Knoxville, Tennessee
355 Anglewood Dr.
Lenoir City, TN 37772
(865) 603-2662

West Regional Office

Phoenix, Arizona
19515 E. Via Park St
Queen Creek, AZ 85142
(480) 710-9487

Mid-Atlantic Regional Offices

Raleigh, North Carolina
298 Smith Dr.
Angier, NC 27501
(919) 800-9957

Richmond, Virginia
13511 E Boundary Rd.
Midlothian, VA 23112
(540) 623-2361

Florida Regional Office

Lakeland, Florida
1248 George Jenkins Blvd.
Lakeland, FL 33815
(239) 333-6491



B. Source Technologies, LLC - References

References

Project	Contact	Title	Phone	Email	Program Start
Pasco County, FL	Tom Donahue	Utilities O&M Assistant Director	813.235.6189 x6931	tdonahue@pascocountyfl.net	March 2021
First Utility District, Knoxville, TN	Pat Spangler	CMOM / Engineering Supervisor	865.966.9741	pspangler@fudknox.org	October 2011
Charlotte County Utilities, FL	David Chamberlain	Wastewater Collections Field Supervisor	941.883.3560	david.chamberlain@charlottecountyfl.gov	April 2022

Project Highlight: Pasco County, Florida - Providing Service since 2021

Serving the Tampa suburbs, Pasco County treats approximately 30.5 million gallons of wastewater per day. The county's interceptor sewer system spans over 1,100 miles, with over half of the system consisting of force mains feeding over 900 pump stations. Five regional water reclamation facilities are distributed across the area to manage the county.

For over nine (9) years, Pasco County utilized magnesium hydroxide to abate odor and prevent corrosion within the collection system. During that time, residents regularly complained of odor, especially in a community located in Wesley Chapel, which consistently experienced high levels of H₂S. Despite the County repeatedly appealing to its chemical vendor to provide a solution, the issue was never resolved. This remained the case until 2019, when Source asked the County for their biggest problem location to demonstrate the effectiveness of the **STX Redox Process™**.

Source prides itself on due diligence, gathering as much information as possible to ensure each challenge is fully understood. Pasco County's problem involved 46 regional pump stations discharging at different locations before combining at Master Pump Station 1-436, where odor complaints occurred. Sulfide loading at LS 1-436 averaged 11.4 mg/L with magnesium hydroxide treatment. After a 30-day trial where the **STX Redox Process™** was injected at three (3) locations, sulfide loading was reduced by 94 percent with an average of 0.66 mg/L, and most importantly, the odor complaints stopped.

Buoyed by the success at LS 1-436, Source was entrusted with managing Pasco County's broader odor and corrosion challenges. Previously, 13 locations were treated with magnesium hydroxide at an annual cost exceeding \$1.2M. The efficiency of the **STX Redox Process™** enabled Source to service 24 dosing locations at a reduced annual cost of \$1.1M, thereby providing enhanced

protection for both the community and its infrastructure. With a goal of splitting their time to 70 percent preventative maintenance and 30 percent corrective maintenance, Pasco County currently is able to devote 95 percent of their time to preventive measures, crediting Source as the driving factor behind this change.

Today, Source treats 36 locations across Pasco County using the **STX Redox Process™** and the **ETX Redox Process™** and operates 12 scrubbers employing our vapor phase technology, all based on the Source Advanced Oxidation Process. Our chemistries are pH-neutral, organic Redox catalysts, capable of eliminating sulfide in milliseconds, generating only inert elemental sulfur and water as byproducts. Similar to the scope of work for LFUCG, Pasco County operates and maintains a complex wastewater treatment system, with a multifaceted approach to liquid and vapor phase odor and corrosion treatment. Through continuous testing and proactive changes, Source works hand in hand with Pasco to create an environment perfect for innovation and excellence.

Project Highlight: First Utility District, Knoxville, Tennessee - Providing Service since 2011

First Utility District of Knox County (FUD) treats nine (9) million gallons of wastewater daily. The Utility's collection system spans 633 miles with 478 miles of gravity mains, which collects at 27 pump stations. One regional water reclamation facility manages First Utility Districts' flows.

For ten years, FUD utilized Calcium Nitrate as their primary solution for their odor management program. After a decade of treatment, corrosion was prevalent throughout the collection system and odor complaints occurred regularly. Despite an odor management budget that increased whenever the contract would allow, results did not improve to the standard desired by the county. Source was provided the opportunity to conduct a pilot study with the **STX Redox Process™** at the largest problem location, Ebenezer Pump Station. After a successful pilot study where Source reduced the liquid sulfide loading to less than 0.5 mg/l and vapor phase H₂S averages dropped to zero (0) ppm at the control point while being less expensive than the previous solution, FUD reevaluated their odor management program. Concluding it was in their best interest to expand their treatment options, FUD began utilizing the **STX Redox Process™** as an alternative solution at two (2) locations. Aside from Source's quality pilot study results, the detail-oriented focus on data gathering and service impressed FUD. Because of that, the remaining nine (9) calcium nitrate locations were also given to Source to manage.

After months of quality data with no odor complaints at the two (2) locations utilizing the **STX Redox Process™** that historically were the largest complaint areas, and with continued issues at the systems utilizing calcium nitrate, FUD decided to convert the remaining locations to the **STX Redox Process™** and the **ETX Redox Process™**. After completing the transition in 2011, FUD's odor complaints vanished. Furthermore, the Utility reduced its annual chemical spend by nearly 32 percent while achieving these improved results.

	Treating w/ Calcium Nitrate	Treating w/ ETX & STX Process	Delta
Average Sulfide Levels Site #1	5.4 mg/l	0.75 mg/l	86% Reduction
Average Sulfide Levels Site #2	4.3 mg/l	Non- detected	100% Reduction
Average Sulfide Levels Site #3	2.55 mg/l	0.3 mg/l	88% Reduction
Average Sulfide Levels Site #4	2.45 mg/l	Non-detected	100% Reduction
Customer Annual Chemical Spend	\$346,385.00 (\$949/day)	\$235,790.00 (\$646/day)	\$110,595.00 (31.9%)

After 14 years of partnership, Source continues to be the full-service turnkey solution for FUD. With an annual treatment budget under \$1 million, Source has been able to do more for less. This project is a wonderful example where Source identified a better option than the broad use of Calcium Nitrate across the collection system. Our relationship with FUD demonstrates how additional testing and openness to new technologies can positively impact a municipality.

Project Highlight: Charlotte County Utilities Collection System, Charlotte County, Florida - Providing Service since 2022

Charlotte County has utilized 50 percent Hydrogen Peroxide (H₂O₂) for years supplied by Evoqua (Xylem). Although remarkably close to Evoqua's (Xylem) light industry headquarters, the customer did not feel they were receiving quality service.

Upon award of the first three-year contract to provide hydrogen peroxide for the entire county, Source started a testing protocol to identify troublesome areas, water quality, potential treatments, and truthful reporting. The prior reporting given monthly to the county showed no H₂S generation with very little sulfide loading. However, testing revealed the customer was left battling vapor phase average H₂S levels greater than 250 ppm with peaks exceeding 1,000 ppm. Source determined that hydrogen peroxide alone was not sufficient to mitigate hydrogen sulfide. Source conducted a system assessment to identify optimal treatment solutions, utilizing the same Advanced Oxidation Technology that we piloted for LFUCG. Source delivered better results for Charlotte County while also mitigating odor and corrosion within their collection system and at their water reclamation facility.

Source now provides five (5) treatment sites in the collection system and one treatment plant site for the county, providing them with better results, mitigating odor and corrosion within their infrastructure. Installing the **STX Redox Process™** gave them greater than 92 percent reduction in dissolved sulfides. Charlotte County had two sites that were particularly areas of concern and complaints from adjacent neighborhoods and area businesses. One site had sulfide concentrations of 30 mg/L in solution and 3,600 ppm in the air. Through our testing protocol and successful installation of the **STX Redox Process™**, we were able to reduce the sulfides in the wastewater to less than 1 mg/L in solution and under 200 ppm in the air, successfully meeting the client's mitigation goals. The other site receiving excessive complaints had sulfide concentrations of 18 to 22 mg/L in solution and 500 ppm in the air. Our installation of the **STX Redox Process™**, injected upstream of the site, reduced the concentrations to under 1 mg/L in solution and 50 ppm in the air. This approach successfully met the client's mitigation goals and prevented Charlotte County from needing to retrofit a carbon scrubber on the site.

Source delivers a full-service application to Charlotte County and has done so for six (6) years. Source provides customer-approved reporting, H₂S monitoring, pH evaluation, dye testing, remote cellular access, equipment maintenance, chemical delivery, and site inspections. Source owns and maintains all equipment.



C. Source Technologies, LLC - ETX Catalyst Product Description

ETX - Redox Catalyst designed to treat up to 50 hours

The **ETX Redox Process™** is ideal for sludge treatment or extended force main retention times. For sludge treatment or extended retention time applications, our ETX Redox Catalyst is capable of managing sulfide generation for up to 50 hours. ETX not only destroys sulfide but also prevents its reformation, thereby addressing odor issues in solids processing or extended retention time force mains with air release valves.

ETX Product Specifications

- pH: 6.5-7.85
- Not subject to CERCLA/SARA III reportable quantities
- Not corrosive
- Ferrous iron content <0.5%

Description of the Process

The **ETX Redox Process™** offers a highly effective solution for oxidizing hydrogen sulfide (H₂S) and other sulfonated organic compounds responsible for odors in wastewater. The environmentally friendly, pH-neutral catalyst is a complex organic reagent that, when combined with an oxidizing agent (typically H₂O₂), initiates a robust Redox reaction. This reaction specifically targets sulfide, reducing it to inert elemental sulfur without generating additional waste or sludge. ETX is ideal for sludge treatment or extended force main retention times.

How It Works

- **Molecular Interaction:** The catalyst bonds with sulfide molecules. When the oxidant is introduced, it triggers the Redox reaction, effectively breaking down sulfide into water and chemically inert sulfur.
- **Waste Reduction:** Unlike iron salts—which precipitate as iron oxide and produce significant sludge—the unique organic structure of ETX allows it to be continually re-energized by the oxidant. This not only sustains the reaction but also significantly reduces the amount of chemicals required, thereby minimizing waste.

Application and Benefits

- Versatility: The **ETX Redox Process™** is easily integrated into existing treatment systems through a simple metered injection of the catalyst and oxidizing agent, rapid in-line mixing, and controlled retention time.
- Efficiency: In a 100-ppm H₂S solution, approximately 80% reduction is achieved within the first minute, with complete oxidation occurring in under 5 minutes.
- Prevention of Corrosion: By eliminating sulfide in solution, the process prevents any future formation of H₂S, thereby reducing the risk of corrosion.
- Ideal Applications: This technology is well-suited for wastewater treatment plants, collection systems, and “end-of-pipe” applications.

Operating Parameters and Treatable Compounds

- pH Range: While the **ETX Redox Process™** operates effectively over a broad pH range, optimal efficiency is achieved between 6.5 and 7.85.
- Contaminant Spectrum: In addition to hydrogen sulfide and other reduced sulfur compounds, the process can treat a variety of contaminants, including selected pesticides, petroleum hydrocarbons, chlorinated solvents, and common odor-producing chemicals such as MtBE, TCE, BTEX, and PCE.



The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Wednesday, March 25, 2026** at 12:15 a.m. Eastern Time. Please contact NSF to confirm the status of any Listing, report errors, or make suggestions.

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

<http://info.nsf.org/Certified/PwsChemicals/Listings.asp?Company=C0362498&Standard=060&>

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

Evonik Corporation

2 Turner Place

Piscataway, NJ 08854

United States

732-981-5000

Visit this company's website (<http://www.evonik.com>)

Facility : Theodore, AL

Hydrogen Peroxide[HP]

Trade Designation

HI OX 270 SG

HI OX 340 SG

HI OX 350 SG

HI OX 500 SG

HYPROX® 270 H2O2 BULK

Product Function

Dechlorination

Oxidant

Dechlorination

Oxidant

Dechlorination

Oxidant

Dechlorination

Oxidant

Dechlorination

Oxidant

Max Use

29.5mg/L

23mg/L

23mg/L

16mg/L

29.5mg/L

HYPROX® 340 H2O2 BULK	Dechlorination Oxidant	23mg/L
HYPROX® 350 H2O2 BULK	Dechlorination Oxidant	23mg/L
HYPROX® 500 H2O2 BULK	Dechlorination Oxidant	16mg/L
HYPROX® 700 H2O2 BULK	Dechlorination Oxidant	11.5mg/L

[HP] Use of this product shall be followed by chlorination to remove levels of hydrogen peroxide. Chlorine residuals shall not exceed 4 mg/L, the EPA's proposed maximum residual level.

NOTE: Only products bearing the NSF Mark on the product, product packaging, and/or documentation shipped with the product are Certified.

Facility : Tampa, FL

Hydrogen Peroxide[HP]

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
HI OX 500 SG	Dechlorination Oxidant	16mg/L
HYPROX® 500 DW Bulk	Dechlorination Oxidant	16mg/L
HYPROX® 500 H2O2 Bulk	Dechlorination Oxidant	16mg/L

[HP] Use of this product shall be followed by chlorination to remove levels of hydrogen peroxide. Chlorine residuals shall not exceed 4 mg/L, the EPA's proposed maximum residual level.

Facility : Fairmont City, IL

Miscellaneous Treatment Chemical

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
PERACLEAN® 5	Oxidant	3mg/L

Miscellaneous Water Supply Products[1]

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Peraclean 15	Reverse Osmosis Membrane Biocide	NA

[1] This product is designed to be used off-line and flushed out prior to using the system for drinking water, following manufacturer's use instructions.

[HP] Use of this product shall be followed by chlorination to remove levels of hydrogen peroxide. Chlorine residuals shall not exceed 4 mg/L, the EPA's proposed maximum residual level.

NOTE: Only products bearing the NSF Mark on the product, product packaging, and/or documentation shipped with the product are Certified.

Number of matching Manufacturers is 1

Number of matching Products is 14

Processing time was 1 seconds



C. Source Technologies, LLC - STX Catalyst Product Description

STX - Redox Catalyst designed to treat between 3 minutes and 6 hours

Source Technologies is known for its proprietary organic **STX Redox Process™** designed to target sulfide and other reduced sulfur compounds, eliminating them within just three (3) minutes of contact time in a force main. This process can be strategically applied as an end-of-pipe solution to fully oxidize sulfide before discharge to gravity, as well as within wet wells and lift stations—with retention times under six hours—or directly at a wastewater treatment plant without compromising facility integrity or bacterial health.

STX Product Specifications

- pH: 6.5-7.85
- Not subject to CERCLA/SARA III reportable quantities
- Not corrosive
- Ferrous iron content <0.5%
- Chloride content 0.0%

Description of the Process

The **STX Redox Process™** offers a highly effective solution for oxidizing hydrogen sulfide (H₂S) and other sulfonated organic compounds responsible for odors in wastewater. The environmentally friendly, pH-neutral STX Catalyst is a complex organic reagent that, when combined with an oxidizing agent (typically H₂O₂), initiates a robust Redox reaction. This reaction specifically targets sulfide, reducing it to inert elemental sulfur without generating additional waste or sludge.

How It Works

- **Molecular Interaction:** The STX Catalyst bonds with sulfide molecules. When the oxidant is introduced, it triggers the Redox reaction, effectively breaking down sulfide into water and chemically inert sulfur.
- **Waste Reduction:** Unlike iron salts—which precipitate as iron oxide and produce significant sludge—the unique organic structure of STX allows it to be continually re-energized by the oxidant. This not only sustains the reaction but also significantly reduces the amount of chemicals required, thereby minimizing waste.

Application and Benefits

- Versatility: The **STX Redox Process™** is easily integrated into existing treatment systems through a simple metered injection of the catalyst and oxidizing agent, rapid in-line mixing, and controlled retention time.
- Efficiency: In a 100-ppm H₂S solution, approximately 80% reduction is achieved within the first minute, with complete oxidation occurring in under 5 minutes.
- Prevention of Corrosion: By eliminating sulfide in solution, the process prevents any future formation of H₂S, thereby reducing the risk of corrosion.
- Ideal Applications: This technology is well-suited for wastewater treatment plants, collection systems, and “end-of-pipe” applications.

Operating Parameters and Treatable Compounds

- pH Range: While the **STX Redox Process™** operates effectively over a broad pH range, optimal efficiency is achieved between 6.5 and 7.85.
- Contaminant Spectrum: In addition to hydrogen sulfide and other reduced sulfur compounds, the process can treat a variety of contaminants, including selected pesticides, petroleum hydrocarbons, chlorinated solvents, and common odor-producing chemicals such as MtBE, TCE, BTEX, and PCE

SAFETY DATA SHEET

HYPROX® 500

SDS #: 7722-84-1-50-10
Revision date: 2021-10-14
Format: NA
Version 1.06



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name HYPROX® 500
CAS-No 7722-84-1
Synonyms Hydrogen peroxide.

Recommended use of the chemical and restrictions on use

Recommended Use: Industrial bleaching, processing, pollution abatement and general oxidation reactions

Manufacturer/Supplier

Evonik Active Oxygens, LLC
2005 Market Street
Suite 3200
Philadelphia, PA 19103
Phone: +1 267/ 422-2400 (General Information)
E-Mail: Product-regulatory-services@evonik.com

Emergency telephone numbers

For leak, fire, spill or accident emergencies, call:
1 800 / 424 9300 (CHEMTREC - U.S.A.)
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)
+1 303/ 389-1409 (Medical - U.S. - Call Collect)

2. HAZARDS IDENTIFICATION**Classification****OSHA Regulatory Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Oxidizing Liquids	Category 2

GHS Label elements, including precautionary statements**EMERGENCY OVERVIEW****Danger****Hazard Statements**

H314 - Causes severe skin burns and eye damage
 H318 - Causes serious eye damage
 H302 - Harmful if swallowed
 H332 - Harmful if inhaled
 H335 - May cause respiratory irritation
 H272 - May intensify fire; oxidizer

**Precautionary Statements - Prevention**

P271 - Use only outdoors or in a well-ventilated area
 P260 - Do not breathe mist, vapours or spray.
 P270 - Do not eat, drink or smoke when using this product
 P264 - Wash face, hands and any exposed skin thoroughly after handling
 P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
 P220 - Keep away from clothing and other combustible materials
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Precautionary Statements - Response

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P310 - Immediately call a POISON CENTER or doctor
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
 P363 - Wash contaminated clothing before reuse
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
 P310 - Immediately call a POISON CENTER or doctor
 P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
 P310 - Immediately call a POISON CENTER or doctor
 P370 + P378 - In case of fire: Use water for extinction

Precautionary Statements - Storage

P405 - Store locked up

Precautionary Statements - Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information**Supplemental Information**

Keep container in a cool place out of direct sunlight. Store only in vented containers. Do not store on wooden pallets. Do not return unused material to its original container. Avoid contamination - Contamination could cause decomposition and generation of oxygen which may result in high pressure and possible container rupture. Empty drums should be triple rinsed with water before discarding.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula HO - OH

Chemical name	CAS-No	Weight %
Hydrogen peroxide	7722-84-1	50
Water	7732-18-5	50

4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Seek immediate medical attention/advice.
Skin Contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.
Inhalation	Move to fresh air. If person is not breathing, contact emergency medical services, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Ingestion	Rinse mouth. Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	Hydrogen Peroxide irritates respiratory system and, if inhaled, may cause inflammation and pulmonary edema. The effects may not be immediate. Overexposure symptoms are coughing, giddiness and sore throat. In case of accidental ingestion, necrosis may result from mucous membrane burns (mouth, esophagus and stomach). Oxygen rapid release may cause stomach swelling and hemorrhaging, which may product major, or even fatal, injury to organs if a large amount has been ingested. In case of skin contact, may cause burns, erythema, blisters or even necrosis.
Indication of immediate medical attention and special treatment needed, if necessary	Hydrogen peroxide at these concentrations is a strong oxidant. Direct contact with the eye is likely to cause corneal damage especially if not washed immediately. Careful ophthalmologic evaluation is recommended and the possibility of local corticosteroid therapy should be considered. Because of the likelihood of corrosive effects on the gastrointestinal tract after ingestion, and the unlikelihood of systemic effects, attempts at evacuating the stomach via emesis induction or gastric lavage should be avoided. There is a remote possibility, however, that a nasogastric or orogastric tube may be required for the reduction of severe distension due to gas formation.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Water. Do not use any other substance.
Specific Hazards Arising from the Chemical	In closed unventilated containers, risk of rupture due to the increased pressure from decomposition.
Flammable properties	Contact with combustible material may cause fire
Hazardous Combustion Products	On decomposition product releases oxygen which may intensify fire.
Explosion data	
Sensitivity to Mechanical Impact	Not sensitive.
Sensitivity to Static Discharge	Not sensitive.
Protective equipment and precautions for firefighters	Use water spray to cool fire exposed surfaces and protect personnel. Move containers from fire area if you can do it without risk. As in any fire, wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Isolate and post spill area. Keep people away from and upwind of spill/leak. Eliminate all sources of ignition and remove combustible materials.
Other	Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in fire.
Environmental Precautions	See Section 12 for additional Ecological Information.
Methods for Containment	Dike to collect large liquid spills. Stop leak and contain spill if this can be done safely. Small spillage: Dilute with large quantities of water.
Methods for cleaning up	Flush area with flooding quantities of water. Hydrogen peroxide may be decomposed by adding sodium metabisulfite or sodium sulfite after diluting to about 5%.

7. HANDLING AND STORAGE

Handling	Use only in well-ventilated areas. Keep/Store away from clothing/ combustible materials. Wear personal protective equipment. Never return unused hydrogen peroxide to original container. Contamination may cause decomposition and generation of oxygen gas which could result in high pressures and possible container rupture. Empty drums should be triple rinsed with water before discarding. Utensils used for handling hydrogen peroxide should only be made of glass, stainless steel, aluminum or plastic. Pipes and equipment should be passivated before first use. Hydrogen peroxide should be stored only in vented containers and transferred only in a prescribed manner.
Storage	Keep containers in cool areas out of direct sunlight and away from combustibles. Provide mechanical general and/or local exhaust ventilation to prevent release of vapor or mist into work environment. Containers must be vented. Keep/store only in original container. Store rooms or warehouses should be made of non-combustible materials with impermeable floors. In case of release, spillage should flow to safe area. Containers should be visually inspected on a regular basis to detect any abnormalities (swollen drums, increases in temperature, etc.).

Incompatible products Combustible materials. Copper alloys, galvanized iron. Strong reducing agents. Heavy metals. Iron. Copper alloys. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Ingredients with workplace control parameters.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m ³	IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m ³	Mexico: TWA 1 ppm
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m ³	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m ³

Appropriate engineering controls

Engineering measures Ensure that eyewash stations and safety showers are close to the workstation location.
 Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use chemical splash-type monogoggles and a full-face shield made of polycarbonate, acetate, polycarbonate/acetate, PETG or thermoplastic.

Skin and Body Protection For body protection wear impervious clothing such as an approved splash protective suit made of SBR rubber, PVC (PVC Outershell w/Polyester Substrate), Gore-Tex (Polyester trilaminate w/Gore-Tex), or a specialized HAZMAT Splash or Protective Suite (Level A, B, or C). For foot protection, wear approved boots made of NBR, PVC, Polyurethane, or neoprene. Overboots made of Latex or PVC, as well as firefighter boots or specialized HAZMAT boots are also permitted. DO NOT wear any form of boot or overboot made of nylon or nylon blends. DO NOT USE cotton, wool or leather as these materials react rapidly with higher concentrations of hydrogen peroxide. Completely submerge hydrogen peroxide contaminated clothing or other materials in water prior to drying. Residual hydrogen peroxide, if allowed to dry on materials such as paper, fabrics, cotton, leather, wood or other combustibles, can cause the material to ignite and result in a fire.

Hand Protection For hand protection, wear approved gloves made of nitrile, PVC, or neoprene. DO NOT use cotton, wool or leather for these materials react RAPIDLY with higher concentrations of hydrogen peroxide. Thoroughly rinse the outside of gloves with water prior to removal. Inspect regularly for leaks.

Respiratory Protection If concentrations in excess of 10 ppm are expected, use NIOSH/DHHS approved self-contained breathing apparatus (SCBA) or other approved air-supplied respirator (ASR) equipment (e.g., a full-face airline respirator (ALR)). DO NOT use any form of air-purifying respirator (APR) or filtering facepiece (dust mask), especially those containing oxidizable sorbants such as activated carbon.

Hygiene measures Avoid breathing vapors, mist or gas. Clean water should be available for washing in case of eye or skin contamination.

General information Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear, colorless liquid
Physical State	Liquid
Color	Colorless
Odor	odorless
Odor threshold	Not applicable
pH	<= 3.0
Melting point/freezing point	-52 °C
Boiling Point/Range	114 °C
Flash point	Not flammable
Evaporation Rate	> 1 (n-butyl acetate=1)
Flammability (solid, gas)	Not flammable
Flammability Limit in Air	Not applicable
Upper flammability limit:	Not applicable
Lower flammability limit:	No information available
Vapor pressure	18 mm Hg @ 30 °C
Vapor density	No information available
Density	1.2 @ 20 °C
Specific gravity	1.2
Water solubility	completely soluble
Solubility in other solvents	No information available
Partition coefficient	log Kow = -1.5 @ 20 °C
Autoignition temperature	Not combustible
Decomposition temperature	100 °C (adiabatic)
Viscosity, kinematic	1.17 cP @ 20 °C
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidizing properties	Strong oxidizer
<u>Other Information</u>	
Molecular weight	34

10. STABILITY AND REACTIVITY

Reactivity	Reactive and oxidizing agent. .
Chemical Stability	Stable under normal conditions. Decomposes on heating. Stable under recommended storage conditions.
Possibility of Hazardous Reactions	Contact with organic substances may cause fire or explosion. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Excessive heat; Contamination; Exposure to UV-rays; pH variations.
Incompatible materials	Combustible materials. Copper alloys, galvanized iron. Strong reducing agents. Heavy metals. Iron. Copper alloys. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.
Hazardous Decomposition Products	Oxygen which supports combustion. Liable to produce overpressure in container.

11. TOXICOLOGICAL INFORMATION**Product Information**

LD50 Oral	50% solution: LD50 > 225 mg/kg bw (rat) 35 % solution: LD50 1193 mg/kg bw (rat) 70 % solution: LD50 1026 mg/kg bw (rat)
LD50 Dermal	35% solution: LD50 > 2000 mg/kg bw (rabbit) 70 % solution: LD50 9200 mg/kg bw (rabbit)
LC50 Inhalation	50% solution: LC50 > 170 mg/m ³ (rat) (4-hr) Hydrogen Peroxide vapors: LC0 9400 mg/m ³ (mouse) (5 - 15 minutes) Hydrogen Peroxide vapors: LC50 > 2160 mg/m ³ (mouse)
Serious eye damage/eye irritation Skin corrosion/irritation	Corrosive. Risk of serious damage to eyes. Corrosive to skin. Causes severe burns.
Sensitization	Did not cause sensitization on laboratory animals.

Information on toxicological effects

Symptoms	Vapors, mists, or aerosols of hydrogen peroxide can cause upper airway irritation, inflammation of the nose, hoarseness, shortness of breath, and a sensation of burning or tightness in the chest. Prolonged exposure to concentrated vapor or to dilute solutions can cause irritation and temporary bleaching of skin and hair. Exposure to vapor, mist, or aerosol can cause stinging pain and tearing of eyes.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity	This product contains hydrogen peroxide. The International Agency for Research on Cancer (IARC) has concluded that there is inadequate evidence for carcinogenicity of hydrogen peroxide in humans, but limited evidence in experimental animals (Group 3 - not classifiable as to its carcinogenicity to humans). The American Conference of Governmental Industrial Hygienists (ACGIH) has concluded that hydrogen peroxide is a 'Confirmed Animal Carcinogen with Unknown Relevance to Humans' (A3).
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Chemical name	ACGIH	IARC	NTP	OSHA
Hydrogen peroxide 7722-84-1	A3	3		

Mutagenicity	This product is not recognized as mutagenic by Research Agencies In vivo tests did not show mutagenic effects
Reproductive toxicity	This product is not recognized as reprotox by Research Agencies. No toxicity to reproduction in animal studies.
STOT - single exposure STOT - repeated exposure	May cause respiratory irritation. Not classified.
Target organ effects	Eyes, Respiratory System, Skin.
Aspiration hazard	No information available.

12. ECOLOGICAL INFORMATION**Ecotoxicity****Ecotoxicity effects**

Hydrogen peroxide is naturally produced by sunlight (between 0.1 and 4 ppb in air and 0.001 to 0.1 mg/L in water). Not expected to have significant environmental effects.

Hydrogen peroxide (7722-84-1)				
Active Ingredient(s)	Duration	Species	Value	Units
Hydrogen peroxide	96 h LC50	Fish Pimephales promelas	16.4	mg/L
Hydrogen peroxide	72 h LC50	Fish Leuciscus idus	35	mg/L
Hydrogen peroxide	48 h EC50	Daphnia pulex	2.4	mg/L
Hydrogen peroxide	24 h EC50	Daphnia magna	7.7	mg/L
Hydrogen peroxide	72 h EC50	Algae Skeletonema costatum	1.38	mg/L
Hydrogen peroxide	21 d NOEC	Daphnia magna	0.63	mg/L
Hydrogen peroxide	72 h LC50	Fish Leuciscus idus	35	mg/L

Persistence and degradability

Hydrogen peroxide in the aquatic environment is subject to various reduction or oxidation processes and decomposes into water and oxygen. Hydrogen peroxide half-life in freshwater ranged from 8 hours to 20 days, in air from 10 - 20 hours, and in soils from minutes to hours depending upon microbiological activity and metal contamination.

Bioaccumulation

Material may have some potential to bioaccumulate but will likely degrade in most environments before accumulation can occur.

Mobility

Will likely be mobile in the environment due to its water solubility but will likely degrade over time.

Other Adverse Effects

Decomposes into oxygen and water. No adverse effects.

13. DISPOSAL CONSIDERATIONS**Waste disposal methods**

Dispose of in accordance with local regulations. Can be disposed as waste water, when in compliance with local regulations.

US EPA Waste Number

D001; D002.

Contaminated Packaging

Dispose of in accordance with local regulations. Drums - Empty as thoroughly as possible. Triple rinse drums before disposal. Avoid contamination; impurities accelerate decomposition. Never return product to original container.

14. TRANSPORT INFORMATION**DOT**

UN/ID no	UN 2014
Proper Shipping Name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Hazard class	5.1
Subsidiary class	8
Packing Group	II

TDG

UN/ID no	UN 2014
Proper Shipping Name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION

HYPROX® 500

SDS # : 7722-84-1-50-10
Revision date: 2021-10-14
Version 1.06

Hazard class 5.1
Subsidiary class 8
Packing Group II

ICAO/IATA

Hydrogen peroxide (>40%) is forbidden on Passenger and Cargo Aircraft. Air regulation permit shipment of Hydrogen Peroxide (<=40%) in non-vented containers for Air Cargo Only aircraft, as well as for Passenger and Cargo aircraft. HOWEVER, all Hydrogen Peroxide containers are vented and therefore, air shipments of H2O2 are not permitted. IATA air regulations state that venting of packages containing oxidizing substances is not permitted for air transport.

IMDG/IMO

UN/ID no UN 2014
Proper Shipping Name HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Hazard class 5.1
Subsidiary Hazard Class 8
Packing Group II

OTHER INFORMATION

Protect from physical damage. Keep drums in upright position. Drums should not be stacked in transit. Do not store drums on wooden pallets.

15. REGULATORY INFORMATION**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

This product has the following hazards that are reportable under The Emergency Planning and Community Right-to-Know rule (EPCRA Tier II):

- Oxidizer
- Acute toxicity
- Serious eye damage/eye irritation
- Skin corrosion/irritation
- Specific Target Organ Toxicity (STOT) - Single Exposure

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA/EPCRA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Response Compensation and Liability Act (CERCLA) or as an extremely hazardous substance (EHS) under the Emergency Planning and Community Right to Know Act (EPCRA) / Superfund Amendments and Reauthorization Act (SARA).

Chemical name	CERCLA Hazardous Substances RQs (40 CFR 302.4)	SARA Sec 304 Extremely Hazardous Substance RQ (40 CFR 355 Appendix A)	SARA Section 302 EHS Threshold Planning Quantity (40 CFR 355)
Hydrogen peroxide 7722-84-1		1000 lb	1000 lb

Hydrogen Peroxide RQ is for concentrations of > 52% only

US State Regulations**U.S. State Right-to-Know Regulations**

This product contains the following substances regulated under state Right-to-Know laws:

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Hydrogen peroxide	X	X	X		X

California Proposition 65

This product does not contain any Proposition 65 chemicals

CANADA**Environmental Emergencies**

Chemical name	Canada - Environmental Emergencies - Part 1 Substances - Substances Likely to Explode - Minimum Threshold Quantities	Canada - Environmental Emergencies - Part 1 Substances - Substances Likely to Explode - Minimum Mixture Concentrations	Canada - Environmental Emergencies - Part 2 Substances - Substances Hazardous When Inhaled - Minimum Threshold Quantities	Canada - Environmental Emergencies - Part 2 Substances - Substances Hazardous When Inhaled - Minimum Mixture Concentrations
Hydrogen peroxide 7722-84-1			3.40 tonnes Minimum quantity ([2-011])	52

Canadian National Pollutant Release Inventory

This product contains no substances reportable under Canada's National Pollutant Release Inventory regulations.

International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/EL INCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)	NZIoC (New Zealand)
Hydrogen peroxide 7722-84-1	X	X	231-765-0	X	X	X	X	X	X

All ingredients are directly listed on the active TSCA Inventory

Mexico**Mexico - Grade**

Serious risk, Grade 3

16. OTHER INFORMATION

NFPA	Health Hazards 3	Flammability 0	Stability 1	Special Hazards OX
HMIS	Health Hazards 3	Flammability 0	Physical hazard 1	Personal Protection H

NFPA/HMIS Ratings Legend

Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Special Hazards: OX = Oxidizer

Protection = H (Safety goggles, gloves, apron, the use of supplied air or SCBA respirator is required in lieu of a vapor cartridge respirator)

Uniform Fire Code

Oxidizer: Class 2--Liquid

Revision date:

2021-10-14

Revision note

Manufacturer name changed, product rebranded.

Disclaimer

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Prepared By:

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End of Safety Data Sheet



Revision Date 3/25/2024

Safety Data Sheet

Section 1: Identification

Product Identifier: ETX

Recommended use*: Oxidation Treatment

* The "Recommended use" identified for this product is provided solely to comply with a US Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Manufacturer: Source Technologies

Address: 157 Venture Ct Suite 9, Lexington, KY 40511

Telephone (general): 859-223-1444

Email: admin@sourcetechnologiesllc.com

Company website: <http://www.sourcetechnologiesllc.com>

Emergency Telephone Number

Source Technologies: 1-859-223-1444

CHEMTREC: 1-800-424-9300 (US/Canada) | +1-703-527-3887 (International)

Section 2: Hazard(s) Identification

Emergency Overview

CAUTION: MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. INGESTION MAY CAUSE GASTRIC DISTURBANCES. Use with local exhaust ventilation. Wear a NIOSH-certified (or equivalent) organic vapor/particulate respirator. Wear NIOSH-certified chemical goggles. Wear protective clothing. Wear chemical resistant protective gloves. Eye wash fountains and safety showers must be easily accessible.

Signal Word: Warning

State of matter: Liquid

Color: Light brown liquid, slightly acrid in liquid form.

Odor: Mild organic

Hazards not otherwise classified: None known

Prevention: Do not breathe dust, fume, gas, mist vapors or spray. Wash thoroughly after handling. Use only outdoors or in a well ventilated area. Wear gloves, eye and face protection and protective clothing.

Response: IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minute. Remove contact lenses if present and easy to do. Continue rinsing. Call a POISON CENTER or

doctor if you feel unwell. Specific Treatment (see on this label). If skin or eye irritation persists, get



medical attention or advice. Take off contaminated clothing and wash before reuse. **Potential Health**

Effects

Primary routes of exposure: Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Medical conditions aggravated by overexposure: Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product. See section 11 - Toxicological information.

GHS Hazard Pictograms:

	Corrosive – Product has a slightly corrosive effect when left in prolonged contact with metals.
	Irritant – Product exposure to eyes, skin/body, hands, ingestion, and inhalation should be avoided. May Be Harmful if Swallowed. See section 4 First-Aid Measures for additional information.

HAZARD CLASSIFICATIONS: **CATEGORY INTERPRETATION ACUTE TOXICITY** 5 Low

SKIN IRRITATION 3 Mild

EYE IRRITATION 2B Severe Eye Irritation Possible **TARGET ORGAN SYSTEMIC TOXICITY** 3

Transient Respiratory Irritation Possible

Storage / Disposal: Product should be stored in a well ventilated area with proper spill containment and drainage capabilities. Dike area around spill to prevent spreading, and use absorbent material to pick up spill. Dispose of water in accordance with applicable federal, state, and local laws at licensed incinerators or landfills. Do not discharge to waterways or sewer systems without authority. This material is not regulated by RCRA or CERCLA (Superfund).

Section 3: Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

This product is not classified as hazardous under the referenced regulation.

CAS Number Content Chemical Name

Trade Secret 15-25% Proprietary Catalyst

Section 4: First-Aid Measures

Description of First Aid Measures

Eyes: Flush with water immediately and thoroughly for at least a 15 minutes. Get prompt medical attention if irritation persists.

Skin: Remove contaminated clothing and flush skin with water.

Inhalation: Remove to fresh air. Call a physician if problems persist.

Ingestion: Do not induce vomiting. Give large quantities of water, then an antacid. Seek medical assistance.

Inhalation: Keep patient calm, remove to fresh air, seek medical attention

Most Important Symptoms and effects, both acute and delayed

No significant symptoms are expected due to the non-classification of the product. **Note to physician:** Treat according to symptoms (decontamination, vital functions), no known specific antidotes

Section 5: Fire-Fighting Measures

Suitable extinguishing media: Will not burn; use materials appropriate for any surrounding fires.

Unsuitable extinguishing media: Will not burn; use materials appropriate for any surrounding fires.

Special Hazards arising from the substance or mixture: When mixed with strong oxidizers such as Hydrogen Peroxide, product will create an exothermic reaction. Avoid accidental mixture with such oxidizers unless product has been sufficiently diluted as specified by seller.

Unusual fire and explosion hazards: None

Advice for firefighters: Will not burn; use materials appropriate for any surrounding fires.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective clothing

Emergency Procedures: Follow your organizations standard emergency response procedures. Perform any emergency actions with local exhaust ventilation. When interacting with chemical, wear a NIOSH certified (or equivalent) organic vapour/particulate respirator. Wear NIOSH-certified chemical goggles. Wear protective clothing. Wear chemical resistant protective gloves. Eye wash fountains and safety showers must be easily accessible.

Environmental Precautions: Do not discharge into drains/surface waters/groundwater unless as specifically directed by seller

Methods and materials for containment and clean up

CAUTION: Ventilation should be provided in enclosed areas. Dike area around spill to prevent spreading, and use absorbent material to pick up spill.

Dispose of water in accordance with applicable federal, state, and local laws at licensed incinerators or landfills. Do not discharge to waterways or sewer systems without authority. This material is not regulated by RCRA or CERCLA (Superfund).

Section 7: Handling and Storage

Precautions for Safe Handling: No special measures necessary provided product is used correctly.

Storage General Advice: Keep container closed until use. Store at room temperature and protected against freezing.

Temperature tolerance: Protect from temperatures below: -10 °C

Incompatible materials or Ignition Sources: Do not store with strong oxidizers such as Hydrogen

Section 8: Exposure Controls / Personal Protection

Control parameters: Advice on system design; provide local exhaust ventilation to control vapors/mists.

Personal Protective Equipment

Respiratory protection: Wear respiratory protection if ventilation is inadequate. Breathing protection if breathable aerosols/dust are formed.

Hand protection: Chemical resistant protective gloves

Eye protection: Safety glasses with side-shields.

Skin / Body: Wear protective clothing

General safety and hygiene measures: Wear protective clothing as necessary to minimize contact.

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin and eyes. Remove contaminated clothing.

Section 9: Physical and Chemical Properties

Information on chemical and physical properties

Material Description			
Physical Form	Liquid		
Color	Light brown liquid, slightly acrid in liquid form.		
Taste	Unknown		
Particulate Size	No particles		
Odor Threshold	Mild organic odor, threshold unknown		
General Properties			
Boiling Point	106C (223F)	Melting Point	N/A
Decomposition	Will not occur	Stability	Stable
Temp pH	6.5 – 7.5	Specific Gravity	1.40 ± 0.21
Water Solubility	Complete	Decomposition	Will not occur
Viscosity	N.D.	Explosive Properties	N/A
Volatility			
Vapor Density N.D. Vapor Pressure			
Evaporation Rate	N.D.	VOC (Wt.)	N.D.
VOC (vol.)	N.D.	Volatiles (Wt.)	N.D.
Volatiles (vol.)	N.D.		

Flammability

Flash Point	N/A	UEL	N/A
LEL	N/A	Auto ignition	N/A
Self-Accelerating Decomposition Temp (SADT)	N/A	Heat of Combustion	N/A
Burning Time	N/A	Flame Duration	N/A
Flame Height	N/A	Flame Extension	N/A
Ignition Distance	N/A	Flammability (solid, gas)	N/A

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Section 10: Stability and Reactivity

Reactivity: Reacts exothermically in the presence of strong oxidizers (e.g. Hydrogen Peroxide)

Conditions to avoid: Oxidizing agents

Incompatible materials: Will corrode metals over time, including, but not limited to iron, steel, aluminum, copper, tin

Stability: Stable

Hazardous Polymerization: Will not occur

Hazardous decomposition products: None known

Section 11: Toxicological Information

Component Name		CAS	
Proprietary Catalyst		Trade secret	
Acute Toxicity			
Type of Value		Species	Value
Oral LD 50		Rat	>2,000 mg / kg
Dermal LD 50		Rat	>2,000 mg / kg
Irritation / Corrosion			
Species	Route	Result	Method

Rabbit	Skin	Non-irritant	OECD Guideline 404
Rabbit	Eye	Non-irritant	OECD Guideline 404
Guinea Pig	Sensitization	No sensitizing effect	

The statements are based on the properties of the individual components

Routes of Exposure: Eyes. Ingestion. Inhalation. Skin.

Eye Contact: Causes moderate irritation. May cause: discoloration. irritation. discomfort. tearing. blurred vision. corneal ulceration. conjunctival ulceration.

Skin Contact: May cause mild to moderate irritation. Contact may cause: discomfort. rash. ulceration.

Skin Absorption: No data available.

Inhalation: May cause moderate irritation. May irritate: upper respiratory tract. May cause: coughing. **Ingestion:** May cause mild irritation. May cause: gastrointestinal irritation. Repeated ingestion may cause: gastrointestinal ulceration.

Medical Conditions Aggravated by Exposure to Product: None known.

Other: None known.

Cancer Information: This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

Section 12: Ecological Information

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Daphnia: (Ceriodaphnia dubia) LC50: 144.1 mg/l

Fathead Minnow (Pimephales promelas) LC50: >1000 mg/l

Algae (Selenastrum capricornutum) EC50: 732.8 mg/l, EC0: 288.4 mg/l

Biodegradability: Readily biodegradable based on OECD criteria

Section 13: Disposal Consideration

Waste disposal of substance: Dispose of in accordance with national, state and local regulations. It is the waste generator's responsibility to determine if a particular waste is hazardous under RCRA. **Container disposal:** Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

Section 14: Transportation Information

Proper Shipping Name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.

Transport Mode	USDOT	IMDG Hazard Class	Packing Group	ID #	Hazard Label	Marine Pollutant
Land	May be transported as non hazardous under USDOT in approved packaging.	N/A	N/A	N/A	N/A	N/A

Sea N/A	8	III	UN326 7	8	No
Air	8	III	UN326 7	8	N/A

Section 15: Regulatory Information

United States Federal Regulations

OSHA Hazard Category: Not hazardous

EPCRA 311/312 Hazard Categories: IMMEDIATE HAZARD

Section 16: Other Information

NFPA Hazard Codes: Health: 1 Fire: 0 Reactivity: 0 Special: 0 **HMIS III Rating:** Health: 1 Flammability: 0

Physical hazard: 0 Personal Protection: 0

Last Revision Date: 03/25/2015

Preparation Date: 12/12/2014

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Disclaimer/Statement of Liability: The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstance of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Key to abbreviations

NDA = No data available

N/A = Not applicable

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Revision Date 9/19/2024

Safety Data Sheet

Section 1: Identification

Product Identifier: STX

Recommended use*: Oxidation Treatment

* The "Recommended use" identified for this product is provided solely to comply with a US Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Manufacturer: Source Technologies

Address: 157 Venture Ct Suite 9, Lexington, KY 40511

Telephone (general): 859-223-1444

Email: admin@sourcetechnologiesllc.com

Company website: <http://www.sourcetechnologiesllc.com>

Emergency Telephone Number

Source Technologies: 1-859-223-1444

CHEMTREC: 1-800-424-9300 (US/Canada) | +1-703-527-3887 (International)

Section 2: Hazard(s) Identification

Emergency Overview

CAUTION: MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. INGESTION MAY CAUSE GASTRIC DISTURBANCES. Use with local exhaust ventilation. Wear a NIOSH-certified (or equivalent) organic vapor/particulate respirator. Wear NIOSH-certified chemical goggles. Wear protective clothing. Wear chemical resistant protective gloves. Eye wash fountains and safety showers must be easily accessible.

Signal Word: Warning

State of matter: Liquid

Color: Dark brown liquid, slightly acrid in liquid form.

Odor: Mild organic

Hazards not otherwise classified: None known



Prevention: Do not breathe dust, fume, gas, mist vapors or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear gloves, eye and face protection and protective clothing.

Response: IF ON SKIN: Wash with plenty of soap and water. IF INHAILED: Remove victim to fresh air and

keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minute. Remove contact lenses if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor if you feel unwell. Specific Treatment (see on this label). If skin or eye irritation persists, get medical attention or advice. Take off contaminated clothing and wash before reuse. **Potential Health Effects**
Primary routes of exposure: Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Medical conditions aggravated by overexposure: Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product. See section 11 - Toxicological information.

GHS Hazard Pictograms:

	Corrosive – Product has a slightly corrosive effect when left in prolonged contact with metals.
	Irritant – Product exposure to eyes, skin/body, hands, ingestion, and inhalation should be avoided. See section 4 First-Aid Measures for additional information.

Storage / Disposal: Product should be stored in a well-ventilated area with proper spill containment and drainage capabilities. Dike area around spill to prevent spreading, and use absorbent material to pick up spill. Dispose of water in accordance with applicable federal, state, and local laws at licensed incinerators or landfills. Do not discharge to waterways or sewer systems without authority. This material is not regulated by RCRA or CERCLA (Superfund).

Section 3: Composition / Information on Ingredients
--

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

This product is not classified as hazardous under the referenced regulation.

CAS Number Content Chemical Name

Trade Secret 20-25% Proprietary Catalyst

Section 4: First-Aid Measures

Description of First Aid Measures

Eyes: Flush with water immediately and thoroughly for at least 15 minutes. Get prompt medical attention if irritation persists.

Skin: Remove contaminated clothing and flush skin with water.

Inhalation: Remove to fresh air. Call a physician if problems persist.

Ingestion: Do not induce vomiting. Give large quantities of water, then an antacid. Seek medical assistance.

Inhalation: Keep patient calm, remove to fresh air, seek medical attention

Most Important Symptoms and effects, both acute and delayed

No significant symptoms are expected due to the non-classification of the product.

Note to physician: Treat according to symptoms (decontamination, vital functions), no known specific antidotes

Section 5: Fire-Fighting Measures

Suitable extinguishing media: Will not burn; use materials appropriate for any surrounding fires.

Unsuitable extinguishing media: Will not burn; use materials appropriate for any surrounding fires.

Special Hazards arising from the substance or mixture: When mixed with strong oxidizers such as Hydrogen Peroxide, product will create an exothermic reaction. Avoid accidental mixture with such oxidizers unless product has been sufficiently diluted as specified by seller.

Unusual fire and explosion hazards: None

Advice for firefighters: Will not burn; use materials appropriate for any surrounding fires.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective clothing

Emergency Procedures: Follow your organizations standard emergency response procedures. Perform any emergency actions with local exhaust ventilation. When interacting with chemical, wear a NIOSH certified (or equivalent) organic vapor/particulate respirator. Wear NIOSH-certified chemical goggles. Wear protective clothing. Wear chemical resistant protective gloves. Eye wash fountains and safety showers must be easily accessible.

Environmental Precautions: Do not discharge into drains/surface waters/groundwater unless as specifically directed by seller

Methods and materials for containment and clean up

CAUTION: Ventilation should be provided in enclosed areas. Dike area around spill to prevent spreading, and use absorbent material to pick up spill.

Dispose of water in accordance with applicable federal, state, and local laws at licensed incinerators or landfills. Do not discharge to waterways or sewer systems without authority. This material is not regulated by RCRA or CERCLA (Superfund).

Section 7: Handling and Storage

Precautions for Safe Handling: No special measures necessary provided product is used correctly.

Storage General Advice: Keep container closed until use. Store at room temperature and protected against freezing.

Temperature tolerance: Protect from temperatures below: -10 °C

Incompatible materials or Ignition Sources: Do not store with strong oxidizers such as Hydrogen Peroxide

Section 8: Exposure Controls / Personal Protection

Control parameters: Advice on system design; provide local exhaust ventilation to control vapors/mists.

Personal Protective Equipment

Respiratory protection: Wear respiratory protection if ventilation is inadequate. Breathing protection if breathable aerosols/dust are formed.

Hand protection: Chemical resistant protective gloves

Eye protection: Safety glasses with side-shields.

Skin / Body: Wear protective clothing

General safety and hygiene measures: Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin and eyes. Remove contaminated clothing.

Section 9: Physical and Chemical Properties
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Information on chemical and physical properties

Material Description			
Physical Form	Liquid		
Color	Dark brown liquid, slightly acid in liquid form.		
Taste	Unknown		
Particulate Size	No particles		
Odor Threshold	Mild organic odor, threshold unknown		
General Properties			
Boiling Point	106C (223F)	Melting Point	N/A
Decomposition Temp	Will not occur	Stability	Stable
pH	6.5 – 7.85	Specific Gravity	1.090 ± 0.21
Water Solubility	Complete	Decomposition	Will not occur
Viscosity	N.D.	Explosive Properties	N/A
Volatility			
Vapor Density	N.D.	Vapor Pressure	
Evaporation Rate	N.D.	VOC (Wt.)	N.D.
VOC (vol.)	N.D.	Volatiles (Wt.)	N.D.
Volatiles (vol.)	N.D.		

Flammability			
Flash Point	N/A	UEL	N/A
LEL	N/A	Auto ignition	N/A
Self-Accelerating Decomposition Temp (SADT)	N/A	Heat of Combustion	N/A
Burning Time	N/A	Flame Duration	N/A
Flame Height	N/A	Flame Extension	N/A
Ignition Distance	N/A	Flammability (solid, gas)	N/A

Section 10: Stability and Reactivity

Reactivity: Reacts exothermically in the presence of strong oxidizers (e.g. Hydrogen Peroxide)

Conditions to avoid: Oxidizing agents

Incompatible materials: Will corrode metals over time, including, but not limited to iron, steel, aluminum, copper, tin

Stability: Stable

Hazardous Polymerization: Will not occur

Hazardous decomposition products: None known

Section 11: Toxicological Information
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Component Name		CAS
Proprietary Catalyst		Trade secret
Acute Toxicity		
Type of Value	Species	Value
Oral LD 50	Rat	>2,000 mg / kg
Dermal LD 50	Rat	>2,000 mg / kg
Irritation / Corrosion		

Species	Route	Result	Method
Rabbit	Skin	Non-irritant	OECD Guideline 404
Rabbit	Eye	Non-irritant	OECD Guideline 404
Guinea Pig	Sensitization	No sensitizing effect	

The statements are based on the properties of the individual components

Routes of Exposure: Eyes. Ingestion. Inhalation. Skin.

Eye Contact: Causes moderate irritation. May cause: discoloration. irritation. discomfort. tearing. blurred vision. corneal ulceration. conjunctival ulceration.

Skin Contact: May cause mild to moderate irritation. Contact may cause: discomfort. rash. ulceration.

Skin Absorption: No data available.

Inhalation: May cause moderate irritation. May irritate: upper respiratory tract. May cause: coughing.

Ingestion: May cause mild irritation. May cause: gastrointestinal irritation. Repeated ingestion may cause: gastrointestinal ulceration.

Medical Conditions Aggravated by Exposure to Product: None known.

Other: None known.

Cancer Information: This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

Section 12: Ecological Information

Daphnia: (*Ceriodaphnia dubia*) LC50: 144.1 mg/l

Fathead Minnow (*Pimephales promelas*) LC50: >1000 mg/l

Algae (*Selenastrum capricornutum*) EC50: 732.8 mg/l, EC0: 288.4 mg/l

Biodegradability: Readily biodegradable based on OECD criteria

Section 13: Disposal Consideration

Waste disposal of substance: Dispose of in accordance with national, state and local regulations. It is the waste generator's responsibility to determine if a particular waste is hazardous under RCRA. **Container disposal:** Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

Section 14: Transportation Information

Proper Shipping Name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.

Transport Type	USDOT	IMDG Hazard Class	Packing Group	ID #	Hazard Label	Marine Pollutant
Land	May be transported as nonhazardous under USDOT in approved packaging.	N/A	N/A	N/A	N/A	N/A
Sea	N/A	8	III	UN3267	8	No
Air		8	III	UN3267	8	N/A

Section 15: Regulatory Information

United States Federal Regulations

Registration Status: Chemical, TSCA, US, released / listed

OSHA Hazard Category: Not hazardous

EPCRA 311/312 (Hazard Categories): Not hazardous

Section 16: Other Information

NFPA Hazard Codes: Health: 1 Fire: 1 Reactivity: 0 Special: 0 **HMIS III Rating:** Health: 1 Flammability: 1

Physical hazard: 0 Personal Protection: 0

Last Revision Date: 03/25/2024

Preparation Date: 12/12/2014

Disclaimer/Statement of Liability: The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstance of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Key to abbreviations

NDA = No data available

N/A = Not applicable



E. Source Technologies, LLC - Spill Prevention and Response Plan

Delivery Requirements

Source provides comprehensive delivery services for all products and solutions. No special delivery requirements are necessary. Customers are not required to manage or handle Source materials, storage facilities, or dosing equipment. All safety data sheets, including emergency contacts, are readily available onsite.

Maintenance and Operation Requirements

Source delivers a complete “Full-Service” experience. We assume full responsibility for the maintenance and hands-on operation of our systems, including operating, stocking, and troubleshooting all processes and equipment to ensure seamless service delivery. All sites will be set up to comply with OSHA, NFPA, and PHMSA, as well as with all known federal and local regulations.

Safe Handling

Source values the safety of all its employees and associated workers on job sites and in the warehouse. To ensure that everyone encountering hazardous materials is educated on the dangers of the chemistries we encounter, each employee goes through HAZWOPER certification, PPE training, and confined space training. All field technicians and delivery drivers are required to bring with them on job sites a field kit containing appropriate PPE, with the addition of emergency respirators and Hazmat chemical absorbent pads. Basic personal protective equipment required for all personnel includes disposable nitrile gloves, safety goggles, chemical-resistant shoes, rescue respirator, & chemical apron. Advanced PPE gear sets also include Tyvek suits, full-face respirators, long-sleeve rubber gloves, and forced air fans. This is usually only carried into sites that require confined space entry or areas with very high hydrogen sulfide development.

In Case of Emergency Spill

While most of our chemistries (STX and ETX Catalysts) are non-hazardous, EPA-approved, and TOSCA-registered; the use of hydrogen peroxide is always a danger and should be taken very seriously. For minor leaks and spills the best way to handle hydrogen peroxide is through dilution with water and containing the spill in an area that has no risk of fire since hydrogen peroxide is a strong oxidizer. All Source vehicles are equipped with emergency cleanup kits to ensure that no chemical spill becomes a hazard.

Any spill over 10 gallons is required by law to be reported to HAZMAT directly, as well as reported to CERCLA for reportable quantities. To ensure the spill can be handled promptly and efficiently, Source uses CHEMTREC as a 24/7 service that will contact emergency responders, facilitate cleanup of the site, and log any information for reporting. In more than 20 years of handling chemistry, Source has had no reportable quantity spills or accidental releases.

All work sites and labels have the CHEMTREC number and Source's account number printed on them as follows:

Emergency

IN CASE OF EMERGENCY CALL: 1-800-424-9300

CHEMTREC Customer number: 824960

Hazard Communication Program

1. Hazardous Chemicals Communication Policy

To ensure that information about the dangers of all hazardous chemicals used by Source is known by all affected workers, the following hazard communication program has been implemented. Under this program, workers will be informed of the requirements of the OSHA Hazard Communication Standard, the operations where exposure to hazardous chemicals may occur, and how workers can access this program, as well as labels and SDS information. This program applies to any chemical that is known to be present in the workplace in such a manner that workers may be exposed under normal conditions of use or in a foreseeable emergency. All work areas that involve potential exposure to chemicals are part of the hazard communication program. Copies of the hazard communication program are available in the office or electronically for review by any interested worker.

2. Container Labeling

Competent Safety Officer, Marcus Bullock, will verify that all containers received for use will be clearly labeled in accordance with the requirements of HazCom 2012, including a product identifier, pictogram, hazard statement, signal word, and precautionary statements, as well as the supplier's contact information. The Project Manager in each work area will ensure that all secondary containers are labeled with the original supplier's label or with an alternative workplace label. The Project Manager will review the company labeling procedures every six months and will update labels as required.

3. Safety Data Sheets (SDSs)

The Competent Safety Officer is responsible for establishing and monitoring Source's SDS program. The procedure below will be followed when an SDS is not received at the time of initial shipment: Copies of SDSs for all hazardous chemicals to which workers are exposed or are potentially exposed will be kept in the work truck and in every pump box. Workers can access SDSs at any time.

4. Employee Information and Training

Marcus Bullock is responsible for employee information and training. Every worker who will be potentially exposed to hazardous chemicals will receive initial training on the Hazard Communication standard, Global Harmonization System (GHS 2015), and this program before starting work. The training program for new workers is as follows: Introduction to Personal Protection Equipment, 24-hour HAZWOPER course (online), and possibly Confined Spaces training for field technicians. Prior to introducing a new chemical hazard into any work area, each worker in that work area will be given information and training as outlined above for the new chemical hazard.

5. Hazards of Non-routine Tasks

Periodically, workers are required to perform non-routine tasks that are hazardous. Examples of non-routine tasks are: confined space entry, tank cleaning and refurbishing. Prior to starting work on such projects, each affected worker will be given information by Marcus Bullock about the hazardous chemicals he or she may encounter during such activity. This information will include specific chemical hazards, protective and safety measures the worker should use, and steps the company is taking to reduce the hazards, including ventilation, respirators, the presence of another worker (buddy systems), and emergency procedures.

6. Informing Other Employers/Contractors

It is the responsibility of the Competent Safety Officer to provide other employers and contractors with information about hazardous chemicals that their workers may be exposed to on this work site, and suggested precautions for workers. It is the responsibility of the compliance director to obtain information about hazardous chemicals used by other employers to which our workers may be exposed. Other employers and contractors will be provided with SDSs for hazardous chemicals generated by this company's operations by both paper and digital copy. In addition to providing a copy of an SDS to other employers, other employers will be informed of necessary precautionary measures to protect workers exposed to operations performed by this company. Also, other employers will be informed of the hazard labels used by the company. If alternative workplace labeling systems are used, the other employers will be provided with information to understand the labels used for hazardous chemicals to which their workers may have exposure.

7. List of Hazardous Chemicals

A list of all known hazardous chemicals in the workplace is attached to this program. This list includes the name of each chemical, and the work area(s) in which each of the chemicals is used. Further information on each chemical may be obtained from the SDSs. When new chemicals are received, this list is updated within (3) days of introduction into the workplace.



G. Source Technologies, LLC - Chemical Dosing

Dosing Strategy and Methodology

- Proprietary **Redox Processes™**: Source Technologies will utilize:
 - **STX Redox Process™** for short retention times (3 minutes to 6 hours) at the Brannon Crossing Force Main estimated between 80 and 125 gallons per day based on the previous pilot at this location. Brannon Crossing is forcemain injection. Source will utilize the existing stainless steel saddled taps and shutoffs
 - **ETX Redox Process™** for extended retention (up to 50 hours) at the South Elkhorn Pump Station estimated at 230 to 400 gallons per day based on previous pilots at this location. Dosing will be at the influent channel where the current calcium nitrate addition is taking place. Source will coordinate with LFUCG to core drill through the outer wall of the building to bring in and secure the dosing lines.
- Dosing pumps and tubing provided:
 - Watson-Marlow Qdos peristaltic pumps
 - Conduit pipe or Flex for tubing
 - Kynar tubing and LLDPE tubing
 - All fittings required, including shutoff valves and backflow preventers.
- Initial Rate Determination: Baseline dosing rates will be established through additional liquid-phase sampling of total sulfides at LFUCG-identified control points.
- Calculated Mitigation: Rates are calculated to address existing sulfides and prevent future generation or reformation based on site-specific samples.
- Advanced Pacing Strategies: If requested by LFUCG, future strategies may include flow pacing, sulfide pacing, or timer-based dosing to further refine chemical efficiency.

Monitoring and Data Collection

- Vapor Phase Monitoring: Source will analyze vapor Acrulog™ data to identify Hydrogen Sulfide patterns and ensure results align with project goals.
- Remote Data Access: Data will be electronically accessible to LFUCG on a continuous, real-time basis via 4G cellular connection. Source assumes all costs associated with cellular service.
- Liquid Phase Sampling:
 - Monthly samples will be collected at designated points on the force main to determine total sulfide concentrations.
 - Hach DR900 Colorimeters will be used for total sulfide analysis.
 - LaMotte kits will be utilized for dissolved sulfide analysis.
 - pH, Temperature, nitrate residuals, & peroxide residuals will be recorded to monitor fluctuations and optimize dosing rates.
 - Monitoring points will include wet wells, air release valves, and discharge manholes, as identified by LFUCG.
- Tank Level Monitoring: Vega VIS sensors will be installed on all Source-owned equipment to provide remote tank level monitoring and record deliverables.

Approval and Communication Workflow

- Full-Service Responsibility: Source is responsible for supplying all chemicals and performing necessary operation and maintenance on equipment.
- Electronic Approval Process: All dose rate adjustments will be submitted for approval via electronic communication (text or email) to the designated LFUCG Division of Water Quality representative.
- Pre-Authorization Requirement: Adjustments will only be implemented after approval is granted by LFUCG.

Performance Targets

- Dissolved Sulfide Goal: Maintain dissolved sulfide samples below 0.5 mg/L.
- Atmospheric H₂S Goal: Maintain hydrogen sulfide gas levels below a 10 ppm average.
- Target Alignment: All dose rates will be optimized specifically to achieve these and any other target goals provided by LFUCG representatives.

Reporting and Monthly Review

- Monthly Delivery: A comprehensive report will be electronically mailed to LFUCG on or before the 10th day of each following month.
- Report Contents:
 - Results of all monitoring and sampling efforts.
 - Current chemical dosing rates and a log of all adjustments made during the month.
 - Monthly and cumulative chemical usage data.
 - Up-to-date data regarding expenditures and overall fiscal year budget status.
- Collaborative Meetings:
 - Source will participate in monthly meetings to review these reports.
 - While meetings may be held remotely, a representative will attend in person at least once per quarter, as requested by LFUCG.



F. Source Technologies, LLC - Storage Equipment

South Elkhorn Pump Station

Chemical Storage and Infrastructure:

- Existing Tank Utilization: Source proposes to utilize the four existing 1,200-gallon tanks located within the South Elkhorn Pump Station building for ETX Catalyst storage.
- Maintenance Protocol: To prevent pump clogging, Source will perform a comprehensive cleaning of these tanks to remove existing calcium nitrate sludge buildup prior to use.
- Chemical Compatibility: ETX Catalyst and calcium nitrate are chemically compatible and do not produce negative interactions. Source has extensive experience utilizing similar tank configurations.
- Contingency Planning: If LFUCG elects not to use the existing infrastructure, Source will provide a 5,200-gallon (105-inch Diameter x 160-inch OAH) single-walled cross-linked polyethylene (XLPE) tank that meets all specific gravity requirements.
- Hardware Specifications: All fittings will consist of Schedule 80 PVC or stainless steel, featuring appropriate venting and isolation shutoff valves.

Hydrogen Peroxide (50%) Storage:

- Bulk Storage: 50% Hydrogen Peroxide will be stored in a 6,550-gallon (119-inch Diameter x 186-inch OAH) double-walled XLPE tank equipped with a hinged manway lid and a dedicated pressure-relief vent.
- Wetted Components: To maintain product purity and prevent contamination, all wetted fittings will be constructed from passivated 316 stainless steel.
- Interim Measures: Should the bulk tank be unavailable by the project start date, a 2,050-gallon (72-inch Diameter x 159-inch OAH) double-walled tank will be utilized as a temporary solution.

Brannon Crossing Pump Station

STX Catalyst and Oxidizer Storage:

- STX Tank: STX will be stored in a 2,000-gallon (86-inch Diameter x 100-inch OAH) single-walled XLPE tank rated for the appropriate specific gravity.
- Fittings: All hardware will be Schedule 80 PVC or stainless steel to ensure long-term durability.
- Hydrogen Peroxide (50%): Storage consists of 4,050-gallon (96-inch Diameter x 177-inch OAH) double-walled XLPE tanks, including hinged manway lids and pressure-relief vents.
- Purity Standards: All wetted fittings will be passivated 316 stainless steel to ensure zero contamination.

Safety and Regulatory Compliance

Source maintains strict adherence to federal and state safety mandates to protect personnel and the environment.

Emergency Response Infrastructure:

- South Elkhorn Provision: The site is currently equipped with an exterior courtesy spigot and a comprehensive emergency shower/eyewash station located inside the scrubber room.
- Brannon Crossing Provision: Source will install an emergency shower and eyewash station capable of providing a 30-minute continuous flush.

Compliance Matrix

Regulatory Body	Standard/Guideline	Requirement and Application
OSHA	29 CFR 1910.151(c)	Requires eyewash/shower facilities for immediate use where eyes or body may be exposed to corrosive materials.
ANSI/ISEA	Z358.1-2014	Sets the industry standard for a 15-minute flush; Source's 30-minute capability exceeds this requirement.
Kentucky Law	803 KAR 2:310	Kentucky Occupational Safety and Health (KY OSH) adoption of federal standards for hazardous material handling and emergency drenching equipment.
EPA	40 CFR Part 112	Secondary containment requirements (SPCC) are met through the use of double-walled XLPE tanks for oxidizers.



H. Source Technologies, LLC - Personnel

Personnel

Source is exceptionally well-positioned to become fully operational for LFUCG with minimal lead time. Our strategically located Central office and warehouse in Lexington, Kentucky, is ready to deploy equipment, trucks, and trained personnel—specializing in wastewater data collection and hydrogen sulfide abatement—without disrupting service.

Our team has over 100 years of combined wastewater treatment experience we use to consistently support and guide every project. The Central office in Lexington will provide LFUCG with personnel, equipment, and operational support, including the day-to-day operations.

Corporate Management - Office: 859.223.1444 www.sourcetechnologiesllc.com

- **CEO – Suzie Richards (Central)**
 - Leadership 859.361.5623 srichards@sourcetechnologiesllc.com
- **CSO – Lori Wyatt, PE (Central)**
 - Engineering & Sales 270.519.1526 lw Wyatt@sourcetechnologiesllc.com
- **VP, Operations – Marcus Bullock (Central)**
 - Field Operations 859.489.6519 mbullock@sourcetechnologiesllc.com
- **VP, Supply Chain – Michael Engram (Central)**
 - Logistics 770.307.6813 mengram@sourcetechnologiesllc.com
- **Central Region Territory Manager – Doug Van Hoy (Central)**
 - Reporting & QC 812.360.4725 dvanhoy@sourcetechnologiesllc.com
- **Communications & Marketing Director – Missy Clifton (Central)**
 - Community Outreach 859.509.6311 mclifton@sourcetechnologiesllc.com
- **Accountant – Dalton Spurlock (Central)**
 - Accounts Payable 606.465.3979 admin@sourcetechnologiesllc.com

Field Operations

- **Corporate Regional Project Manager – Jeff Dombroskas (Central)**
 - Main Contact 859.585.0184 jdombroskas@sourcetechnologiesllc.com
- **Field Technician – Logan Wears (Central)**
 - Chemical Deliveries 859.550.0675 lwears@sourcetechnologiesllc.com
- **Field Technician – Nathan Vittitow (Central)**
 - Sulfide Testing 859.421.6763 nvittitow@sourcetechnologiesllc.com
- **Backup Project Manager – Drew Kirby (Tennessee)**
 - Additional Contact 804.484.4917 dkirby@sourcetechnologiesllc.com
- **Backup Field Technician – Dontate Washington (Tennessee)**
 - Chemical Deliveries 706.581.4720 dWASHINGTON@sourcetechnologiesllc.com

Source's robust personnel structure and regional presence ensure we can seamlessly transition LFUCG to our full-service team, delivering reliable, uninterrupted operations and exceptional service quality.



I. Source Technologies, LLC - Mobilization/Demobilization Fee

Lump Sum Mobilization and Demobilization Fees

Source submits the following lump sum fees for the mobilization and demobilization of all project-related equipment, based on our best interpretation of the language in this section of the ITB. These fees are separate from the evaluated bid price. The Mobilization fee is for the installation of all equipment at both the Brannon Crossing and the South Elkhorn Pump Station locations.

- Mobilization Fee: \$9,500 (Nine thousand five hundred dollars).
- Demobilization Fee: \$9,500 (Nine thousand five hundred dollars).
- New ETX tank at South Elkhorn Pump Station: \$20,250 (Twenty thousand two hundred fifty dollars). Remove from lump sum if existing tanks are suitable for use.
- Total Lump Sum Fee: \$29,250 (Twenty nine thousand, two hundred fifty dollars). If the existing tanks at the South Elkhorn Pump Station are suitable for use, deduct \$20,250 from the total lump sum.

Scope of Equipment Serviced

The fees outlined above cover the mobilization, maintenance, and demobilization (if ever required) of the following core system components:

- Chemical Storage Tanks: Source will install chemical storage tanks.
- Pumping Systems: Watson Marlow Qdos peristaltic pumps.
- Fluid Handling: $\frac{3}{8}$ -inch outer diameter x $\frac{1}{4}$ -inch inner diameter LLDPE and Kynar tubing.
- Valve Assemblies: Full port shut-off ball valves for both influent and effluent sides of chemical pumps.
- Calibration and Safety: Calibration columns for dosing precision and backflow prevention check-valves for tank integrity.
- Related Hardware: All secondary fittings and connectors required for full system operation.

South Elkhorn Pump Station (SELK PS) Storage Tank Details

If LFUCG desires to own the chemical tanks, the purchase prices for both new chemical storage equipment for the the SELK PS site is provided as follows:

- Vendor ETX Tank Price for purchase to LFUCG: \$20,250 (Twenty thousand two hundred fifty dollars) for Assmann 5,200-gallon single-wall XLPE tank with all associated fittings.
- Vendor H₂O₂ 50% Tank Price for purchase to LFUCG: \$54,000 (Fifty-four thousand dollars) for Assmann 6,500-gallon double-wall XLPE tank with all associated fittings.
- Preferred Approach (Existing Tanks): Source proposes to utilize the four existing 1,200-gallon tanks at the SELK PS for ETX storage. To ensure system reliability, Source will perform a comprehensive cleaning to remove calcium nitrate sludge buildup prior to commissioning as well as a tank inspection to evaluate the long term viability of the tanks and fittings.

FREDDIE O'CONNELL, MAYOR



METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY

10/16/2025 | 1:52 PM CDT

Ashley Cole
Source Technologies LLC*
157 Venture Ct, Suite 9
Lexington, KY 40511

Dear Ms. Cole:

The Metropolitan Government of Nashville and Davidson County, Business Assistance Office (BAO) has received and reviewed all documentation submitted by your company regarding the small business status of Source Technologies LLC. Based upon our careful review of all submitted documentation, we have approved your small business status and you are designated as an approved small business for procurement purposes. Please note that this status is only granted for procurements with the Metropolitan Government of Nashville and Davidson County, the Music City Center and MDHA and does not include the quasi governmental entities such as NES, MNAA and MTA who use different standards and criteria. This letter only addresses your company's status as a Small Business and in no way addresses your company's minority or woman owned business status.

Please note that this status is in effect for one full year of the date of this letter and it is your responsibility to renew this status should you desire for it to remain in effect after a year. If your status is not renewed timely consistent with the date of this letter, your status will be considered denied. In all situations, the date of this letter shall prevail and shall establish the period during which your small business status is considered effective.

Note that the Metropolitan Government of Nashville and Davidson County, Business Assistance Office (BAO) reserves the right to revoke this status at any time during the term of the approval should it occur that there are material changes to your company's small business eligibility as outlined in the R4.44.020.02 of the Regulations to the Metropolitan Procurement Code. Should such material changes occur, you are required to notify the BAO within 10 business days of the effective date of the material change.

Please note that either the tax documents that you submitted to confirm your status are enclosed or any electronically submitted documents have been purged. This action is taken in an effort to protect the confidentiality of these documents.

Should you have any questions or if we may be of further assistance, please feel free to contact me via email at jerval.watson@nashville.gov or via telephone at 615-862-5461. Thanks.

Cordially,

A handwritten signature in cursive script that reads "Jerval Watson".

Jerval Watson, Business Development Officer
Business Assistance Office (BAO)

*Metro Nashville Supplier Registration ID #1002353



Michael Engram <mengram@sourcetechnologiesllc.com>

WBE

1 message

Missy Clifton <mclifton@sourcetechnologiesllc.com>
To: Michael Engram <mengram@sourcetechnologiesllc.com>

Tue, Mar 24, 2026 at 2:53 PM

Minority Business Enterprise for Lexington
Sherita Miller, MPA, CPSD
Emailed Sherita Miller March 12, 2026 to discuss next steps.
Emailed Sherita Miller June 17, 2024 to discuss designation

Minority and Women Business Enterprise Certification
Paula M. Weglarz

Program Investigator II

Finance and Administration Cabinet

Office of EEO/Contract Compliance

Emailed Paula Weglarz, June 24, 2024 to discuss next steps
Spoke March 13, 2026 to discuss next steps.



Michael Engram <mengram@sourcetechnologiesllc.com>

Missy is Co-Chair for Lexington WOW- meet every other month for a year.

1 message

Missy Clifton <mclifton@sourcetechnologiesllc.com>
To: Michael Engram <mengram@sourcetechnologiesllc.com>

Tue, Mar 24, 2026 at 3:18 PM

I have co-hosted 8 events in the past year+

**WoW Planning Meeting - Chapter Lead
Coordination**

Tuesday, March 24 · 2:00 – 2:30pm
Every 2 months on the third Tuesday

Microsoft Teams Meeting



Source Technologies, LLC

585 followers

4mo • 🌐

2025 **NC One Water** Women of Water Luncheon! Packed house and even bigger energy. Meeting the movers and shakers, [Andrea Song, PE, PMP, CWP](#) and [Carolyn E Ross, MPA](#) #womeninwater #womenleaders #waterindustry



👍❤️ 25

4 reposts



Source Technologies, LLC

585 followers

4mo • Edited •

Source Technologies, LLC is proud to be a key sponsor in [NC One Water's](#) Women of Water networking event and luncheon on Monday, Nov. 3rd. As a woman-led company in the water industry, we're all about supporting the Women of Water initiative!

"Women of Water" is not just about fairness; it's a strategic necessity for creating a more resilient, effective, and sustainable water sector worldwide.

Come meet [Todd Muncie](#), [Lori Speer Wyatt](#), and [Jarus Cox](#) at the events or visit Booth #1800!

[#womenofwater](#) [#watersolutions](#) [#waterindustry](#) [#20yearsinbusiness](#)



MONDAY, NOVEMBER 3, 2025

Women of Water Networking Event

4:00 p.m. - 5:00 p.m. | Room 402

No Registration Required

Join us after the conference sessions to relax and recharge! Enjoy complimentary wine, cheese, and casual conversation with fellow women in the water industry. This is the perfect opportunity to make new connections and catch up with colleagues.



1 repost



Melissa Clifton • 1st
Communications & Marketing Manager Source Technologies, LLC
Type • 🌐

Women of Water Central Kentucky Chapter gathering at Grounded All Day Cafe - thanks to [Susan Lancho](#) and [Krista Citron, PE, MBA](#) for launching this group! If you work in the water, wastewater or stormwater space in Central Kentucky -- for a utility, consulting firm, supplier or other water-related company or organization, contact Susan or Krista to join us for our next event! [#womenofwater](#) [#wowcentralky](#)

[Source Technologies, LLC](#)
[American Water](#)
[Suzie Richards](#)
[Ashley Cole](#)
[Ellen Williams](#)
[Katie Beard](#)



👍👍👍 20

2 comments • 5 reposts

yoga class

Join us August 12th for a free Vinyasa (flow) yoga class – let's move like water together!
Please bring your own yoga mat.

Happy hour sponsored by  **SOURCE**
TECHNOLOGIES

12 August _ YOGA is 5:30pm - 6:15pm
(happy hour afterwards)

Ten20 Brewery
1020 E Washington St.
Louisville, KY 40206

