



Bid on #35-2016 Storm Sewer Trenchless Rehabilitation & Repair Services4

Submitted To:

**Division of Central Purchasing
200 East Main Street, Room 338
Lexington, KY 40507**

Submitted By:

**Utility Service Group
535 Courtney Hodges Boulevard
PO Box 1350
Perry, GA 31069**

Kentucky Location

**126 Spring Bluff Drive
Georgetown, KY 40324**

UTILITY SERVICE

535 COURTNEY HODGES BOULEVARD
P O BOX 1350
PERRY, GA 31069
TEL 800-223-3695
TEL 478-987-0303
FAX 478-987-1085
WWW.UTILITYSERVICE.COM



March 23, 2016

Lexington-Fayette Urban County Government
Division of Central Purchasing
200 East Main Street, Room 338
Lexington, KY 40507, (859) 258-3320

Re: Invitation to Bid
#35-2016

Dear LFUCG Division of Central Purchasing:

Thank you for allowing the Utility Service Group to present our proposal for the Storm Sewer Trenchless Rehabilitation & Repair Services.

With corporate headquarters in Atlanta, GA and twelve operations centers located throughout the contiguous US, Utility Service Group is uniquely qualified to service LFUCG for all of its storm sewer infrastructure maintenance needs. Having over 50 years of industry experience, USG is the market leader in municipal water Asset Management Programs, not only for tank maintenance, but for all of the County's water and wastewater system needs. From source to tap USG provides services to over 2,600 municipalities throughout the country and manages through our "best in class" Asset Management Program over 6,000 tanks, including close to 100 concrete tanks.

For the subject project, USG has partnered with A&W Maintenance, a high performance epoxy liner manufacturer and in-house applicator, to provide all of the services and deliverables set forth in the Invitation to Bid. USG and A&W have collaborated on several large rehabilitation projects, including a chlorine contact tunnel rehabilitation in San Francisco, CA. The key members of this Project team are listed below and their Statements of Qualifications are included in this response:

- Danny Warren, A&W Maintenance, President
- Dalton Harris, E.I.T., USG, Project Engineer
- Jonathan Cato, USG, Vice President of Tank and Concrete Services

We look forward to this opportunity to continue to serve LFUCG in this exciting opportunity.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jonathan Cato".

Jonathan Cato

VP of Tank and Concrete Services



RESOLUTION OF BOARD OF DIRECTORS

OF

UTILITY SERVICE CO., INC.

BE IT RESOLVED that Jonathan Cato, Vice President of Tank Services, of Utility Service Co., Inc., is hereby authorized and empowered by the Board of Directors as of December 20, 2013 to execute any and all bid bonds, bid responses, and bid contracts on behalf of Utility Service Co., Inc.

UTILITY SERVICE CO., INC.

By:


Dominique Demessence
CEO

CERTIFICATE OF SECRETARY

OF

UTILITY SERVICE CO., INC.

I, J. Shane Albritton, as Secretary of Utility Service Co., Inc., do hereby certify that the above Resolution was duly proposed, adopted, and resolved, during a meeting of Utility Service Co., Inc., a corporation, on the 20th day of December, 2013.

So executed on the 20th day of December, 2013.


J. Shane Albritton

[Corporate Seal]





ADDENDUM #1

Bid Number: 35-2016

Date: March 23, 2016

Subject: Storm Sewer Trenchless Rehabilitation & Repair Services

**Address inquiries to:
Brian Marcum
(859) 258-3320**

TO ALL PROSPECTIVE SUBMITTERS:

Please be advised of the following clarifications to the above referenced Bid:

Are the pipe sizes existing pipe sizes or what size hdpe liner you want quoted?

They are existing, but generic, pipe sizes and the cost quote should be for a complete solution for that size culvert.

Todd Slatin, Director
Division of Central Purchasing

All other terms and conditions of the Bid and specifications are unchanged.
This letter should be signed, attached to and become a part of your Bid.

COMPANY NAME: Utility Service Co, Inc.

ADDRESS: 535 Courtney Hodges Blvd., Perry, GA. 31069

SIGNATURE OF BIDDER: Marek Kujawa, Bid Coordinator





Lexington-Fayette Urban County Government

Lexington, Kentucky
Horse Capital of the World

Division of Central Purchasing

Date of Issue: March 11, 2016

INVITATION TO BID #35-2016 Storm Sewer Trenchless Rehabilitation & Repair Services

Bid Opening Date: March 24, 2016

Bid Opening Time: 2:00 PM

Address: 200 East Main Street, 3rd Floor, Room 338, Lexington, Kentucky 40507

Type of Bid: Price Contract

Pre Bid Meeting: N/A

Pre Bid Time: N/A

Address: N/A

Sealed bids will be received in the office of the Division of Central Purchasing, 200 East Main Street, Lexington, Kentucky, until **2:00 PM**, prevailing local time on **03/24/2016**. Bids must be received by the above-mentioned date and time. Mailed bids should be sent to:

Division of Central Purchasing
200 East Main Street, Room 338
Lexington, KY 40507, (859) 258-3320

The Lexington-Fayette Urban County Government assumes no responsibility for bids that are not addressed and delivered as indicated above. Bids that are not delivered to the Division of Central Purchasing by the stated time and date will be rejected. All bids must be signed and have the company name and address, bid invitation number, and the name of the bid on the outside of the envelope.

Bids are to include all shipping costs to the point of delivery located at: VARIOUS LOCATIONS, Lexington, KY

Bid Security Required: ___ Yes No Cashier Check, Certified Check, Bid Bond (Personal checks and company checks will not be acceptable).

Performance Bond Required: ___ Yes No

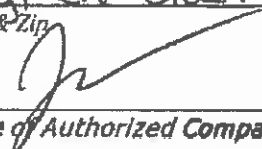
<p align="center">Check One:</p> <p><input type="checkbox"/> Bid Specifications Met <input type="checkbox"/> Exceptions to Bid Specifications. <i>Exceptions shall be itemized and attached to bid proposal submitted.</i></p>		<p>Proposed Delivery: ____ days after acceptance of bid.</p>
<p>Procurement Card 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? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>		

Submitted by: Utility Service Co., Inc.
Firm Name

535 Courtney Hodges Blvd.
Address

Perry, GA. 31069
City, State & Zip

Bid must be signed:
(original signature)


Signature of Authorized Company Representative - Title

Jonathan Cato, VP of Tank Services
Representative's Name (Typed or printed)

478-987-0303 478-987-9657
Area Code - Phone - Extension Fax #

jcato@utilityservice.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, Jonathan Cato, and after being first duly sworn under penalty of perjury as follows:

1. His/her name is Jonathan Cato and he/she is the individual submitting the bid or is the authorized representative of Utility Service Co., Inc. 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 Central Purchasing 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.

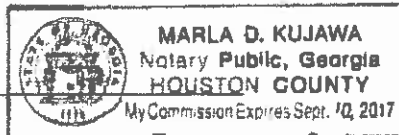
Jonathan Cato, VP of Tank Services

STATE OF Georgia

COUNTY OF Houston

The foregoing instrument was subscribed, sworn to and acknowledged before me by Jonathan Cato on this the 24th day of March, 2015: 2016.

My Commission expires: _____



Marla D. Kujawa
NOTARY PUBLIC, STATE AT LARGE

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 _____ 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 Central Purchasing may permit the withdrawal of a bid. The decision as to whether a bid may be withdrawn shall be that of the Division of Central Purchasing.
- 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 or all parts to one vendor.
- 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 Central Purchasing. 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 marked on the face of the envelope:

"Bid on #35-2016 Storm Sewer Trenchless Rehabilitation & Repair Services

and addressed to: Division of Central Purchasing
 200 East Main Street, Room 338
 Lexington, Kentucky 40507

The Lexington-Fayette Urban County Government assumes no responsibility for bids that are not addressed and delivered as indicated above. Bids that are not delivered to the Division of Central Purchasing by the stated time and date will be rejected.

- 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 NA 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, creed, national origin, sex or age, and to promote equal employment through a positive, continuing program from itself and each of its sub-contracting agents. This program of equal employment opportunity shall apply to every aspect of its employment policies and practices.
- 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 Act further provides:

KRS 45.610. Hiring minorities - Information required

- (1) *For the length of the contract, each contractor shall hire minorities from other sources within the drawing area, should the union with which he has collective bargaining agreements be unwilling to supply sufficient minorities to satisfy the agreed upon goals and timetable.*
- (2) *Each contractor shall, for the length of the contract, furnish such information as required by KRS 45.560 to KRS 45.640 and by such rules, regulations and orders issued pursuant thereto and will permit access to all books and records pertaining to his employment practices and work sites by the contracting agency and the department for purposes of investigation to ascertain compliance with KRS 45.560 to 45.640 and such rules, regulations and orders issued pursuant thereto.*

KRS 45.620. Action against contractor - Hiring of minority contractor or subcontractor

- (1) *If any contractor is found by the department to have engaged in an unlawful practice under this chapter during the course of performing under a contract or subcontract covered under KRS 45.560 to 45.640, the department shall so certify to the contracting agency and such certification shall be binding upon the contracting agency unless it is reversed in the course of judicial review.*
- (2) *If the contractor is found to have committed an unlawful practice under KRS 45.560 to 45.640, the contracting agency may cancel or terminate the contract, conditioned upon a program for future compliance approved by the contracting agency and the department. The contracting agency may declare such a contractor ineligible to bid on further contracts with that agency until such time as the*

contractor complies in full with the requirements of KRS 45.560 to 45.640.

- (3) *The equal employment provisions of KRS 45.560 to 45.640 may be met in part by a contractor by subcontracting to a minority contractor or subcontractor. For the provisions of KRS 45.560 to 45.640, a minority contractor or subcontractor shall mean a business that is owned and controlled by one or more persons disadvantaged by racial or ethnic circumstances.*

KRS 45.630 Termination of existing employee not required, when

Any provision of KRS 45.560 to 45.640 notwithstanding, no contractor shall be required to terminate an existing employee upon proof that that employee was employed prior to the date of the contract.

KRS 45.640 Minimum skills

Nothing in KRS 45.560 to 45.640 shall require a contractor to hire anyone who fails to demonstrate the minimum skills required to perform a particular job.

It is recommended that all of the provisions above quoted to be included as special conditions in each contract. In the case of a contract exceeding \$250,000, the contractor is required to furnish evidence that his work-force in Kentucky is representative of the available work-force in the area from which he draws employees, or to supply an Affirmative Action plan which will achieve such representation during the life of the contract.

- 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 Central Purchasing 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 Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing 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 Central Purchasing 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 Central Purchasing 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 Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing 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 Central Purchasing shall in writing, affirm or withdraw the recommendation.

III. Procurement Contract Bid Conditions

- A. The terms of this agreement shall be for 1 year(s) from the date of acceptance of this contract by the Lexington-Fayette Urban County Government. This agreement may be automatically extended for an additional 2-1 year(s) 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**)
 - (xx) 1. Prices quoted in response to the Invitation shall be firm prices for the first 90 days of the Procurement Contract. After 90 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 quarter. 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. Procurement Level Contract
- 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 Central Purchasing.
- G. Any job over \$50,000 will require the contractor to obtain a 100% performance and payment bond.

EQUAL OPPORTUNITY AGREEMENT

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.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- 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.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:
The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's Intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. 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 knowingly or unknowingly 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.

Bidders

I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, veteran status, disability and age.

Signature
Jonathan Cobb, VP of Tank Services

Utility Service Co., Inc.

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.
2. Failure to submit ALL forms and information required by LFUCG may be grounds for disqualification.
3. Addenda: All addenda, 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. 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.
19. 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
Jonathan Cato, VP of Tank Services

3/24/10

Date

**DIRECTOR, DIVISION OF CENTRAL PURCHASING
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
200 EAST MAIN STREET
LEXINGTON, KENTUCKY 40507**

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE
EQUAL EMPLOYMENT OPPORTUNITIES AND DBE CONTRACT PARTICIPATION**

The Lexington-Fayette Urban County Government has set a goal that not less than ten percent (10%) of the total value of this contract be subcontracted to MBE/WBE's. The goal for the utilization of certified MBE/WBE's as subcontractors are recommended goals. Contractors who fail to meet such goals will be expected to provide written explanations to the Director of the Division of Central Purchasing of efforts they have made to accomplish the recommended goals and the extent to which they are successful in accomplishing the recommended goals will be a consideration in the procurement process.

For assistance in locating MBE/WBE Subcontractors contact Sherita Miller at 859/258-3320 or by writing the address listed below:

Sherita Miller, Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street – Room 338
Lexington, Kentucky 40507

Lexington-Fayette Urban County Government
MWDBE PARTICIPATION GOALS

A. GENERAL

- 1) The LFUCG request all potential contractors to make a concerted effort to include Minority-Owned (MBE), Woman-Owned (WBE) and Disadvantaged (DBE) Business Enterprises and Veteran-Owned Businesses as subcontractors or suppliers in their bids.
- 2) Toward that end, the LFUCG has established 10% of total procurement costs as a Goal for participation of Minority-Owned, Woman-Owned and Disadvantaged Businesses on this contract.
- 3) **It is therefore a request of each Bidder to include in its bid, the same goal (10%) for MWDBE participation and other requirements as outlined in this section.**
- 4) The LFUCG has also established a 3% of total procurement costs as a Goal for participation for of Veteran-Owned Businesses.
- 5) **It is therefore a request of each Bidder to include in its bid, the same goal (3%) for Veteran-Owned participation and other requirements as outlined in this section.**

B. PROCEDURES

- 1) The successful bidder will be required to report to the LFUCG, the dollar amounts of all payments submitted to Minority-Owned or Woman-Owned subcontractors and suppliers for work done or materials purchased for this contract. (See Subcontractor Monthly Payment Report)
- 2) Replacement of a Minority-Owned or Woman-Owned subcontractor or supplier listed in the original submittal must be requested in writing and must be accompanied by documentation of Good Faith Efforts to replace the subcontractor / supplier with another MWDBE Firm; this is subject to approval by the LFUCG. (See LFUCG MWDBE Substitution Form)
- 3) For assistance in identifying qualified, certified businesses to solicit for potential contracting opportunities, bidders may contact:
 - a) The Lexington-Fayette Urban County Government, Division of Central Purchasing (859-258-3320)
- 4) The LFUCG will make every effort to notify interested MWDBE and Veteran-Owned subcontractors and suppliers of each Bid Package, including information on the scope of work, the pre-bid meeting time and location, the bid date, and all other pertinent information regarding the project.

C. DEFINITIONS

- 1) A Minority-Owned Business Enterprise (MBE) is defined as a business which is certified as being at least 51% owned and operated by persons of African American, Hispanic, Asian, Pacific Islander, American Indian or Alaskan Native Heritage.
- 2) A Woman-Owned Business Enterprise (WBE) is defined as a business which is certified as being at least 51% owned and operated by one or more Non-Minority Females.
- 3) A Disadvantaged Business (DBE) is defined as a business which is certified as being at least 51% owned and operated by a person(s) that are economically and socially disadvantaged.

- 4) A Veteran-Owned Business is defined as a business which is certified as being at least 51% owned and operated by a veteran and/or a service disabled veteran.
- 5) Good Faith Efforts are efforts that, given all relevant circumstances, a bidder or proposer actively and aggressively seeking to meet the goals, can reasonably be expected to make. In evaluating good faith efforts made toward achieving the goals, whether the bidder or proposer has performed the efforts outlined in the Obligations of Bidder for Good Faith Efforts outlined in this document will be considered, along with any other relevant factors.

D. OBLIGATION OF BIDDER FOR GOOD FAITH EFFORTS

- 1) **The bidder shall make a Good Faith Effort to achieve the Participation Goal for MWDBE subcontractors/suppliers. The failure to meet the goal shall not necessarily be cause for disqualification of the bidder; however, bidders not meeting the goal are required to furnish with their bids written documentation of their Good Faith Efforts to do so.**
- 2) Award of Contract shall be conditioned upon satisfaction of the requirements set forth herein.
- 3) The Form of Proposal includes a section entitled "MWDBE Participation Form". The applicable information must be completed and submitted as outlined below.
- 4) **Failure to submit this information as requested may be cause for rejection of bid.**

E. DOCUMENTATION REQUIRED FOR GOOD FAITH EFFORTS

- 1) Bidders reaching the Goal are required to submit only the MWDBE Participation Form." The form must be fully completed including names and telephone number of participating MWDBE firm(s); type of work to be performed; estimated value of the contract and value expressed as a percentage of the total Lump Sum Bid Price. The form must be signed and dated, and is to be submitted with the bid.
- 2) Bidders not reaching the Goal must submit the "MWDBE Participation Form", the "Quote Summary Form" and a written statement documenting their Good Faith Effort to do so. If bid includes no MWDBE participation, bidder shall enter "None" on the subcontractor / supplier form). In addition, the bidder must submit written proof of their Good Faith Efforts to meet the Participation Goal:
 - a. 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 MWDBE firms to participate.
 - b. Included documentation of advertising in the above publications with the bidders good faith efforts package
 - c. Attended LFUCG Central Purchasing Economic Inclusion Outreach event
 - d. Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs of subcontracting opportunities

- e. Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms
- f. Requested a list of MWDBE subcontractors or suppliers from LFUCG Economic Engine and showed evidence of contacting the companies on the list(s).
- g. Contacted organizations that work with MWDBE companies for assistance in finding certified MWDBE firms to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.
- h. Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs 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.
- i. Followed up initial solicitations by contacting MWDBEs to determine their level of interest.
- j. Provided the interested MWDBE firm with adequate and timely information about the plans, specifications, and requirements of the contract.
- k. Selected portions of the work to be performed by MWDBE firms in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MWDBE participation, even when the prime contractor may otherwise perform these work items with its own workforce.
- l. Negotiated in good faith with interested MWDBE firms not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.
- m. Included documentation of quotations received from interested MWDBE firms which 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.
- n. 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 MWDBE quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE goals.
- o. Made an effort to offer assistance to or refer interested MWDBE firms to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal.

- p. Made efforts to expand the search for MWBE firms beyond the usual geographic boundaries.
- q. Other--any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include MWDBE participation.

Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement. Documentation of Good Faith Efforts are to be submitted with the Bid, if the participation Goal is not met.



MINORITY BUSINESS ENTERPRISE PROGRAM

Sherita Miller, MPA
Minority Business Enterprise Liaison
Division of Central Purchasing
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 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 city council adopted and implemented resolution 167-91--Disadvantaged Business Enterprise (DBE) 10% Goal Plan in July of 1991. The resolution states in part (a full copy is available in Central Purchasing):

"A Resolution supporting adoption of the administrative plan for a ten percent (10%) Minimum goal for disadvantaged business enterprise participation in Lexington-Fayette Urban County Government construction and professional services contracts; Providing that as part of their bids on LFUCG construction contracts, general Contractors shall make a good faith effort to award at least ten percent (10%) of All subcontracts to disadvantaged business enterprises; providing that divisions of LFUCG shall make a good faith effort to award at least ten percent of their Professional services and other contracts to disadvantaged business enterprises..."

A Disadvantaged Business Enterprise is defined as a business that has been certified as being at least 51% owned, operated and managed by a U.S. Citizen of the following groups:

- African-American
- Hispanic-American
- Asian/Pacific Islander
- Native American/Native Alaskan
- Non-Minority Female
- Economically and Socially Disadvantaged

We have compiled the list below to help you locate certified MBE, WBE and DBE certified businesses. Below is a listing of contacts for LFUCG Certified MWDBEs in Economic Engine (<https://lfucg.economicengine.com>)

Business	Contact	Email Address	Phone
LFUCG	Sherita Miller	smiller@lexingtonky.gov	859-258-3323
Commerce Lexington – Minority Business Development	Tyrone Tyra	tyra@commercelexington.com	859-226-1625
Tri-State Minority Supplier Diversity Council	Sonya Brown	sbrown@tsmsdc.com	502-625-0137
Small Business Development Council	Dee Dee Harbut UK SBDC	ddharbut@uky.edu	859-257-7668
	Shiric Hawkins	smack3@email.uky.edu	859-257-7666
Community Ventures Corporation	James Coles	jcoles@cycyky.org	859-231-0054
KY Department of Transportation	Melvin Bynes	Melvin.bynes@ky.gov	502-564-3601
Ohio River Valley Women's Business Council (WBENC)	Rea Waldon	rwaldon@gsul.org	513-487-6534
Kentucky MWBE Certification Program	Yvette Smith, Ken Finance Cabin	Yvette.Smith@ky.gov	502-564-8099
National Women Business Owner's Council (NWBOC)	Janet Harris-Lange	janet@nwbo.org	800-675-5066
Small Business Administration	Robert Coffey	robertcoffey@sba.gov	502-582-5971
LaVoz de Kentucky	Andres Cruz	lavozydeky@yahoo.com	859-621-2106
The Key News Journal	Patrice Muhamma	paatricem@keynewsjournal.com	859-373-9428



LFUCG MWDBE PARTICIPATION FORM
 Bid/RFP/Quote Reference # 35-2016

The MWDBE 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 Central Purchasing for approval immediately.

MWDBE Company, Name, Address, Phone, Email	MBE WBE or DBE	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
1. J2 Systems Supply 803 E. 38 th St. Indianapolis, IN 46205 317-602-3740 rsteenberger@j2sslk.com	MBE	Fuel Supply	TBD	TBD
2. Big Meadow Oil 219 Industrial Dr Glasgow, KY 42141 270-651-5712 bigmoil@scrtc.com	WBE DBE	Fuel Supply	TBD	TBD
3.				
4.				

The undersigned company representative submits the above list of MWDBE 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.

Utility Service Co., Inc
 Company

3/24/16
 Date


 Company Representative

Jonathan Cato, V P of Tank Services
 Title



MWDBE QUOTE SUMMARY FORM

Bid/RFP/Quote Reference # 35-2016

The undersigned acknowledges that the minority subcontractors listed on this form did submit a quote to participate on this project.

Company Name <u>Utility Service Co., Inc.</u>	Contact Person <u>Jonathan Cato</u>
Address/Phone/Email <u>535 Courtney Hodges Blvd. Perry, GA 31069</u> <u>478-788-5241</u> <u>jcato@utilityservice.com</u>	Bid Package / Bid Date <u>35-2016 / 3/24/2016</u>

MWDBE Company Address	Contact Person	Contact Information (work phone, Email, cell)	Date Contacted	Services to be performed	Method of Communication (email, phone meeting, ad, event etc)	Total dollars \$\$ Do Not Leave Blank (Attach Documentation)	MBE * AA HA AS NA Female	Veteran
<u>Systems Supply 403 E 38th St Indianapolis, IN 46205</u>	<u>Rickey Steenberger</u>	<u>317-602-3740 steenberger@systemsllc.com</u>	<u>3-22-2016</u>	<u>Fuel Supply</u>	<u>Email</u>	<u>\$200 per Trip \$0.45/gal</u>	<u>AA</u>	

(MBE designation / AA=African American / HA= Hispanic American/AS = Asian American/Pacific Islander/ NA= Native American)

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

Utility Service Co., Inc
Company

[Signature]
Company Representative

3/24/16
Date

VP of Tank and Concrete Services
Title

From:
Sent:
To:
Subject:

sorry for the delay - had to get pricing approved.

Per Trip charge \$200/each

Wet-hosing OPIS daily average plus \$0.45/gal

If you discover that the project will require greater than 500 gallons total let me know and we can look at it again.

Thank you,

Rickey Steenberger

Ms. Rickey Steenberger
Office Manager
J2 Systems and Supply, LLC.
317.602.3940 office
866.391.2772 fax

LFUCG STATEMENT OF GOOD FAITH EFFORTS

Bid/RFP/Quote # 35-2016

By the signature below of an authorized company representative, we certify that we have utilized the following Good Faith Efforts to obtain the maximum participation by MWDBE business enterprises on the project and can supply the appropriate documentation.

_____ 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 MWDBE firms to participate.

_____ Included documentation of advertising in the above publications with the bidders good faith efforts package

_____ Attended LFUCG Central Purchasing Economic Inclusion Outreach event

_____ Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs of subcontracting opportunities

_____ Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms

Requested a list of MWDBE subcontractors or suppliers from LFUCG Economic Engine and showed evidence of contacting the companies on the list(s).

_____ Contacted organizations that work with MWDBE companies for assistance in finding certified MWDBE firms to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.

_____ Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs 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.

Followed up initial solicitations by contacting MWDBEs to determine their level of interest.

Provided the interested MWDBE firm with adequate and timely information about the plans, specifications, and requirements of the contract.

Selected portions of the work to be performed by MWDBE firms in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MWDBE participation, even when the prime contractor may otherwise perform these work items with its own workforce

Negotiated in good faith with interested MWDBE firms not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.

_____ Included documentation of quotations received from interested MWDBE firms which 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.

_____ 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 MWDBE quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE goals.

✓ _____ Made an effort to offer assistance to or refer interested MWDBE firms to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal

✓ _____ Made efforts to expand the search for MWDBE firms beyond the usual geographic boundaries.

✓ _____ Other - any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include MWDBE participation.

Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement. Documentation of Good Faith Efforts are to be submitted with the Bid, if the participation Goal is not met.

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.

Utility Service Co., Inc.
Company



Company Representative

3/24/16
Date

Jonathan Cato, VP of Tank Services
Title

Continued NINE/10E Firm

Category	Company Name	Contact Name	Email	Phone	Address	City	State	Zipcode	Classification
Fuel	Compassy River								
Fuel	Auto Custom Design and Blends	Mary M. Lay	marym@autocustomdesign.com	859-264-1911	1786 Lakewood Drive	Lexington	KY	40503	Women-Owned Business Enterprise
Fuel	Big Brothers Of Kentucky, Inc	Billy Gombay	bigbrothers@bigbrothers.com	270-437-7091	4264 Big Brothers Road	Lexington	KY	40514	Women-Owned Business Enterprise
Fuel	Changest Of Lexington	Rachel Almyer	rachel@changest.com	559-801-6434	1423 Versailles Rd	Lexington	KY	40504	African-American Business Enterprise
Fuel	Brewery Mutual Care	Seah Bremer	seah@brewerymutualcare.com	859-221-2116	P.O. Box 2481	Lexington	KY	40513	Women-Owned Business Enterprise
Fuel	Car In Query & Removal LLC	Joseph Clark	carinquery@carinquery.com	502-417-7234	421 1st Avenue	New York	NY	10019	Woman-Owned Business Enterprise, African-American Business Enterprise
Fuel	DORRY PITCHER THAMMO CO. LTD	TORRY OFFABAO	dorripitcher@pitcher.com	861-485-5458 Ext. 101	4014 RICHMOND AVE. DR. SUITE 115	Metairie	LA	70002	Woman-Owned Business Enterprise
Fuel	Highways Program Company	Goody Jackson	goodyj@highwaysprogram.com	318-474-4377	2877 Commercial Drive	Madisonville	MO	64501	Woman-Owned Business Enterprise
Fuel	IT Systems and Supply	AJARY SIMONOFF	ajarysimonoff@it-systems.com	317-631-2660	822 E. 28th Street	Madisonville	MO	64501	African-American Business Enterprise
Fuel	James River Substom	Bradley Bulley	bradleybulley@jamesriver.com	757-752-1325	10427 Lakeside Parkway	Albany	VA	23009	Women-Owned Business Enterprise
Fuel	Leitch Mineral Development Inc.	Leitch Boyd	leitch@leitchmineral.com	259-828-9976	1128 Versailles Rd #250	Lexington	VA	40504	African-American Business Enterprise
Fuel	LFV CONSULTING/CONCRETE	LEONARD PALSE	leonard@lfv.com	259-221-1130	P.O. BOX 31	North Cove	VA	43749	African-American Business Enterprise
Fuel	LFV Supply	Leitch Boyd	leitch@lfv.com	259-221-1130	651 Lexington Road	North Cove	VA	43749	African-American Business Enterprise
Fuel	North Fork Recycling	Leitch Boyd	leitch@northforkrecycling.com	260-431-6627 Ext. 347	7139 Lewisberry way	Lexington	VA	40504	Woman-Owned Business Enterprise
Fuel	PAE Services	Leitch Boyd	leitch@paeservices.com	716-941-4877 Ext. 39	7911 Professional Circle	Northampton Beach	VA	23124	Woman-Owned Business Enterprise
Fuel	Phenix Petroleum, Inc.	Leitch Boyd	leitch@phenixpetroleum.com	404-726-5114	2097 Chapman Road #200	Atlanta	GA	30329	Woman-Owned Business Enterprise
Fuel	PL Energy Group Inc	Leitch Boyd	leitch@plenergy.com	875-398-0178	400 West 204th	Atlanta	GA	30329	Woman-Owned Business Enterprise
Fuel	Raymond Engineering Co., Inc.	Leitch Boyd	leitch@raymondeng.com	734-946-0495	28140 West Road	Burton	MI	48324	Woman-Owned Business Enterprise
Fuel	SAK Petroleum Companies	Christina Blaney	blaney@sakpetroleum.com	253-279-2100 Ext. 12	312 41 Club	Frankfort	KY	40601	Woman-Owned Business Enterprise
Fuel	Triumph Fuel, LLC	Bill Roberts	bill@triumphfuel.com						

**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 demonstrate the ability to assure compliance with the above indemnity provisions and these other risk management provisions prior to final acceptance of its bid and the commencement of any work or provision of goods.

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	\$500,000

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 Products and Completed Operations coverage and Premises and Operations coverage unless it is deemed not to apply by LFUCG.
- d. The General Liability Policy shall include a Pollution liability and/or Environmental Casualty endorsement unless it is deemed not to apply by LFUCG.
- e. The General Liability Policy shall include Explosion-Collapse Underground (XCU) coverage or an endorsement unless it is deemed not to apply by LFUCG.
- f. 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.
- g. 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

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.

00512818

**Request for Qualifications and Pricing for
Storm Sewer Trenchless Rehabilitation and Repair Services**

SCOPE

Lexington-Fayette Urban County Government (LFUCG) is accepting qualification statements and bids from interested Contractors to establish a price contract for trenchless rehabilitation of storm sewer pipe (defined here as one or more ends having a limited access structure) and culvert (open to natural grade at each end) services. Trenchless Rehabilitation and Repair Services shall include complete solutions to failing stormwater pipes to provide for restored or improved function for an agreeable service life at expected structural loading conditions (expected service life to be determined through assessment process). Individual Rehabilitation Service Projects shall be completed according to the specifications below or to "industry standards" and may include the following services: detailed assessment and reporting of existing conditions; repair of major/minor defects in pipe materials or end-treatments; invert repair or re-shape; slipline or reline existing piping, individual joint repair; pipe surface treatment-coatings; and/or stabilize culvert fill envelope with pressure grouting or epoxy injection.

1. Contract Type and Process

This request for qualifications and pricing is to establish a prequalified list of Contractors able to perform the repair and rehabilitation services noted above on an "as needed" basis at various locations in Fayette County, Kentucky. LFUCG reserves the right to award contracts to multiple, qualified Bidders. Each rehabilitation project under this contract shall be completed on a lump sum basis determined by lowest and best quote solicited individually from all pre-qualified contractors. If selected to complete a project, the Contractor shall complete all work and furnish all management, supervision, labor, materials, tools, equipment, excavation, cleaning, de-watering, worksite erosion and pollution control, worksite restoration (excluding pavement), permitting and incidentals necessary for performance and completion of the rehabilitation project.

If determined necessary by LFUCG, it is required that the Contractor be available to meet with the Project Manager or his representative(s) within ten (10) working days of being notified of a proposed project, to discuss the project. The Project Manager and Contractor or his representative(s) shall determine the extent of work to be performed and the Contractor shall, within ten (10) working days following initial contact, provide the Project Manager with a written cost estimate (lump sum) and work schedule, including the starting and completion date. Time of completion for such projects(s) will be determined with the approval of the

Project Manager. If the Contractor does not respond to either the initial notification or does not provide a written cost estimate response (either "not interested" or "unable to complete" the work is an acceptable response) during the given time frames, the Contractor may be excluded on future solicitation of quotes.

All cost estimates prepared by the Contractor shall be at no cost to the LFUCG. The Contractor agrees that the lump sum cost estimates provided will be the not-to-exceed maximum project cost if accepted by the LFUCG and that LFUCG shall bear no liability or responsibility to the Contractor for the payment of any costs or charges in excess of the amount identified in the written cost estimates, unless additional work is agreed to (in writing) prior to work being performed. All projects shall be completed within the time period specified unless a time extension has been approved by the Project Manager.

2. Project Assessment

Contractor shall thoroughly familiarize him or herself with all aspects of the project, the defect to be repaired, potential cause of defect, plans if available, specifications, provisions, and special requirements, and is responsible for bringing any discrepancies, potential problems or unknown factors to the attention of the Project Manager. Assessment shall start with identification of existing materials and best determination of original design function including drainage or structural function. LFUCG may provide documentation of original design or drainage function, if available. A complete assessment may require some or all of the components listed below as determined during the initial review meeting with the Project Manager.

- Meet applicable OSHA requirements including, but not limited to, confined space entry. Review of weather forecasting in relation to flash flooding and any other necessary safety precautions.
- Cleaning of pipe system or culvert as necessary for review.
- Record measurements of shape, diameter, deflections, cross section area, cracking, and settlement along with location documentation.
- Provide follow-up inspection to compare data or determine trends in noted defect.
- Provide determination of extent of damage/defect, the potential for failure and/or best estimate of service life remaining and potential service life with repair.
- Identify and provide measurement of relational object defects or irregularities which could determine the magnitude of the defect; such as roadway surface, sinkholes or material deposition.
- Excavation, coring or sampling of existing materials.

- Determination of pipe hydraulic performance. Completed work may require certification of hydraulic equivalency to existing conditions.
- Identification of existing or potential safety hazards or public safety issues.
- Video inspection services.

*Note that some of the components above may require verification to be provided by a qualified Professional. This shall be determined at the initial review meeting and provided at no additional cost to LFUCG unless determined otherwise during the initial review meeting.

3. Scheduling

Contractor shall coordinate assessment and repair work with other utilities or public or private entities affected by the work. Contractor shall remain informed of construction progress of all other Contractors or subcontractors working on the project and shall coordinate work of others to ensure efficient and orderly progress of the work. Contractor shall provide the LFUCG Project Manager notice of potential changes to the project schedule.

4. Warranties/Guarantees

For a period of one year from the date of issuance of the final payment for the work, the Contractor shall furnish and install, without cost to the LFUCG, any and all work which, in the judgement of the LFUCG, proves defective in materials and/or workmanship. This shall include, but is not limited to, surface defects due to pipe fill envelope settlement or related surface feature defects.

5. Bidder Minimum Submittal for Qualification

- Executive summary identifying the Contractors qualifications to complete these type projects. This summary should include: general information about the Contractor and any subcontractors or professional affiliates related to this work; a summary of experience completing this type of work; and at least one detailed example of a past storm sewer or culvert rehabilitation project describing the typical approach to completion of a project.
- A list of at least three references for projects completed in the past two (2) years that are similar in scope to the work required under this contract. Include the names and specific contact information for each reference. Projects and contacts local to the Lexington, Kentucky area are preferred.
- Written Specifications typical for Trenchless Rehabilitation method most often used or preferred by the Contractor, including but not limited to the following; materials

specifications, installation procedures, ASTM testing references, Field Testing and Inspection and General Warranty.

d. General pricing information (Dollar amount per lineal foot repaired) for full rehabilitation of the following culvert rehabilitation project examples. Note that this pricing is to be used for general project planning and the Contractor will not be held to individual pricing for use in future solicited lump sum bid quotes.

<u>Pipe ID or Eq. ID (any type)</u>	<u>Rehabilitation Price(\$/LF, 50 LF or greater)</u>
15"	<u>\$321</u> / LF
30"	<u>\$385</u> / LF
48"	<u>\$513</u> / LF
60"	<u>\$577</u> / LF

FAILURE OF A BIDDER TO SUBMIT THE REQUIRED INFORMATION OUTLINED ABOVE OR TO POSSESS THE MINIMUM EXPERIENCE AS DETERMINED BY VERIFICATION MAY RENDER SUCH BID NON-RESPONSIVE AND SUCH BID MAY NOT BE CONSIDERED FOR AWARD.

The LFUCG does not guarantee the amount of work to be performed or that any work will be performed under this contract.

Please pay close attention to the submittal requirements of this request, all things needed to evaluate your process and materials need to be clearly defined in you submittal.



Utility
Service
Group

Utility Service Group

Company Profile

Utility Service Company is a company focused on providing sustainable asset management, water conservation, and water quality services and solutions to the US water industry.

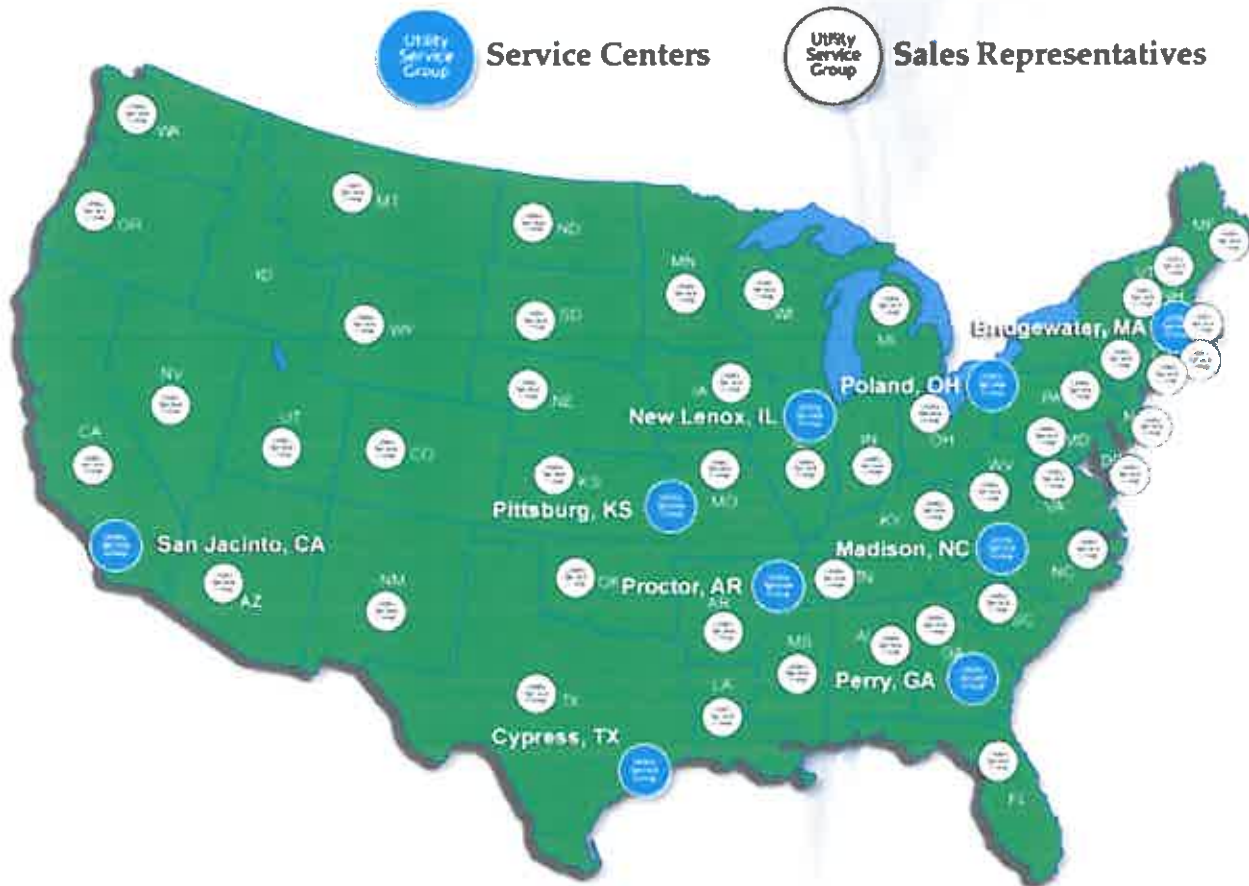
In 2008, Utility Service Company was acquired by Suez Environnement, making available a suite of additional global solutions, technologies, information systems and approaches to real life challenges facing US water and wastewater utilities. Consequently, Utility Service Company consistently leverages the knowledge and lessons learned from Suez and our affiliated companies around the world to offer innovative solutions domestically. As part of Utility Service Company's mission to address critical water resource challenges facing the planet, we are organized to deliver advanced services for water and wastewater utility providers to minimize capital and operational expenses, improve system operations and performance, extend the useful lives of utility assets, and improve water quality.

The document that follows provides a brief overview of the services offered by Utility Service Company for water and wastewater utility owners. It is not intended to be comprehensive, but rather to provide context around the identity of Utility Service Company and how our services have helped thousands of communities manage challenging issues addressing our industry today.

Utility Service Group Service Center and Sales Representative Locations

UNMATCHED IN THE INDUSTRY

Utility Service Group's assets and physical resources are unmatched in the industry.



Our Storage Tank Asset Management Program means... no more surprises

DELIVERING PEACE OF MIND

Utility Service Group is the largest tank service firm in the United States. We created the Full Service Asset Management Program over 20 years ago to provide tank owners with comprehensive sustainable solutions to manage storage tank assets.

VALUE OF UTILITY SERVICE GROUP FULL SERVICE ASSET MANAGEMENT PROGRAM:

- GASB 34 Compliance
- Comprehensive, sustainable asset management program
- Renewable each year at tank owner's option
- Covers all aspects of tank asset mgmt. including engineering services and renovations
- Extends tank service life
- Flat annual fee eliminates unplanned expenditures
- Transfers rehabilitation risk



UTILITY SERVICE GROUP FULL SERVICE ASSET MANAGEMENT PROGRAM INCLUDES:

- Annual tank inspections with detailed reports - safety, sanitation, structure, security and coatings
- Evaluation and planning for short and long term maintenance needs
- Interior chemical cleaning and disinfection typically every two years
- Preventative maintenance to performed rehabilitation
- All future interior and exterior coatings
- Artwork and logo design and application
- Standby emergency services for immediate on call responses

Storage Tank Condition Assessment? You have choices

PROVEN, PATENTED AND NSF CERTIFIED

"Tanks should be washed out and inspected at least once every three years." – AWWA M-42

VALUE OF UTILITY SERVICE GROUP STORAGE TANK CONDITION ASSESSMENT PROGRAM:

- Extend tank service life, enhanced aesthetics
- Reduced disinfectant demand, nitrification risk
- Retention of higher chlorine residuals
- Minimized formation of disinfectant by products (DBP)
- Facilitates preventative maintenance



UTILITY SERVICE GROUP STORAGE TANK CONDITION ASSESSMENT PROGRAM INCLUDES:

- Tank relocations
- Washout, clean and disinfect in accordance with AWWA C652
- Remove sediments and biofilm
- Photos and detailed report of tank safety, sanitation, structure, security and coatings
- Document compliance to state regulations
- Provide recommendations for corrective actions

REMOTELY OPERATED VEHICLE (ROV) INSPECTION FOR WHEN YOU CANNOT TAKE THE TANK DOWN

Yes! ROV inspections eliminate the inconvenience and expense of taking your tank completely out of service for several days for draining, inspection, filling, and waiting for negative bacteriological results to place it back into service.

Our ROV:

- Washout and disinfect in accordance with AWWA C652
- Swims throughout the tank's interior to observe upper sidewalls and the roof's interior from only a few feet away
- Moves bottom silt easily to observe floor conditions
- Identifies obvious adhesion bubbling and paint failures

USG, the national leader in Asset Management Programs for tanks, has over 90 concrete tanks under our responsibility.



Each tank on our Concrete Asset Management Program receives:

- Annual visual inspection
- Biennial washout inspection
- Annual Condition Assessment Report
- Emergency service
- All future renovations
- All future repairs.

<i>Customer Name</i>	<i>Tank Size/Style</i>
• CITY OF DURHAM, NC	1,000,000 CONCRETE GST
• CITY OF DURHAM, NC	5,000,000 CONCRETE GST
• CITY OF DURHAM, NC	5,000,000 CONCRETE GST
• CITY OF DURHAM, NC	1,000,000 CONCRETE GST
• CITY OF DURHAM, NC	4,000,000 CONCRETE
• CITY OF DURHAM, NC	,000,000 CONCRETE GST
• COUNTY OF MOORE, NC	1,000,000
• COUNTY OF MOORE, NC	500,000 GROUND STORAGE
• ALEXANDER CITY WATER DEPARTMENT, AL	5,000,000 CONCRETE
• CITY OF LANCASTER, OH	1,500,000 CONCRETE
• CITY OF LANCASTER, OH	2,000,000 CONCRETE
• CITY OF LANCASTER, OH	1,500,000 CONCRETE
• CITY OF LANCASTER, OH	4,000,000 CONCRETE
• CITY OF LANCASTER, OH	2,000,000 CONCRETE
• CITY OF RALFIGH, NC	5,000,000 GROUND STORAGE
• CITY OF FALLS, TX	50,000 CONCRETE
• TOWN OF ROXBORO, NC	1,500,000 CONCRETE
• VILLAGE OF KINGSTON, OH	1,000 CONCRETE
• TOWN OF RAMSEUR, NC	500,000 GST CONCRETE
• CITY OF FALLS CITY, NE	500,000 CONCRETE
• CITY OF FALLS CITY, NE	500,000 CONCRETE
• TOWN OF ROXBORO, NC	1,500,000 GST
• CITY OF HAVELOCK, NC	1,000,000 CONCRETE GST
• CITY OF MOUNT HOLLY, NC	2,000,000 CONCRETE GST
• LEEDS WATER WORKS BOARD, AL	1,500,000 CONCRETE
• CITY OF WAYNESBORO, VA	1,000,000 CONCRETE GST
• CITY OF WAYNESBORO, VA	1,000,000 CONCRETE GST
• ONSLOW WATER AND SEWER AUTHORITY, NC	3 MIL CONCRETE GST
• ONSLOW WATER AND SEWER AUTHORITY, NC	3 MIL CONCRETE GST
• BRUNSWICK GLYNN JOINT SEWER AND WATER COMMISSION,	118,942 CONCRETE GST
• INDIAN RIVER COUNTY UTILITIES, FL	3,000,000 CONCRETE
• MACON WATER AUTHORITY, GA	1,500,000 CONCRETE GST
• TOWN OF SOUTHERN PINES, NC	2,000,000 CONCRETE
• CITY OF NEW BERN, NC	4,000,000 CONCRETE GST
• CITY OF RIDGELAND, MS	1,000,000 CONCRETE GST
• BEAUREGARD WATER AUTHORITY, AL	1,000,000 CONCRETE GST
• VILLAGE OF BALD HEAD ISLAND, NC	400,000 CONCRETE GST
• PUBLIC WATER SUPPLY DISTRICT 2 OF ST CHARLES COUNT	2,350,000 CONCRETE GST
• PUBLIC WATER SUPPLY DISTRICT 2 OF ST CHARLES COUNT	2,350,000 CONCRETE GST

- PUBLIC WATER SUPPLY DISTRICT 2 OF ST CHARLES COUNT 2,350,000 CONCRETE GST
- TOWN OF LADY LAKE, FL 500,000 CONCRETE
- CITY OF COLUMBUS, NE 3,000,000 CONCRETE GST
- ONSLOW WATER AND SEWER AUTHORITY, NC 3,000,000 CONCRETE GST
- ONSLOW WATER AND SEWER AUTHORITY, NC 3,000,000 CONCRETE GST
- PENDER COUNTY UTILITIES, NC 200,000 GST CONCRETE
- WASHINGTON COUNTY, NC 500,000 CONCRETE GST
- CITY OF MIAMI, OK 1,000,000 CONCRETE GST
- CITY OF CAYCE, SC 1,000,000 CONCRETE
- CITY OF CAYCE, SC 2,500,000 CONCRETE
- CITY OF CAYCE, SC 1,000,000 CONCRETE
- CITY OF JACKSON, MO 670,000 CONCRETE GST
- TOWN OF CHATHAM, VA 150,000 CONCRETE
- MIDWAY WATER SYSTEM INC, FL 250,000 CONCRETE
- AVON WATER COMPANY, CT 400,000 CONCRETE
- AVON WATER COMPANY, CT 750,000 CONCRETE
- CITY OF SAPULPA, OK 2,000,000 CONCRETE
- TOWN OF MOORESVILLE, NC 500,000 CONCRETE
- TOWN OF MOORESVILLE, NC 1,000,000 CONCRETE
- TOWN OF MOORESVILLE, NC 532,000 GST
- CITY OF BELTON, SC 150,000 STANDPIPE
- RIPLEY GAS WATER AND WASTE WATER DEPT DIVISION OF 400,000 CONCRETE
- ISLE OF PALMS WATER & SEWER, SC 1,000,000 CONCRETE
- HENDERSONVILLE UTILITY DISTRICT, TN 400,000 CONCRETE
- HENDERSONVILLE UTILITY DISTRICT, TN 400,000 CONCRETE
- HENDERSONVILLE UTILITY DISTRICT, TN 3,000,000 GST
- HENDERSONVILLE UTILITY DISTRICT, TN 2,000,000 GST
- CITY OF WINCHESTER PUBLIC UTILITIES, VA 1,000,000 GROUND STORAGE
- CITY OF WALESKA, GA 500,000 GST
- CITY OF PALM COAST, FL 2,000,000 CONCRETE
- CITY OF MINNEOLA, FL 500,000 GST
- CITY OF MINNEOLA, FL 300,000 GST
- WATER AUTHORITY OF DICKSON COUNTY, TN 2,500,000 CONCRETE GST
- WATER AUTHORITY OF DICKSON COUNTY, TN 2,000,000 CONCRETE
- DESTIN WATER USERS INC, FL 1,000,000 GST
- SOUTH GRANVILLE WATER AND SEWER AUTHORITY, NC 1,000,000 STANDPIPE
- CHATHAM COUNTY WATER, NC 1,000,000 GST
- CITY OF KINSTON, NC 1,000,000 GST
- MACON WATER AUTHORITY, GA 2,000,000 CONCRETE GST
- CITY OF PALM COAST, FL 2,500,000 CONCRETE

- BANKS COUNTY UTILITIES, GA 200,000 GST
- HARNETT COUNTY PUBLIC UTILITIES, NC 3,000,000 GROUND STORAGE
- HARNETT COUNTY PUBLIC UTILITIES, NC 5,000,000 GROUND STORAGE
- CITY OF REYNOLDS, GA 60,000 GST
- CITY OF FELLOSMERE, FL 500,000 CONCRETE
- INDIAN RIVER COUNTY UTILITIES, FL 3,000,000 GST
- TOWN OF BLOWING ROCK, NC 500,000 GST
- SUN N LAKE IMPROVEMENT DISTRICT OF SEBRING, FL 250,000 GST
- HARNETT COUNTY PUBLIC UTILITIES, NC 2,000,000 GST
- HARNETT COUNTY PUBLIC UTILITIES, NC 2,000,000 GST
- INDIAN RIVER COUNTY UTILITIES, FL 2,000,000 GST
- INDIAN RIVER COUNTY UTILITIES, FL 2,000,000 GST
- INDIAN RIVER COUNTY UTILITIES, FL 750,000 GST
- ORANGE WATER AND SEWER AUTHORITY, NC 3,000,000 GST
- AUGUSTA UTILITIES, GA 500,000 GST

Recent Concrete Tank Repair and Rehabilitations

Ralls, TX

City of Ralls, TX (Aunie Sellers)

806-253-2558

Clean/paint the interior and exterior of a 50,000 gallon concrete ground storage tank. Applied Warren 100% solids epoxy coating.

Contract Amount: \$51,000

Completed: December 2014

Ripley, TN

Ripley Gas, Water, and Waste Water Department, TN (Scott Nelson)

731-413-1243

Clean/paint the interior and exterior of a 400,000 gallon concrete clarifier. Applied Warren 100% solids epoxy coating.

Contract Amount: \$125,000

Completed: January 2015

Fort Valley, GA

Fort Valley Utility Commission, GA (Keith Spillers)

478-825-7701 ext. 217

Clean, repair, and paint the interior of a 100,000 gallon concrete clearwell. Applied Warren 100% solids epoxy coating.

Contract Amount: \$152,000

Completed: March 2015

Sandersville, GA

Thiele Kaolin Company, GA (John Dalton)

478-552-3951

Clean/paint concrete slurry tanks, sumps and grates at an industrial mining facility. Applied Warren 100% solids epoxy coating.

Contract Amount: \$500,000

Completed: April 2015

STORAGE TANK REHABILITATION

Is your storage tank showing its age? We offer custom solutions

RESTORE YOUR STORAGE TANK ASSETS TO OPERABILITY WITH THE INDUSTRY'S LEADER

Utilize innovative and proven technologies provided by experienced professionals to restore your storage tank condition.

VALUE OF UTILITY SERVICE GROUP TANK REHABILITATION PROGRAM:

- Experienced, expert crews
- Repair rather than replace - lower investment, environmental sustainability
- Solutions for capacity, water pressure issues
- Solutions for structural issues
- Single source responsibility



UTILITY SERVICE GROUP CHEMICAL TANK REHABILITATION PROGRAM INCLUDES:

Modifications and repairs, minor and major

- Tank relocations
- Raising and lowering of tanks
- Roll and dish plates for roofs, shells and bowls, roof replacements
- Engineering design and fabrication, tank accessories
- ATTIESBURG, MS 2,500,000 GS

WATER MIXING

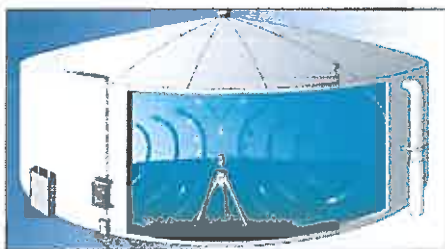
Active mixing, proven performance... ...any tank, any size

AN ACTIVE TANK MIXING SYSTEM

The FAX Water Mixer is an active, submersible mixing system for the cost-effective management of drinking water quality in storage tanks and reservoirs.

VALUE OF UTILITY SERVICE GROUP WATER MIXING SYSTEM:

- Thermal stability and uniform disinfectant distribution
- Improved water quality
- Most energy efficient solution available
- Reduced chemical coast, environmentally sustainable
- Reduce thermal stratification, ice formation



UTILITY SERVICE GROUP WATER MIXING SYSTEM INCLUDES:

- Tank assessment using computational fluid dynamics
- Design most effective and efficient mixing system
- Active mixing (24/7/365)



CHEMICAL CLEANING

Proven NSF certified chemical cleaning technology

CHEMICAL CLEANING OF WATER TANKS AND FILTER PLANT MEDIA

Utility Service utilizes proven, patented products and NSF certified technology for cleaning the interior of water tanks and gravity and pressure filters.

VALUE OF UTILITY SERVICE GROUP CHEMICAL CLEANING SERVICE:

- Reduce disinfectant demand
- Maintain higher disinfectant residuals
- Minimize disinfectant by products (DBP)
- Reduced nitrification risk
- Improved aesthetics, maintain water quality

VALUE OF UTILITY SERVICE GROUP CHEMICAL CLEANING SERVICES FOR FILTER PLANT MEDIA RESTORATION AND MAINTENANCE:

- Increases system capacity
- Minimize loss of media
- Maximize efficiency



UTILITY SERVICE GROUP CHEMICAL CLEANING PROGRAM INCLUDES:

- Condition assessment
- Profile water from a chemical and biological standpoint
- Interpret and evaluate results
- Develop cleaning protocol for disinfection
- Design system for ongoing maintenance

Trade References

Tnemec Co., Inc.

Dean Drehoff

Atlanta, GA

770-242-9605

Sherwin Williams

Jim Ratliff

Global Account Manager

501-679-6648

Reed Minerals, Inc.

Abrasives

David Dewitt

Memphis, TN

901-789-1573

Warren Environmental, Inc.

Danny Warren

Carver, MA

508-947-8539



Company Overview

The Warren Environmental System of specialty 100% solids, zero V.O.C. epoxies have been used to rehabilitate and protect deteriorating infrastructure for over twenty years.

The Warren Environmental product line consists of two part, highly thixotropic 100% solids epoxy systems formulated with special additives and modifiers to enhance the water resistance, chemical resistance, and bond strength to a variety of substrates as well as its own internal strength. The high thixotropic index allows for spray application at structural thicknesses, creating an impermeable pore free corrosion resistant surface.

Our products include liners approved for both potable and wastewater applications, high build epoxies for structural rehabilitation, flexible grouts for cracks and expansion joints, flame resistant liners, pipelining systems, flooring grouts and mastics. Warren Environmental products have been engineered for easy application under the most extreme conditions imaginable, whether your problem is application to wet surfaces, corrosive environments, or temperature extremes.

Warren Environmental coatings can be applied to a wide variety of substrates including concrete, steel, and brick. Application of the product is via our patented solvent free plural component spray system, or by hand troweling and spin casting. All of our application processes are solvent free.

History

Warren Environmental, Inc. is a Massachusetts corporation with licensees throughout the United States, Australia and Europe. Our business is the design, manufacture, development, and sales of our patented application equipment and high performance epoxy coatings and grout products.

Our strength is not only in the quality of our systems, but our expertise in the field application of our product line. A & W Maintenance, Inc. is the contracting company owned by the Warren family. A & W has over 25 years of experience in the application of industrial coatings, and has an excellent reputation in the industrial coating arena. Together, our companies provide a united front of cutting edge technology in product development, and practical application methodologies that have been proven time and again in the field. We are proud to have the support of a large return industrial customer base.

Engineering

Warren Environmental products are engineered to provide superior strength, durability, and resistance to both chemical and biological attack. As the cured surface is non porous,

bacteria in the sewer environment are unable to penetrate and colonize, and are flushed through with the flow. By products of the remaining bacterial population such as hydrogen sulfide do not affect the integrity of the liner.

The ability to apply product to damp surfaces and in humid conditions utilizing one high build coat up to and over 250 mils in one spray application allows for shorter facility shut downs, minimizing the cost to our customers in lost production time.

Our engineered systems and specifications provide both the product and the process that will ensure a successful application, usually increasing the strength of the coated system beyond that of its original state.

Warren is an ISO 9001 certified company, insuring the highest standards of quality control and customer service.

1.04 QUALITY ASSURANCE

- A. Applicator shall initiate and enforce quality control procedures consistent with applicable industry standards together with Warren Environmental, Inc. and the Engineer's recommendations.
- B. Applicator shall use an adequate number of skilled workmen who are thoroughly trained and experienced in the necessary crafts. These workmen shall be completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section. The job Foreman shall have a minimum of seven years experience.
- C. Applicator shall use approved specialty equipment adequate in size, capacity and number sufficient to accomplish the work of this Section in a timely manner.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Materials are to be kept dry, protected from weather and stored under cover and stored between 50 deg F and 90 deg F. Do not store near flame, heat or strong oxidants.
- B. Protective cured in place liner materials are to be handled according to their material safety data sheets.

PART 2 – PRODUCTS AND APPLICATION EQUIPMENT

2.01 MANUFACTURER AND EQUIPMENT SUPPLIER

- A. Warren Environmental, Inc., P.O. Box 1206, Carver, MA 02330 Telephone (508)947-8539.

2.02 CURED IN PLACE LINING SYSTEM

- A. Warren Environmental Cured in Place Liner – a unique 250 mil vinyl clad felt insert impregnated with an 100% solids, non-toxic, solventless epoxy resin laminar system as applied with the patent protected process of Warren Environmental, Inc. which can be pulled into place or inverted in order to accommodate bends or an increase or decrease in pipe size, and exhibiting the following characteristics.

Product type	amine cured epoxy
Color	Clear
Solids Content (vol %)	100
Mix Ratio,	1:2 S301
Compressive Strength	ASTM D695 6,000 psi
Flatwise Tensile Strength	

Of Sandwich Constructions	ASTM C297	2,608psi
Tensile Strength	ASTM D638	3,000 psi
Tensile Elongation	ASTM D638	4.5%
Flexural Strength	ASTM D790	6,000 psi
Flexural Modulus	ASTM D790	300,000psi
Chemical Resistance to:		
Sulfuric Acid, 70%	ASTM D543	Immersion Service
Sodium Hydroxide, 20%	ASTM D543	Immersion Service

- B. The monolithic surfacing system shall be continuously bonded to the interior of the pipeline.
- C. The finished system shall provide a minimum total thickness of 150 to 200 mils. The cured surfacing shall be monolithic with proper sealing connections to all unsurfaced areas and shall be placed and cured in one application in conformance with the recommendations of the monolithic surfacing system manufacturer.
- D. When cured, the lining system shall form a continuous, tight-fitting, hard, impermeable surfacing that is suitable for sewer system service and chemically resistant to any chemicals, bacteria or vapors normally found in domestic sewage or recycled plant water.
- E. The system shall effectively seal the interior surfaces of the pipe line and prevent any penetration or leakage from the pipe.
- F. The system shall be compatible with the thermal conditions of the existing sewer pipe line system.

2.03 CURED IN PLACE LINER APPLICATION EQUIPMENT

- A. Specially designed water or air inversion equipment for use in the cured in place liner inversion application of the specified system approved for use by the cured in place lining system manufacturer as developed by Warren Environmental, Inc. No Substitutes allowed.

PART 3 – EXECUTION

3.01 PRE-CIP LINING INSPECTION

- A. All pipes to be lined shall be readily accessible to Applicator.
- B. Appropriate actions shall be taken to comply with local, state and federal regulatory and other applicable agencies with regard to environment, health and safety.
- C. Active flows shall be dammed, plugged or diverted as required to ensure that the liquid flow is maintained outside of the pipe.

- D. Installation of the cured in place liner shall not commence until the pipeline has been inspected by closed circuit TV and properly prepared for lining in accordance with the product supplier's recommendations.

3.02 SURFACE PREPARATION

- A. Applicator shall inspect all surfaces specified to receive the cured in place liner system prior to surface preparation. Applicator shall notify Owner of any noticeable disparity in the surfaces that may interfere with the proper preparation or application of the cured in place lining system.
- B. Surface preparation method(s) shall be based upon the conditions of the substrate and the requirements of the cured in place lining system to be applied.
- C. On concrete pipelines quick setting high strength concrete surfacing agents with latex or curing agent additives cannot be used. Proper surface preparation procedures must be followed to ensure adequate bond strength to any surface to be coated. New cement must cure at least 30 days prior to coating.
- D. Existing coatings should be removed or thoroughly abraded to provide adequate surface profile for mechanical bond by the new system. Applicator is to maintain strict adherence to the cured in place lining system manufacturer's recommendations with regard to proper surface preparation and compatibility with existing coatings.
- E. Surfaces that require additional cleaning or profiling will be prepared by abrasive blast to rough the surface sufficient to obtain and ensure adequate bonding of the system. A minimum surface profile of 1-1.5 mils must be achieved to assure proper adhesion. Detergent water cleaning and hot water blasting may be necessary to remove oils and grease from the substrate. Whichever methods are used, they shall be performed in a manner that provides a uniform, sound clean surface that is not excessively damaged.

3.03 APPLICATION OF CIP LINER MATERIALS

- A. All surfaces shall be sufficiently smooth and even, to ensure good flow handling characteristics when complete.
- B. Liner will be installed via water or air inversion, or pulled into place depending on jobsite conditions.
- C. If liner is pulled into place with the vinyl out, the ends of the liner must be seated with Warren M301-18 mastic in order to tightly seal off the ends.

3.04 TESTING AND INSPECTION

- A. A final visual inspection shall be made by closed circuit TV inspection. Any deficiencies in the finished system shall be marked and repaired according to the procedures set forth herein by Applicator.
- B. The system may be put back into operational service as soon as the final

inspection has taken place.

3.05 CLEANING

- A. Trash and loose debris shall not be permitted to accumulate at the project site. All items shall be regularly removed and disposed of at an approved site in accordance with applicable regulatory agencies.

END OF SECTION

Prospective bidder must have a minimum experience of 10,000 feet of coating experience utilizing plural spray application technique in large diameter underground tunnel systems.

STATEMENT OF EXPERIENCE: The undersigned as bidder declares that he has successfully accomplished similar work in the following places:

1. Description of Project: _____
(Include type of project total value of contract, date of completion, etc.)

Owner & Contact Person: _____
(Names, addresses and telephone number's)

Engineer & Contact Person: _____

2. Description of Project: _____
(Include type of project, total value of contract, date of completion, etc.)

Owner & Contact Person: _____
(Names, addresses and telephone number's)

Engineer & Contact Person: _____

3. Description of Project: _____
(Included type of project, total value of contract, date of completion, etc.)

Owner & Contact Person: _____
(Names, addresses and telephone number's)

Engineer & Contact Person: _____

4. Description of Project: _____
(Included type of project, total value of contract, date of completion, etc.)

Owner & Contact Person: _____
(Names, addresses and telephone number's)

Engineer & Contact Person: _____

5. Description of Project: _____
(Included type of project, total value of contract, date of completion, etc.)

Owner & Contact Person: _____
(Names, addresses and telephone number's)

Engineer & Contact Person: _____

Note: Bidders may attach supplementary information, if necessary, to indicate the experience, organization and equipment available to undertake the work in the event of an award of the contract.

The bidder shall list below the name/names of subcontractor, if other than the bidder, who shall perform work on the project:

A. _____

B. _____

The bidder shall submit a list of experience for above sub-contractor.

TECHNICAL REQUIREMENTS AND SPECIFICATIONS
FOR SPINCAST MONOLITHIC SURFACING SYSTEMS
FOR PIPELINING

WARREN ENVIRONMENTAL S-301-14
By
WARREN ENVIRONMENTAL, INC.

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. This specification covers work, materials, equipment and tools including specially developed application equipment as required for installation and testing of the unique monolithic pipeline surfacing system – Warren Environmental System S-301, (hereafter referred to as “WES”) or approved equal.
- B. The use of specialized application equipment combined with rigorous surface preparation requirements shall be used to apply the WES products without the use of solvents. The equipment adds high heat and pressure to the monolithic surfacing system resulting in a high build and quick set of the completed system.
- C. Product application requirements and procedures described include surface preparation, mixing, application, material handling and storage, qualification of applicator and application quality control.

1.02 REFERENCES

- A. ASTM D638 – Tensile Properties of Plastics.
- B. ASTM D790 – Flexural Properties of Unreinforced and Reinforced Plastics.
- C. ASTM D695 – Compressive Properties of Rigid Plastics.
- D. ASTM D4541 – Pull-off Strength of Coatings Using a Portable adhesion Tester.
- E. ASTM D4414 – Wet Film Thickness by Notched Gages.
- F. ASTM D2584 – Volatile Matter Content.
- G. ASTM D2240 – Durometer Hardness, Type D.
- H. ASTM D543 – Water Vapor Transmission of Organic Coating Films.
- I. ASTM D543 – Resistance of Plastics to Chemical Reagents.
- J. ASTM – The published standards of the American Society for Testing and Materials, West Conshohocken, PA.
- K. NACE – The published standards of National Association of Corrosion Engineers (NACE International), Houston, TX.
- L. ASTM E84-Test Method for Surface Burning Characteristics of Building Materials

- B. The equipment shall be specially designated to accurately ratio and apply the specified materials and shall be regularly maintained and in proper working order.
- C. The specified materials must be applied by an approved installer of the monolithic surfacing system.
- D. The specified coating system must be capable of being applied in one coat of 125 mils or greater in order to eliminate the possibility of intercoat contamination resulting in delamination All specified surfaces will be lined with the monolithic surfacing system to provide a minimum total thickness of 150-200 mils. The cured surfacing shall be monolithic with proper sealing connections to all unsurfaced areas and shall be placed and cured in one (1) application in conformance with the recommendations of the monolithic surfacing system manufacturer .

3.04 TESTING AND INSPECTION

- A. During application a wet film thickness gage meeting ASTM D4414 – Standard Practice for Measurement of Wet Film Thickness of Organic Coatings by Notched Gauges, shall be used to ensure a monolithic coating and uniform thickness during application.
- B. After the system has set hard to the touch it shall be inspected by the Engineer verifying the following:
 - The Engineer will measure the system-cured thickness from a specimen retrieved by the Applicator. Retrieval can be made by physically cutting through the surfacing (by drilling or coring) or a suitable non-destructive type of thickness measurement may also be used.
- C. All lined surfaces will be tested with high-voltage holiday detection equipment. The spark tester shall be initially set at 12,000 volts but may be adjusted as necessary to detect the pinhole. All detected pinholes shall be marked and repaired by abrading the lined surface with grit disk paper or other hand tooling method. After abrading and cleaning, additional system material can be hand applied to the repair area. All touch-up/repair procedures shall follow the monolithic surfacing system manufacturer’s recommendations.
- D. Measurement of bond strength of the system to the substrate can be made at regular intervals and along different sections of the structure. Bond strength can be measured in accordance with ASTM D4541. Any areas detected to have inadequate (less than 400 psi) bond strength shall be evaluated by the Project Engineer. Further bond tests may be performed in that area to determine the extent of potentially deficient bonded area and repairs shall be made by Applicator in strict accordance with manufacturer’s recommendations.

- E. A final visual inspection shall be made by the owner's representative. Any deficiencies in the finished system shall be marked and repaired according to the procedures set forth herein by Applicator.
- F. The system may be put back into operational service as soon as the final inspection has taken place.

3.05 CLEANING

- A. Trash and loose debris shall not be permitted to accumulate at the project site. All items shall be regularly removed and disposed of at an approved site in accordance with applicable regulatory agencies.

END OF SECTION

PREQUALIFICATION:

Prospective bidder must have a minimum experience of 10,000 feet of coating experience utilizing plural spray application technique in large diameter underground tunnel systems.

STATEMENT OF EXPERIENCE: The undersigned as bidder declares that he has successfully accomplished similar work in the following places:

- 1. Description of Project: _____
(Include type of project total value of contract, date of completion, etc.)

Owner & Contact Person: _____
(Names, addresses and telephone number's)

Engineer & Contact Person: _____

- 2. Description of Project: _____
(Include type of project, total value of contract, date of completion, etc.)

Owner & Contact Person: _____
(Names, addresses and telephone number's)

Engineer & Contact Person: _____

- 3. Description of Project: _____
(Included type of project, total value of contract, date of completion, etc.)

Owner & Contact Person: _____
(Names, addresses and telephone number's)

Engineer & Contact Person: _____

4. Description of Project: _____
(Included type of project, total value of contract, date of completion, etc.)

Owner & Contact Person: _____
(Names, addresses and telephone number's)

Engineer & Contact Person: _____

5. Description of Project: _____
(Included type of project, total value of contract, date of completion, etc.)

Owner & Contact Person: _____
(Names, addresses and telephone number's)

Engineer & Contact Person: _____

Note: Bidders may attach supplementary information, if necessary, to indicate the experience, organization and equipment available to undertake the work in the event of an award of the contract.

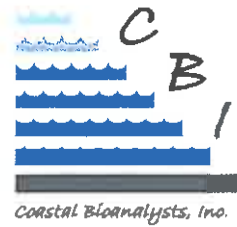
The bidder shall list below the name/names of subcontractor, if other than the bidder, who shall perform work on the project:

A. _____

B. _____

The bidder shall submit a list of experience for above sub-contractor.

Client: Warren Environmental, Inc.
 Project ID: WARR1501
 Sample I.D.: Cured Epoxy #1



Report of Analysis: Acute Elutriate Test (10:1 volume:mass Saltwater:product)

Submitted To: Ms. Jane Warren Warren Environmental, Inc. A & W Maintenance Inc. P.O. Box 1206 Carver, MA 02330	Prepared By: Coastal Bioanalysts, Inc. 6400 Enterprise Court Gloucester, VA 23061 (804) 694-8285 www.coastalbio.com Contact: Peter F. De Lisle, Technical Director
--	---

Acute Test Results*				
Species-Test Method	48-h LC50	95% C.L.	T.U. _{Ac}	NOAEC
<i>M. bahia</i> EPA 2007.0	>100%	N/A	1.00	100%

*Note: Although the name of *Mysidopsis bahia* has officially been changed to *Americamysis bahia*, the former name is referenced because of its use in the EPA method manuals and most NPDES permits. Details regarding test conduct and data analysis provided in attached bench sheets and printouts as applicable.

Acute Test QA/QC		Reference Toxicant: KCl Units: mg/l		Test Organism Source: CBI Stock Cultures	
Species-Method (Ref. Test Date)	Data Source	% Control Survival	48-h LC50	95% C.L./A.L. for LC50	RTT in Control?
<i>M. bahia</i> 2007.0 (6/19/15-6/21/15)	RTT	100	514	459-575	Yes
	CC	100	509	407-611	

Note: RTT = Reference Toxicant Test, CC = Control Chart.

The results of analysis contained within this report relate only to the sample as received in the laboratory. This report shall not be reproduced except in full without written approval from the laboratory. Unless noted below, these test results meet all requirements of NELAP.

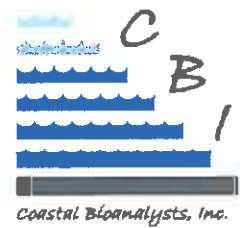
APPROVED:


 Peter F. De Lisle, Ph.D.
 Technical Director

6/23/15
 Date

Deviations from, additions to, or exclusions from the test method, non-standard conditions or data qualifiers and, as appropriate, a statement of compliance/non-compliance: NONE





GLOSSARY OF TERMS AND ABBREVIATIONS

A.L. (Acceptance Limits): The results of a given reference toxicant test are compared to the control chart mean value \pm 2 standard deviations. These limits approximate the 95% probability limits for the "true" reference toxicant value.

Chronic Value (ChrV): The geometric mean of the NOEC and LOEC. Units are same as test concentration units.

C.L. (Confidence Limits): These are the probability limits, based on the data set and statistical model employed, that the "true value" lies within the limits specified. Typically limits are based on 95% or 99% probabilities.

Control chart: A cumulative summary chart of results from QC tests with reference toxicants. The results of a given reference toxicant test are compared to the control chart mean value and 95% Acceptance Limits (A.L.) (mean \pm 2 standard deviations).

IC25: The concentration of sample or chemical, calculated from the data set using statistical models, causing a 25% reduction in test organism growth, reproduction, etc. The lower the IC25, the more toxic the chemical or sample. Units are same as test concentration units.

LC50: The concentration of sample or chemical, calculated from the data set using statistical models, causing a 50% reduction in test organism survival. The lower the LC50, the more toxic the chemical or sample. Units are same as test concentration units. Note: The LC50 value must always be associated with the duration of exposure. Thus 48-h LC50, 96-h LC50, etc. are calculated.

LOEC: Lowest-observable-effect-concentration. The lowest concentration of sample or chemical in a chronic test dilution series in which the test organisms exhibit a statistically significant reduction in any of the test end points (e.g. growth, survival, reproduction) compared to control organisms. Units are same as test concentration units.

PMSD: Percent Minimum Significant Difference: The minimum difference which can exist between a test treatment and the controls in a particular test and be statistically significant; a measure of test sensitivity. The lower the PMSD the more sensitive the test.

N/A: Not applicable.

N/D: Not determined or measured.

NOAEC: No-observable-acute-effect-concentration. The highest concentration of sample or chemical in an acute test dilution series in which the test organisms exhibit no statistically significant reduction in the test end point (e.g. survival) compared to control organisms. Units are same as test concentration units.

NOEC: No-observable-effect-concentration. The highest concentration of sample or chemical in a chronic test dilution series in which the test organisms exhibit no statistically significant reduction in any of the test end points (e.g. growth, survival, reproduction) compared to control organisms. Some regulatory definitions also require that the NOEC be less than the LOEC. Units are same as test concentration units.

Q.L.: Quantitation Limit. Level, concentration, or quantity of a target variable (analyte) that can be reported at a specified degree of confidence.

T.U.: Toxic units. Expresses the relative toxicity of an effluent or elutriate in such a manner that the larger the toxic unit value the more toxic the effluent. $T.U._{Ac} = 100/LC50$. $T.U._{Chr} = 100/NOEC$. A dimensionless unit.



M. bahia daily biological measurements (EPA 2007.0) Template version AMB-STAT-48h-NOAEC5-061313

TREATMENT (% Elutriate)	Rep	#Live Day 0	#Live Day 1	#Live Day 2	Final Mean % Live		
C Lab Control	A	10	10	10	100.0		
	B	10	10	10			
	C	10	10	10			
	D	10	10	10			
#1 6.25	A	10	10	10	100.0		
	B	10	10	10			
	C	10	10	10			
	D	10	10	10			
#2 12.5	A	10	10	10	100.0		
	B	10	10	10			
	C	10	10	10			
	D	10	10	10			
#3 25.0	A	10	10	10	100.0		
	B	10	10	10			
	C	10	10	10			
	D	10	10	10			
#4 50.0	A	10	10	10	100.0		
	B	10	10	10			
	C	10	10	10			
	D	10	10	10			
#5 100	A	10	10	10	100.0		
	B	10	10	10			
	C	10	10	10			
	D	10	10	10			
INITIALS:		GB	GB	PB	% CONTROL SURVIVAL:	100.0	
DATE & TIME:		6/16/15 16:15	6/17/15 8:58	6/18/15 16:04	TAC = 90%		
CHANGES & NOTES (INITIALS, DATE, SPECIFIC CHANGE MADE)	Elutriate prepared using 200g/2L ASW mixed on orbital shaker 1.5 hrs at 100 rpm						
SPECIES:		Mysidopsis (Americamysis) Bahía					
ACCLIMATION WATER:		ASW					
FEEDING PRIOR TO TEST:		Artemia nauplii ad libitum					
FEEDING DURING TEST:		Artemia nauplii (ca. 100/mysid/day)					
SOURCE:		CBI Stock cultures					
ACCLIMATION TEMP (°C):		25					
HARVEST START DATE & TIME:		6/10/15 14:55					
HARVEST END DATE & TIME:		6/11/15 10:50					
DATE/TIME WATER ADDED:		6/16/15 16:00					
DATE/TIME ANIMALS ADDED:		6/16/15 16:15					
ANIMAL AGE WINDOW:		100-300µm				TAC Max. 24 h	
MAX AGE AT TEST START:		5d				TAC Max. 5 d	
TEST SET UP BY:		GB					
ELUTRIATE PREP DATE AND TIME:		6/16/15 14:30				SAMPLE USED	A
ELUTRIATE AGE AT TEST START:		1h 40m				TAC Max 36 h	
TEST ID:	WARR1501AMB		PEER REVIEW BY (INITIALS/DATE):		PB, GB	6/18/15 16:11	

M. bahia daily water quality bench sheet (EPA METHOD 2007.0) Template version AMB-STAT-NOAEC5-061313

TRTMT	Day 0 Initial	Day 1	Day 2 Final	SUMMARY WATER QUALITY DATA				
				MEAN	S.D.	MIN.	MAX.	
pH (S.U.)	C	8.10	7.87	7.91	7.96	0.12	7.87	8.10
	1	8.10	7.97	7.91	7.99	0.10	7.91	8.10
	2	8.12	8.00	7.95	8.02	0.09	7.95	8.12
	3	8.12	8.00	7.97	8.03	0.08	7.97	8.12
	4	8.12	8.00	7.97	8.03	0.08	7.97	8.12
	5	8.14	7.98	7.95	8.02	0.10	7.95	8.14
Temp. (o C)	C	26	26	26	26	0.0	26	26
	1	26	26	26	26	0.0	26	26
	2	26	26	26	26	0.0	26	26
	3	26	26	26	26	0.0	26	26
	4	26	26	26	26	0.0	26	26
	5	26	26	26	26	0.0	26	26
Diss. Oxygen (mg/l)	C	7.2	6.8	5.6	6.5	0.8	5.6	7.2
	1	7.2	6.8	5.6	6.5	0.8	5.6	7.2
	2	7.2	6.7	5.7	6.5	0.8	5.7	7.2
	3	7.2	6.6	5.9	6.6	0.7	5.9	7.2
	4	7.2	6.5	6.0	6.6	0.6	6.0	7.2
	5	7.2	6.5	5.7	6.5	0.8	5.7	7.2
Salinity (g/kg)	C	20		20	20	0.0	20	20
	1						0	0
	2						0	0
	3						0	0
	4						0	0
	5	20		20	20	0.0	20	20
Replicate measured	C	D	B					
Initials	GB	GB	AG					
TRC (mg/l) in highest conc. at end of test:			N/A					

Changes & Notes
(Initials, date, specific change or notes)

Test chamber: 400 ml Tri-pour bkr:

Other:

Test solution vol. (200 ml min): 200 ml:

Other (ml):

Illumination & photoperiod: 50-100 ft-c 16L:8D

Number of replicates/treatment: 4

Initial number animals/replicate: 10

Test Aerated? No

Date & Time Air Start:

TEST ID	TRT ID:	1	2	3	4	5	D.O. Highest conc. @ aeration:
WARR1501AMB	CONC (%)	6.25	12.5	25.0	50.0	100	Total live highest conc. @ aeration