



LEXINGTON

RFP-51-2023

Webster Environmental Associates Inc.
Supplier Response

Event Information

Number: RFP-51-2023
Title: Odor Control Master Planning
Type: Request for Qualifications
Issue Date: 12/8/2023
Deadline: 1/11/2024 02:00 PM (ET)

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ONLY ONLINE BIDS WILL BE ACCEPTED! By submitting your response, you certify that you are authorized to represent and bind your company and that you agree to all bid terms and conditions as stated in the attached bid/RFP/RFQ/Quote/Auction documents.

Jim Ross
Signature

jim.ross@odor.net
Email

Submitted at 1/10/2024 10:44:46 AM (ET)

Response Attachments

LFUCG_OdorControlMasterPlanning_RFP51-2023_WEA-Proposal.pdf

Proposal from Webster Environmental Associates, Inc. in response to RFP-51-2023 Odor Control Master Planning.



PROPOSAL FOR
ODOR CONTROL
MASTER PLANNING
RFP #51-2023

JANUARY 2024



TETRA TECH

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January 11, 2024

Lexington-Fayette Urban County Government
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RE: Request for Proposal #51-2023 Odor Control Master Planning

To Whom it May Concern:

Webster Environmental Associates, Inc. (WEA) is pleased to submit the enclosed Proposal for the above referenced project. WEA is an engineering consulting firm that is devoted exclusively to odor control. Our current staff has completed over 800 successful odor control projects over the past 40 years and have over 100 years of combined experience. WEA's office is located next door in Louisville, KY, which will allow us to provide hands-on support throughout the project. Outside of WEA, there are only a handful of odor control experts in the country and no other reside in our state. We have the knowledge, experience, and expertise to solve your unique odor control problems.

We have teamed with Tetra Tech for this project, a leading water and wastewater treatment system design firm who has worked with Lexington on numerous projects over the past 40 years. Our Team combines WEA's expertise in odor control with Tetra Tech's expertise in wastewater process, mechanical, and structural design. Our team also includes Magna Engineers, a WBE firm whose staff has 120 years of combined electrical engineering experience.

I will serve as the Project Manager and principal contact person on this project. I personally have experience with every existing odor control system at both plants and am ready to hit the ground running. I will be involved in every facet of the project. WEA is a hands-on consulting firm, we have our own equipment, conduct all our own field testing, and work on every project as a team. Herb Lemaster of Tetra Tech will serve as the project Design Manager. Herb has 30 years of engineering consulting experience with Lexington.

Thank you for giving us the opportunity to submit this proposal and we look forward to working with you. Please don't hesitate to contact me with any questions you may have.

Sincerely,

Jim Ross, PE
President
Webster Environmental Associates, Inc.
jim.ross@odor.net
502.422.9070 (mobile)





SECTION #1

Firm Qualifications



TETRA TECH

FIRM QUALIFICATIONS

EXECUTIVE SUMMARY

WEBSTER ENVIRONMENTAL ASSOCIATES (WEA)

and **TETRA TECH** have been working on odor control projects together for 15 years. Our experience includes over 800 completed odor control projects and a staff with over 100 years of municipal odor control experience. Our team joins WEA's expertise in odor control with Tetra Tech's expertise in wastewater process, mechanical, and structural design. Our team also includes Magna Engineers, a WBE firm whose staff has 120 years of electrical engineering experience.

Our team is local to Kentucky and has intimate knowledge of Lexington's facilities. WEA's office is in Louisville and has hands on experience with every odor control system at both plants. There are only a handful of odor control experts in the country and no other resides in our state. Tetra Tech's office is in Lexington and is a trusted consultant to LFUCG, having worked for the LFUCG for over 30 years. Magna Engineers is also located in Lexington and offers a strong track record in electrical design.

WEA has been conducting air sampling and testing, data analysis, and odor control system designs for municipal clients since 1981. Odor control engineering is all we do, every day. We have become world leaders in odor control engineering by providing personalized service, a unique understanding of the issues and creative solutions. We collect the required data and then develop innovative solutions that resolve the odor issues at the lowest possible capital and operating cost. We pride ourselves on staying current with the latest odor control technological advances and take great care to remain unbiased and completely independent when it comes to odor control equipment vendors and manufacturers. This allows us to select, size and recommend the system that best fits every situation.

As a recent example, WEA successfully designed Louisville MSD's first oxygen injection system to mitigate H2S and corrosion in the Ohio River Force Main (ORFM). This system has been in service for over two years now and has provided excellent performance. Additionally, WEA designed an air treatment system for an ARV on the ORFM that is

located at the Botanical Gardens parking lot. This system is also providing excellent performance. WEA would encourage LFUCG to visit these installations and speak to MSD staff about their performance.

WEA is a hands-on consulting firm. We have our own equipment and conduct all our own field testing. The experience we gain by being in the field is critical to the success of our projects. WEA has completed hundreds of odor control studies and designs for wastewater treatment facilities and collection systems across the country. We know what works and we also know what doesn't; our experience has taught us a thing or two over the years.

Our team will be utilizing air dispersion modeling for this project. We will be using AERMOD, which is the EPA preferred model for near field sources. We have two fully trained modelers on staff who have completed hundreds of models. Modeling will be used to predict the off-site odor impacts from each odor source and to evaluate odor mitigation alternatives. This allows us to identify the most efficient and cost-effective odor control solutions without spending more than is necessary. Modeling can also be used as an effective tool to convey odor control plans and efforts to the public.

Jim Ross, PE will serve as the Project Manager for this project. Jim has served as Project Manager for numerous odor control projects and is well known as an expert in his field, having spoken at local and national conferences. Jim is located in Louisville and will be intimately involved in this project. Bruce Koetter will also be involved in this project, bringing his 33 years of odor control experience as well as his familiarity with both plants.



PROJECT BACKGROUND

LFUCG has experienced an increasing number of sanitary sewer odor complaints over the past several years. Complaints have occurred throughout the year but have escalated dramatically between August and November. The source of the odors are typically associated with the two treatment plants but are also likely associated with the collection system where long detention times are forming liquid sulfides, leading to the release of H₂S and odors.

LFUCG is not alone in this experience. WEA has been working with clients across the country who have also seen a significant increase in odor complaints. Locally, Louisville MSD is currently also experiencing tremendous pressure related to odor complaints. Being a good neighbor requires more effort than it has in the past due to a less tolerant public toward odors. Public pressure can be overwhelming, and it is important to be able to develop and communicate a plan to the public that provides quick action and a long-term plan.

OVERALL APPROACH

The team will assist LFUCG to develop and implement a proactive odor control program which effectively prioritizes odor sources and develops short-term and long-term solutions to mitigate those sources. Our overall approach ensures that the following LFUCG's goals and objectives are met:

Objective #1- "Air quality treatment control processes we are currently using are working effectively."

WEA has conducted hundreds of odor control system evaluations and has been asked to teach on this topic at the national WEFTEC conference (Ross, Jim P., "How to Conduct a Comprehensive Checkup on Your Odor Control System", WEFTEC Odor Control Workshop, New Orleans, LA, September 2016). We have all the equipment and expertise needed to effectively evaluate each system. WEA has hands-on experience with every odor control system at both plants.

Depending on the odor control technology, the evaluation of an odor control system can be quite detailed. However, in general, odor control systems are required to do two things- capture foul air and treat foul air. Therefore, effective odor control systems must do both (maintain a negative pressure at the odor source and provide excellent odor removal).

The effective capture of foul air is typically dependent on airflow which is determined during the original design. Therefore, if the original design parameters are correct, then the field-tested airflows can be simply compared to the original design to ensure that they match. However, WEA also recommends field testing to verify that the original design airflows are sufficient for maintaining a negative pressure at the source. Historically, this has been done using smoke testing but WEA prefers to now use differential pressure monitors which are widely available. The benefit of differential pressure monitors is that they measure and record pressure over a period of time which capture pressure data under differing conditions such as flow variations, hatches being opened/closed, or doors being opened/closed.

Testing the effective treatment of foul air is focused on the odor control equipment and generally includes measuring airflow, pressure across the fan, pressure across the media, H₂S removal, and odor removal. This work has already begun under the emergency PO which helped to identify the early action items included in this RFP.

The existing odor control systems at the Town Branch and West Hickman WWTP's are currently comprised of two technologies- carbon adsorption and chemical scrubbing. These technologies have been around a long time and can be effective in the right application. However, the drawback to these is that carbon is quickly exhausted when H₂S is moderate to high and chemical scrubbing requires the handling and storage of hazardous chemicals.



Odor Control System Testing Town Branch WWTP

Objective #2- "Program maintains a system-based plan that routinely assesses vulnerabilities and proactively implements solutions to those vulnerabilities."

A proactive odor control plan is essential for staying ahead of the complaints. Our team will assist LFUCG with the development of this plan which would include the collection system and treatment plants.

On the collection system side, WEA can provide site-specific analysis and recommendations to ensure that odors are effectively treated. WEA is currently assisting Louisville MSD and the city of Jeffersonville, IN to evaluate their chemical feed programs. Both of these programs use calcium nitrate like LFUCG (Louisville uses Evoqua and Jeffersonville uses Aulick).

Sharon Worley, PE heads this up who was a senior Engineer at Louisville MSD for nearly 30 years. This work includes:

- Development of an SOP
- Establishment of H2S limits at control points
- Evaluation of chemical dosages
- Evaluation of chemical effectiveness
- Review and input regarding vendor reports
- Prioritization of chemical feed locations
- Lab testing of chemical to verify composition

WEA also assisted Jeffersonville in developing an RFP to rebid their chemical feed program to tailor it to their needs. This work is helping these communities to catch small issues before they become big issues.

Assessing vulnerabilities in the collection system should also include the evaluation of equipment lifespan, encroachment due to development, and new facilities such as pump stations with their associated ARVs and discharge points. Low pressure sewer systems are also becoming more common in new developments and have their own set of potential odor concerns.

On the treatment plant side, odor control systems are notoriously forgotten about. Unfortunately, WEA often finds systems that are no longer operating as intended and end up requiring major repairs or replacement to get them up and running again. Therefore, a robust O&M program for the existing equipment is critical. Detailed maintenance records should be kept for each system, which helps to identify issues before the odor complaints start. Simple things like a broken fan belt, a frozen pipe, a non-greased bearing, etc...can lead to a major repair

and significant downtime. In addition to the O&M plan, the following should also be considered:

- Annual third-party odor control system checkup (WEA provides these services)
- Capital asset plan for replacement of systems nearing the end of their useful life
- Consideration of process changes at the plant
- Consideration of odor control in the design of new facilities
- Odor risk assessment of potential new developments

Objective #3- "Performance monitoring equipment which validates the applicable elements of items 1 and 2 are installed and maintained."

There are many parameters that can be monitored on odor control systems, but the most critical would be to verify that the system is removing H2S and moving air.

WEA has experience designing multiple types of H2S monitoring systems. There are several manufacturers that offer systems, including Acrulog, Odalog, MSA, and Aztek. These instruments can be permanently installed and connected back to SCADA for continuous monitoring. They all require regular calibration and servicing and each system has its own pros and cons.

Variables to consider include H2S range, required accuracy, system pressure, distance from equipment, and electrical hazard classifications. The picture to the right is of an Acrulog H2S monitoring system that WEA designed for a two-stage odor control system in 2023.



Verification of airflow can be accomplished using a pressure switch, fan rotation sensor, or VFD monitoring.

Objective #4- "The program elements are effectively communicated to the public so that a consistent means of public engagement and participation is achieved."

Public engagement and participation are critical factors to the success of this project. It is assumed that LFUCG will be the forward-facing entity in this process. Our team will work with LFUCG staff to develop an Odor Control Communications Plan.

Additionally, our team will provide the following as requested in this RFP:

- Four (4) recorded project update presentations suitable for posting on YouTube
- Two (2) town hall styled meetings with the public held within the same week (venue secured by Lexington).

Our team has experience presenting odor control plans in similar venues and understands the associated challenges. Information from the modeling is especially helpful in communicating to the public.

SITE-SPECIFIC APPROACH

Site Specific Risk #1- Town Branch WWTP

The odor control systems at the Town Branch WWTP are all carbon adsorption systems. A summary of each of the systems along with the performance results of recent H2S monitoring is included in the table below.

Location	H2S Measurement	H2S Removal	Odor Control Technology	Odor Control System Age
Town Branch WWTP	ppm	%		years
Headworks OC Inlet	6.5	47.7	Carbon	25
Headworks OC Outlet	3.4			
S Primaries OC Inlet	20	94.0	Carbon (Regenerated)	2
S Primaries OC Outlet	1.2			
N Primaries OC Inlet	14	53.6	Carbon	2
N Primaries OC Outlet	6.5			
Scum Facil. OC Inlet	1.2	99.8	Carbon	0.5
Scum Facil. OC Outlet	0.002			
Thickeners OC Inlet	0.55	98.0	Carbon	4
Thickeners OC Outlet	0.011			
Primary Effluent PS	0.18	No Odor Control	No Odor Control	No Odor Control
Solids Building Exhaust	76 (fan off)	No Odor Control	No Odor Control	No Odor Control

In general, WEA typically does not recommend carbon adsorption when average inlet H2S concentrations are >5 ppm due to the need for frequent media replacement and/or regeneration. Higher concentrations tend to make biological technologies more cost effective. In this case, the North and South Primary systems are treating H2S concentrations much higher than 5 ppm and are identified as early action items for replacement as described in Appendix B of the RFP. Our current approach to these two systems is to replace them with bioscrubbers. We have extensive experience designing biological systems so you can rest assured that we will do it right. Our team will also evaluate the feasibility of relocating the existing carbon systems to the West Hickman WWTP to replace the existing systems at the Thickeners which are similar in airflow and vessel size (additionally, the H2S monitoring recently conducted revealed concentrations much lower than the initial site visit, indicating that carbon may be a good fit for the WH Thickeners). If that is not feasible, then they may be able to be used as a second stage polisher to the bioscrubbers.

Our team will provide the following, specific actions

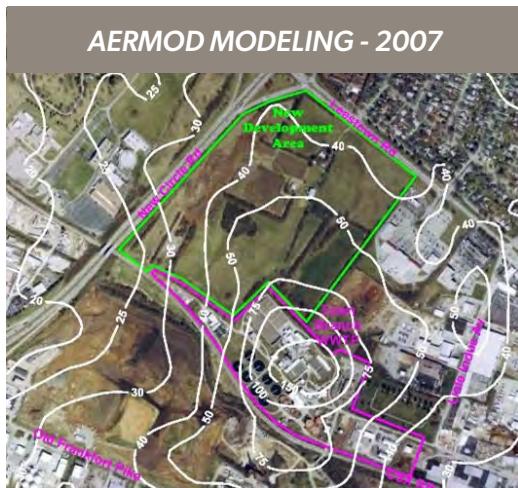
related to this site as outlined in the RFP:

 1. The installation of equipment monitoring that records inlet and exhaust H2S readings for all current and future odor control equipment.

Please see a detailed description of this task in our overall approach section.

 2. The development and calibration of an AERMOD air dispersion model that predicts how odor can migrate off-site within a three-mile radius of the plant. The model should take into account the impact of seasonal changes and temperature inversions.

WEA has developed hundreds of AERMOD odor dispersion models. WEA did the modeling for the Town Branch WWTP back in 2007, prior to the development of the land to the north of the plant. The results of that model indicate that the highest concentration of odor tended to migrate north. A new model will be developed for the plant using the most recent year of meteorological data and the newest odor data. The model includes weather data for every hour of the year, so it will include the impact of seasonal changes and temperature inversions.



 3. Evaluate stack heights and their impact on each piece of equipment's ability to disperse odor safely into the atmosphere.

The effectiveness of increasing stack heights will be evaluated using the AERMOD dispersion model developed above. WEA's experience is that the benefit of increasing stack height is location dependent, with some facilities benefiting more than others. This

is likely due to the surrounding terrain and weather. Increasing exit velocity should also be considered and can also be modeled.

4. Complete an odor risk assessment for the solids processing building.

The Solids Processing Building does not currently have odor control. Additionally, the exhaust fan is off for the winter. Testing revealed high concentrations (76 ppm) of H₂S in the centrifuge room which will escape from the building. This facility will be evaluated with further testing to determine the potential odor risk and alternatives for treating that odor.

5. Complete an odor risk assessment for the primary effluent pump station discharge channel.

The recent testing did not reveal this to be a significant source of odor. However, we are in cool weather, and it is assumed that this location could become much more odorous during warm weather. Testing should be conducted in the summer months to verify.

6. Other investigations and analysis as directed.

Our team will conduct other investigations and analysis as directed.

Site Specific Risk #2- West Hickman WWTP

The odor control systems at the Town Branch WWTP are comprised of two carbon adsorption systems and two chemical scrubbers. A summary of each of the systems, along with the performance results of recent H2S monitoring, is included in the table below. The Gravity Thickener and Aerated Sludge Holding (ASH) tanks systems are identified as early action items for replacement as described in Appendix B of the RFP. Our current approach for the ASH Tank is to replace the chemical scrubber with a bioscrubber (located outside, likely to the east of the chemical scrubber building). As discussed previously, we have extensive experience designing biological systems so you can rest assured that we will do it right. The H2S monitoring data for the Thickener Tanks revealed very low H2S (much lower than the original site visit). Therefore, our current approach is to evaluate the feasibility of relocating the existing carbon systems from the Town Branch WWTP Primaries to the West Hickman WWTP Thickeners (they are close to the same airflow and size). If that is not feasible, then we would propose to replace them with new carbon systems.

Location	H2S Measurement	H2S Removal	Odor Control Technology	Odor Control System Age
West Hickman WWTP	ppm	%		years
Headworks OC Inlet 1	0.7	28.6	Carbon	3
Headworks OC Outlet 1	0.5			
Headworks OC Inlet 2	0.46	41.3	Carbon	3
Headworks OC Outlet 2	0.27			
Thickeners OC Inlet	0.019	100	Carbon	>25
Thickeners OC Outlet	0			
ASH Tank Inlet	42	23.8	Wet Scrubber	9
ASH Tank Exhaust	32			
Solids Building Exhaust	2.2	Not Measured	Wet Scrubber (shutdown for winter)	9
Recycle PS Outlet	50	No Odor Control	No Odor Control	No Odor Control

Our team will provide the following, specific actions related to this site as outlined in the RFP:

 **1.** The installation of equipment monitoring that records inlet and exhaust H2S readings for all current and future odor control equipment.

Please see detailed description of this task in the overall approach section. As a point of clarification, our Team will provide the design of the system, but the installation will be by others.

 **2.** The development and calibration of an AERMOD air dispersion model that predicts how odor can migrate off-site within a three-mile radius of the plant. The model should take into account the impact of seasonal changes and temperature inversions.

WEA has developed hundreds of AERMOD odor dispersion models. A new model will be developed for the plant using the most recent year of meteorological data and the newest odor data. The model includes weather data for every hour of the year, so it will include the impact of seasonal changes and temperature inversions.

 **3.** Evaluate stack heights and their impact on each piece of equipment's ability to disperse odor safely into the atmosphere.

The effectiveness of increasing stack heights will be evaluated using the AERMOD dispersion model developed above. WEA's experience is that the benefit of increasing stack height is location dependent, with some facilities benefiting more than others. This is likely due to the surrounding terrain and weather. Increasing exit velocity should also be considered and can also be modeled.

 **4.** Complete an odor risk assessment for the recycle pump station.

The recycle pump station does not currently have odor control. Testing revealed high concentrations of H2S in the wet well (50 ppm) which likely exhausts through the vent. This location will be evaluated with further testing to determine the potential odor risk and alternatives for treating that odor. This location will likely require a small biological system to treat this level of H2S.

 **5.** Other investigations and analysis as directed.

Our team will conduct other investigations and analysis as directed.

Site Specific Risk #3- Town Branch WWTP Service Area Hot Spots

According to the RFP, the following three specific areas are identified as odor complaint hot spots which require specific attention:

Townley Neighborhood

This area is located to the northeast of the plant. Unfortunately, looking back at the 2007 modeling, this area is in the direct path of the highest concentration of odors emanating from the plant. Mitigating odor sources at the plant will likely reduce odors in this area.

Meadowthorpe Neighborhood

This neighborhood is also to the northeast of the plant, but further away than the Townley neighborhood. Although farther away, previous modeling does predict odors in this area. In addition to the plant improvements, our team will coordinate smoke testing for this area to identify the potential existence of improper sewer connections. It is assumed that LFUCG will contract directly with a contractor to conduct the testing and provide all public notifications. Our Team will coordinate the testing and evaluate the results.

Lisle Industrial/Forbes Road Industrial Area

The RFP requires the consultant to coordinate assessments of all occupied parcels currently not connected to the public sewer system to obtain a better understanding of how these buildings function and to validate their potential contribution to odor complaints.

Our team will coordinate these assessments to investigate the potential odor contribution of these facilities. Similar to the smoke testing described above, it is assumed that LFUCG will contract directly with a contractor to conduct any smoke testing and provide all public notifications. Our team will coordinate the testing and evaluate the results. LFUCG will accompany our team during any work on private property.

Site Specific Risk #4- Cumberland Hill and Woodfield Neighborhood Collection System

The following three specific areas are identified as odor complaint hot spots which require specific attention:

Woodfield Neighborhood

The Woodfield neighborhood is located to the northeast of the West Hickman WWTP. WEA has not conducted modeling for this facility, but the prevailing winds are likely from the southwest, with the highest odors likely traveling northeast. Mitigating odor sources at the plant will likely mitigate odors in this area.

In addition to the plant improvements, our team will coordinate smoke testing for this area. It is assumed that LFUCG will contract directly with a contractor to conduct the testing and provide all public notifications. Our team will coordinate the testing and evaluate the results.

Cumberland Hill Neighborhood

Similar to the Woodfield neighborhood, the Cumberland Hill neighborhood is located to the northeast of the West Hickman WWTP. WEA has not conducted modeling for this facility, but the prevailing winds are likely similar with the highest odors likely traveling northeast. Mitigating odor sources at the plant will likely mitigate odors in this area.

In addition to the plant improvements, our team will coordinate smoke testing for this area. It is assumed that LFUCG will contract directly with a contractor to conduct the testing and provide all public notifications. Our team will coordinate the testing and evaluate the results. Our team will also evaluate the feasibility of installing P-traps on the eight-inch collector sewers serving the neighborhood.

Site Specific Risk #5- West Hickman 1 Trunk Sewer System

The RFP states that the West Hickman 1 Trunk Sewer is potentially the greatest source of odors aside from the plant itself. The trunk receives flow from two Class A pump stations and a large gravity service area. There is concern that this sewer trunk is releasing odors at various locations, leading to complaints.

Our team will evaluate this theory by conducting an odor study for this portion of the system. We have extensive experience conducting collection

system studies. We would recommend the following approach for this section of the sewer trunk:

- Review of existing maps and associated flows
- Review of chemical feed at pump stations (if applicable)
- Liquid sulfide testing at select locations
- H₂S monitoring at select locations
- Pressure monitoring at select locations

The data obtained from the above testing will allow us to determine if the sewer is becoming pressurized and where the odors are escaping coming from. If the trunk sewer is being pressurized, then our Team can evaluate options for treatment which would include:

- Extracting foul air from the trunk and conveying it to an odor control treatment system. This test would include installing a temporary fan at a select location and pulling air while monitoring the pressure in the trunk.
- Evaluating chemical feed alternatives at the associated pump stations.

Site Specific Risk #6- Various Class A Sanitary Pump Stations

The RFP states that the following pump stations have the most history as odor sources/or odor generators.

Pump Station	Address	Station Odors	ARV/Discharge Odors
East Hickman	3316 Buckhorn Drive	●	●
Lower Town Branch	3231 Leestown Road	●	●
South Elkhorn	2500 Bowman Mill Road	●	●

WEA has conducted numerous odor control evaluations and designs for pump stations and associated ARVs and discharge points. Typically, odor control for station odors is done through air treatment and odor control for ARVs and discharge odors is done through chemical feed systems. However, WEA has also designed a successful air treatment system for a sensitive ARV located at the Botanical Gardens in Louisville, so that can also be an option.

Our team will start by conducting liquid phase and vapor phase testing at the wet well, force main discharge, and ARVs. The testing will provide the data we need (such as H₂S, sulfide concentration,

temperature, and pH) to evaluate chemical feed alternatives, dosages, and costs. Depending on the results of the testing, chemical feed alternatives may include oxygen injection, calcium nitrate, magnesium hydroxide, and iron salts. WEA recently designed an oxygen injection system for Louisville MSD which treats flow in the Ohio River Force Main. This system was found to be more cost effective than other alternatives and has been working successfully for over two years now. LFUCG may wish to visit this installation and speak to MSD staff regarding this option.



In addition to the testing described above, odor testing and modeling can be conducted for each station to provide data for the evaluation of air treatment systems. Depending on the data, the following alternatives may be considered:

- Biofiltration
- Bioscrubbing
- Carbon adsorption
- Chemical scrubbing
- Dispersion options (such as stack height or high velocity fans)

Site Specific Risk #7- Key Sanitary Manhole Carbon Inserts Locations

The RFP states that Lexington is currently utilizing CHEMTREAT as an odor control method at key manholes and ARVs.

Our team will conduct the following activities:

- Pressure monitoring in the sewer
- H2S monitoring in the sewer
- H2S testing above the insert to determine its performance
- Evaluate other locations that may benefit from this technology
- Evaluate alternative technologies

Our team is familiar with carbon inserts but does not specifically have experience with CHEMTREAT. In general, we have found that carbon does not perform well in wet environments, but testing will provide a better picture of performance.

Other Risk Factors Requiring Evaluation

The RFP states that Lexington staff engaged numerous citizens who presented questions that remain unanswered because they require more detailed evaluation. In general, the questions relate to:

- Can water be added to the sewer system during dry weather flows?
- Can something be done to mitigate the increase of odors during the fall?
- Can something be done to mitigate the ARV odors due to the frequent cycling of pumps?
- Is the current chemical feed system program effective and what can be done to make it better?

Our team will evaluate each of these questions and provide answers which can be implemented and/or relayed to the public.





SECTION #2

Project Team



PROJECT TEAM

The team assembled for this project brings a wealth of design experience covering all disciplines of this project. Our team will partner closely with LFUCG to understand your needs, recognize the challenges of your project, and pull from our deep bench of resources to deliver the project successfully. We have demonstrated success on previous projects, and bring all of our resources and innovation to LFUCG to deliver your projects in a timely and cost-effective manner.

Organizational Chart



LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT

PROJECT MANAGER

Jim Ross, PE

QA/QC TEAM

Pete Daukss, PE - Odor Control
Bruce Koetter, PE - Odor Control
Brent Bode, PE - Design

FAST TRACK CAPITAL PROJECTS

Herb Lemaster, PE - Design Manager
Jim Ross, PE - Process Design
Brent Bode, PE - Process Design Support
Jason Burkett, PE - Structural
Michael Sutherland, PE - Mechanical/HVAC
Ryan Rathfon, PE - Construction Management

ODOR CONTROL SAMPLING, EVALUATION, & ALTERNATIVES

Jim Ross, PE
Lee Blakeman, PE
Sharon Worley, PE

SUBCONSULTANTS

Magna Engineers (WBE) - Electrical Engineering

Salt River Engineering (VBA) - Cost Estimating

Key Staff Availability

Team Member	Firm	% Of Time Available	Location
Jim Ross, PE	Webster Environmental	50%	Louisville, KY
Bruce Koetter, PE	Webster Environmental	30%	Louisville, KY
Lee Blakeman, PE	Webster Environmental	40%	Louisville, KY
Sharon Worley, PE	Webster Environmental	50%	Louisville, KY
Herbert Lemaster, PE	Tetra Tech	30%	Lexington, KY
Jason Burkett, PE	Tetra Tech	20%	Louisville, KY
Brent Bode, PE	Tetra Tech	20%	East Lansing, MI
Pete Daukss, PE	Tetra Tech	10%	East Lansing, MI
Michael Sutherland, PE	Tetra Tech	30%	Orlando, FL
Ryan Rathfon, PE	Tetra Tech	40%	Lexington, KY

Our Outstanding Team Are:

- Kentucky Based Odor Control Experts
- Intimately Familiar With the Existing Odor Control Systems
- 800 Completed Odor Control Projects
- WEA & Tetra Tech Have Worked Together 15+ Years

World-Class, Award-Winning Odor and Corrosion Control Experts

Local Design and Construction Professionals Familiar to LFUCG

Cost Savings and Schedule Delivery

TEAM QUALIFICATIONS OVERVIEW

WEA has carefully selected the team to complete this project for LFUCG. The team selection was based around completing the objectives of world class odor and corrosion control, local service, and beating LFUCG's schedule and budget expectations. The description of our credentials to accomplish this is described in the following sections.

World-class, Award-winning Odor and Corrosion Control Experts

WEA's singular focus as a company is to evaluate, conceive, design, and construct municipal odor and corrosion control projects. In their 40-years of operation, WEA has completed hundreds of odor and corrosion control projects. This emphasis has unequivocally made them the world's expert on odor and corrosion control. LFUCG can be assured that all of the challenges that will be encountered on the LFUCG project have been seen and solved by WEA on past projects.

WEA and Tetra Tech elected to continue our long relationship to complete this project. Tetra Tech and WEA have worked together numerous times to deliver projects that exceed our clients' expectations.

Tetra Tech is one of the largest engineering consultants and has built the business around studying, designing, and conducting solutions in the Water industry. *Engineering News-Record* has

recognized this expertise and has ranked Tetra Tech **Number One in Water** for 20 consecutive years.

Tetra Tech has also completed some of the region's and country's most complex odor control projects. The team of WEA and Tetra Tech provides additional resources and problem-solving capacity than either team alone.

Our long association means that we seamlessly work together to deliver complete and successful projects.



Jim Ross, PE

Process Design / Odor Control

Mr. Ross is the current President of Webster Environmental Associates, Inc. (WEA). Mr. Ross transitioned from CH2M HILL to WEA in 2012 and has managed numerous collection system and treatment plant odor control projects locally and throughout the country. These have included odor studies, odor dispersion modeling, and odor control system design. Mr. Ross is a well known expert in his field and has spoken multiple times at local and national conferences. Mr. Ross is a licensed professional engineer in Florida, Michigan, Kentucky, Indiana, Washington, South Carolina, and Colorado.



PROJECT RELEVANCE

Multiple Collection System Odor Control Studies and Designs,

Tohopekaliga Water Authority, Kissimmee, FL. Project Manager. Project manager for multiple odor studies and odor control system designs throughout the collection system for the Tohopekaliga Water Authority (TWA). Odor studies included extensive field testing and laboratory analysis, and odor control alternatives evaluations to determine the most cost-effective option for controlling odors in the problem areas. WEA was also selected to design each of the systems to effectively mitigate the offsite odors. WEA has successfully served as TWA's odor control consultant for over 10 years.

Sandhill Water Reclamation Facility Odor Control Study and Design,

Kissimmee, FL. Project Manager. Project manager for a plant wide odor study and odor control design. The study was performed to rank all odor sources at the facility and to evaluate the performance of the existing headworks odor control system. The study included testing for hydrogen sulfide, reduced sulfur compound analysis, odor panel analysis, and odor dispersion modeling. WEA was selected to design two new odor control systems for the plant which were constructed in 2019.

10th Street Pump Station Odor Control Study and Design, City of

Jeffersonville, Jeffersonville, IN. Project Manager. Odor Control System

Design: Design of an 11,275 cfm biofilter for a 50 MGD pump station located adjacent to the main entrance to the city. The system captures and treats foul air from the screening facility, grit tanks, and wet wells. Conducted services during construction and odor control system performance testing.

Borough of Conshohocken WWTP Odor Control Study and Design,

Borough of Conshohocken, Conshohocken, PA. Project Manager.

Project manager for a plantwide odor study at the Borough of Conshohocken Wastewater Treatment Plant (WWTP) which is owned and operated by Borough of Conshohocken. Based on the study, WEA was selected to design a plantwide odor control system which also included aluminum tank covers and extensive ductwork. The new system captures and treats foul air from the headworks, grit tank, aeration tanks, and solids handling facility.

Education

BA, Biology, Florida Atlantic University, 1995

MS, Environmental Engineering, University of South Florida, 2008

Registrations/ Certificates

Professional Engineer: KY, SC, IN, WA, CO, FL, MI

Office Location

Louisville, KY

Years of Experience

15

Bruce Koetter, PE

Odor Control QA/QC

Mr. Koetter has been designing air treatment systems for wastewater collection and treatment facilities since 1993. He has performed over 200 odor evaluations and designed all types of odor control systems ranging in size from less than 1,000 cfm to over 150,000 cfm. His experience also includes the management of construction for numerous industrial and municipal odor control system projects. Mr. Koetter is also author of several technical publications that have been presented at the national WEF Odor and VOC Specialty Conferences over the past several years.

PROJECT RELEVANCE

Philadelphia, PA. Project Manager. Project manager for design of 11,000 cfm odor control system for the gravity thickener facilities and a 27,000 cfm odor control system for the preliminary treatment facilities. The 11,000 cfm system is in operation and the 27,000 cfm system is currently under construction.

Louisville/Jefferson County, Ky. Project Manager. Project manager on numerous odor control projects for Louisville MSD over the past 20 years. Completed several odor evaluations, pilot projects and designs including major odor control designs at their six primary treatment plants and at more than ten (10) pumping stations. On-call services contract with MSD since 1997.

Milwaukee, WI. Project Manager. Project manager for the 300 MGD Jones Island WRF Odor Assessment, Modeling and Capital Improvement plan. WEA conducted two rounds of sampling and testing at the facility, sampling a total of 33 locations within the liquid and biosolids processing facilities. The samples were analyzed for odor detection threshold, reduced sulfur compounds, ammonia and H2S. The results were analyzed and used in air dispersion modeling. The testing and modeling results were then used to develop six Business Case Evaluations (BCE). Each of these BCEs were evaluated and the recommendations were incorporated into the 50 Year Capital Improvement plan for the facility.

Conway, AR. Project Manager. Project manager for design of odor control improvements at the Tupelo Bayou WWTP in Conway, AR. Improvements include 14,000 cfm bioscrubber and 17,700 cfm carbon adsorber. The project is complete, and all systems are operational. The design project was preceded by an Odor Control Evaluation that identified and prioritized odor sources at the site.



Education

BS, Construction Engineering, Purdue University, 1985

Registrations/ Certificates

Professional Engineer: KY, KS, OH, PA, CA, AR, NJ, IA

Office Location

Louisville, KY

Years of Experience

33

Sharon Worley, PE

Collection System Odor Control

Ms. Worley joined WEA in 2022 as Senior Engineer after retiring from a 29-year career with Louisville Metropolitan Sewer District (MSD). She has significant experience with odor control and particularly with sewer collection systems, municipal wastewater treatment plants (WWTPs) and pump stations. She provides engineering services for odor control studies and designs plus municipal collections odor control management.



PROJECT RELEVANCE

While working for WEA:

- Developed Standard Operating Procedures for odor control in sewer collection systems for Louisville MSD and Jeffersonville, IN.
- Developed a system for prioritization of chemical feed in sewer collection systems for Louisville MSD and Jeffersonville, IN.
- Developed a Quarterly Summary of Odor Control progress for Management reporting for Louisville MSD.
- Developed RFP for Calcium Nitrate Solution Supply for Jeffersonville, IN.

While Working for Louisville MSD:

- Managed most of MSD's Odor Control design/construction projects at MSD's five WWTPs and multiple pump stations for over 10 years. Odor Control projects included studies and design/construction projects (Biotrickling Scrubbers, Carbon Scrubbers, Biofilters, etc.) as well as air dispersion modeling & compliance reporting.
- Helped to develop MSD's first Odor Control Master Plan. Work included multiple meetings with Operations and with Management to incorporate their concerns and to communicate testing results and recommendations.
- Helped to develop MSD's first Federally Enforced District Origin Operating Permit (FEDOOP) application for Kentucky's largest WWTP. Work included extensive testing, ToxChem modeling, and multiple review meetings with Louisville Metro Air Pollution Control District.
- Managed consultants for the study of alternatives for MSD's Ohio River Force Main (ORFM) Odor and Corrosion problem. Recommended and managed the design of MSD's first Oxygen Injection System for the ORFM.
- Prepared the RFP/specifications, evaluated submittals, then managed MSD's first Full-Service Odor Control (FSOC) Contract for their sewer collection system.
- Managed community outreach regarding odor concerns at MSD's West County WWTP. Work included engaging and training community stakeholders to provide neighborhood odor information.

Education

MS, Civil Environmental Engineering, University of Illinois, 1985

Registrations/ Certificates

Professional Engineer: KY

Office Location

Louisville, KY

Years of Experience

38

Lee Blakeman, PE

Odor Control Sampling, Evaluation, & Alternatives

Mr. Blakeman transitioned from CH2M HILL to Webster Environmental Associates, Inc. (WEA) in 2016. His responsibilities include air treatment system design, air sampling and monitoring, as well as wastewater treatment plant and collection system odor evaluations. His experience includes completing odor studies at wastewater treatment plants, industrial facilities and within collection systems. He has also designed numerous odor control systems and managed odor control projects from the study phase all the way through the construction phase and startup. Prior to joining WEA his experience included design services and services during construction for municipal wastewater pump stations and treatment facilities. His experience also includes hydraulic modeling, equipment selection, hydraulic calculations, facility plans, construction management, and onsite inspection on large wastewater treatment plant expansions. Lee is a licensed professional engineer in Kentucky, Montana and Idaho.



Education

BS, Civil & Environmental Engineering, University of Louisville, 2011

MS, Civil & Environmental Engineering, University of Louisville, 2012

Registrations/ Certificates

Professional Engineer: KY, MT, ID

Office Location

Louisville, KY

Years of Experience

12

PROJECT RELEVANCE

Bozeman, MT. Conducted an odor evaluation and performance evaluation at the FCWSD treatment plant and made recommendation for improvements. Worked directly with FCWSD to develop a design for the recommended odor control improvements for mitigating offsite odors. Construction began on improvements Spring 2023.

Meridian, ID. Performed an odor control study at the City of Meridian WRRF in 2020 to identify odor sources and quantify odor emissions from each source. Performed odor dispersion modeling to determine the odor impact that the WRRF and each odor source has on the surrounding community. Evaluated odor control alternatives and made recommendations for odor mitigation to the City, including size of recommended systems and budget level construction cost estimate.

Conway, AR. Project Designer. Designer on this project at the Tupelo Bayou Wastewater Treatment Plant. Designed odor control systems for the primary clarifiers, digesters, gravity belt thickener building and aeration basin influent channels. Odor control system designed included a 14,000 cfm bioscrubber for the primary clarifiers & influent channel and a 17,700 cfm carbon adsorber for the digesters and gravity belt thickener building. The \$3.2 million construction of this project was completed in January 2019. No odor complaints have been received since project completion.

Herbert Lemaster, PE

Capital Projects Design Manager

Mr. Lemaster serves on as a Senior Project Manager on various civil and environmental projects. He is responsible for Client coordination, planning, preliminary evaluations, analysis and design, writing specifications, developing contract documents and cost estimates, preparation of construction drawings, construction administration, and construction engineering. Mr. Lemaster has worked on many wastewater, water, solid waste, landfill, and environmental projects. His wastewater-related projects include rehabilitation evaluations of wastewater collection systems, capacity studies, wastewater treatment plant design, design of gravity sewer systems, pump station design, and wet weather storage facility design.



PROJECT RELEVANCE

West Hickman Headworks and Wet Weather Storage Facility – Phase 1, Lexington-Fayette Urban County Government, KY.

Project Manager & Senior Engineer. Design of the wet weather storage facility and improvements to the headworks of the existing treatment plant. The project includes new screening facilities, new grit facilities, 70.0 MGD influent pump station, 80.0 MGD wet weather pump station, a 22.0 MG storage tank, recycle pump station, upgrades to the non-potable water system, odor control facilities, stormwater management facility, a vehicle bridge, and all associated piping and electrical. The work involved hydrologic and hydraulic modeling, surveying, and geotechnical evaluations. The project required significant coordination of civil, structural, mechanical, electrical, instrumentation, and plumbing disciplines in the preparation of the design drawings and specifications. Full time resident project representatives and construction administration was provided during the construction phase of the project.

West Hickman Biological Phosphorus Removal (BPR) Improvements, Lexington-Fayette Urban County Government, KY.

Project Manager & Senior Engineer. Evaluation of existing process and development/analysis of alternatives for improvements in process effectiveness and efficiencies for a 70 MGD treatment facility then design of selected improvements. The construction project includes rehabilitation of existing BPR basins, installation of 32 submersible mixers, installation of new online nutrient process monitoring systems, installation of 8 associated sampling pumps, installation of 4 sodium aluminate pumps, and all associated piping and electrical.

Central Boone County Conveyance, Sanitation District No. 1, KY. Project Manager. Design and construction of this facility. The design of includes a 1.8 MG wet weather storage tank, 7.3 MGD wet weather pump station, and all associated structures piping. The work involved hydrologic and hydraulic modeling, surveying, and geotechnical evaluations. The project required coordination of civil, structural, mechanical, electrical, and instrumentation disciplines in the preparation of the design drawings and specifications.

Morehead Wastewater Treatment Plant Expansion, Morehead Utility Plant Board, KY.

Project Manager. Construction administration on the expansion of an existing treatment plant from 2.5 MGD avg./5.0 MGD peak capacity to 5.0 MGD avg./10.0 MGD peak capacity. This project included construction of two 105-foot-diameter clarifiers and return activated sludge/waste activated sludge (RAS/WAS) pump station, new influent screening facility with mechanical screens, influent and effluent pumps, conversion of the existing primary clarifier to new RAS reaeration basins, conversion of the existing anaerobic digestor system to a two-stage Autothermal Thermophilic Aerobic Digestion system, odor control including biofilter system, new ultraviolet system for disinfection, and construction of a new biosolids handling facility including new belt filter presses.

Education

BS, Civil Engineering,
University of Kentucky, 1990

MS, Civil Engineering
(Environmental), University
of Kentucky, 1992

Registrations/ Certificates

Professional Engineer: KY,
OH

Land Surveyor-in-Training:
KY

Troxler Nuclear Gauge
Certification

Office Location

Lexington, KY

Years of Experience

33

Pete Daukss, PE

Odor Control QA/QC

Mr. Daukss has been involved with biosolids technologies related to municipal wastewater treatment facilities for more than 40 years. During this period, he has participated in the evolution from the most basic disposal strategies to bioenergy production and resource recovery for sustainable management. Prominent biosolids technologies he has evaluated include advanced digestion, composting, pasteurization, thermal processing, and drying. Mr. Daukss' industrial waste treatment projects include biological treatment, physical-chemical treatment, land application, and residuals management technologies. He has extensive experience in all aspects of wastewater treatment technology and biosolids management. His design and construction projects include activated sludge, fine pore aeration systems, biological nutrient removal, disinfection, oxidation ditches, sequencing batch reactors, and biosolids thickening, dewatering, storage, advanced stabilization, digestion, and incineration.



Education

BS, Chemical Engineering,
University of Michigan, 1976

MS, Water Resources
Engineering, University of
Michigan, 1977

MS, Chemical Engineering,
University of Toledo, 1980

Registrations/ Certificates

Professional Engineer: MI, FL

Office Location

East Lansing, MI

Years of Experience

45

PROJECT RELEVANCE

Odor and Corrosion Control Design, Macomb Interceptor Drain Drainage District, MI. QA/QC. Odor complaints at three sanitary sewer system locations and one for pipe corrosion resulted in a study that identified conceptual odor control solutions. Led complex design for Clinton Pump Station, Fraser Biofilter, odor complaints at 21 Mile and Garfield, and the North Gratiot Pump Station.

Clarifier and Aeration Improvements, Water Resource Recovery Facility, City of East Lansing, MI. Project Manager. Proposed project will improve primary and secondary clarifiers and the aeration system. Improvements will save approximately \$400,000 per year in electricity and operating costs mainly by replacing aeration blowers with a more energy-efficient blower technology and converting aeration system from coarse to fine bubble diffusers. An approximate 70% reduction in power and operating costs for new infrastructure assets compared to existing infrastructure. \$31-million-project will be operational in 2023.

WWTP Solids Incinerator Air Emissions Control, City of Warren, MI.

Project Engineer. Developed alternatives to design an approach to comply with Clean Water Act regulations in relation to City's multi-hearth sewage sludge incinerator. Commissioned testing to determine pollutant characteristics in incinerator emissions and emissions downstream of scrubber system and determined an improved emissions control device needed to reliably meet 2016 control requirements. After researching scrubber technologies and interviewing manufacturers, the EnviroCare scrubber was chosen to reliably meet federal regulations. Worked with City to commission hazardous material inventory prior to bidding. Design work included specifying demolition of 40-year-old equipment, including specification for abatement of lead and asbestos. Prepared plans and specifications to obtain construction bids for the installation. Performed construction administration with daily observation performed by City staff. Project completed on-time to meet regulations and subsequent stack testing revealed completed scrubber treated emissions and met all regulatory requirements. Completed annual performance testing since 2016, each test successfully proving scrubber meets design and regulatory specifications.

Brent Bode, PE

Design QA/QC & Process Design Support

Mr. Bode is experienced in the planning, evaluation, design, and construction of water and wastewater treatment facilities and pump stations. He has been involved in the retrofit and new construction of more than 30 water and wastewater treatment facility projects. His expertise lies in the production of and interpretation of contract documents and the use of computerized drafting, hydraulic calculations, specification writing, and developing opinions of probable project cost. He also has experience as onsite project engineer during construction.

PROJECT RELEVANCE

WRRF Improvements Design Phase, Delta Township, MI. Project Engineer. Expansion WRRF to change treatment process and increase peak capacity from 17 to 28 MGD. Project involves designing new headworks, influent pumping, grit removal, aeration, final clarifiers, tertiary filtration, and disinfection systems. Project includes 18,000 cfm odor control system at Headwork Building and 18,000 cfm system at Grit Building. A new controls//laboratory facility is also being constructed.

WWTP Improvements Phase I, Saline, MI. Project Engineer. Expansion WWTP to include new headworks, wet weather storage, primary and secondary clarifiers, aeration tank and blowers system, solids handling system and digester improvements. Project includes 12,000 cfm odor control system at Headwork Building.

Secondary Clarifier and Aeration Improvements, Water Resource Recovery Facility, City of East Lansing, MI.

Project Engineer. The proposed project will improve the primary and secondary clarifiers and the aeration system. The facility improvements will save approximately \$400,000 a year in electricity and operating cost mainly by replacing the existing aeration blowers with a more energy efficient blower technology and converting the aeration system from coarse bubble to fine bubble diffusers. This results in approximately a 70% reduction in power and operating costs for the new infrastructure assets compared to the existing infrastructure. This \$31 million project will be operational in 2023.

Water Pollution Control Aeration System Process Improvements, City of Flint, MI. Project Engineer/Process Design Lead. Aeration system process improvements for the 50-MGD WPC. Three of the four multi-stage centrifugal blowers within the blower building will be replaced with high-efficiency, high-speed turbo blowers sized to match the current air demand for treatment with a wider range of operation to provide a more efficient aeration system.

Water Resource Recovery Facility, Biodigestion with Combined Heat and Power, City of Grand Rapids, MI. Project Engineer. Design for new biodigestion facility including an anaerobic membrane bioreactor process for treatment of the concentrated liquid waste from commercial sources. Power generated from combined heat and power recovery system is utilized in the plant to offset power needs. Performed final design for construction documents.



Education

BS, Engineering
(Concentration in Civil),
Calvin College, 2001

Registrations/ Certificates

Professional Engineer: MI, IN

Office Location

East Lansing, MI

Years of Experience

23

Jason Burkett, PE

Structural

Mr. Burkett is a senior structural engineer who is experienced with many structural systems including: reinforced concrete, steel framing, composite steel, masonry, prestressed/precast concrete, tilt-up concrete panels, light-gage steel, timber, and aluminum. He has extensive experience designing, reviewing other's designs, and performing independent technical reviews for structural projects related to drinking water, wastewater, stormwater, solid waste, industrial, commercial, Department of Defense, hurricane shelters, high-velocity hurricane zones, health care, residential, education, aviation, marine construction, performing arts, roofing components, renovations, additions, and investigations. He leads several groups of structural engineers within Tetra Tech throughout the nation to ensure that quality standards are maintained for project deliverables. His attention to detail and wide variety of experience brings valuable perspective to each project he reviews or designs.



PROJECT RELEVANCE

Odor Control Stack Replacement, Southwest Reverse Osmosis WTP,

City of Cape Coral, FL. Structural QA/QC. Replaced odor control stacks with new 70-foot-tall stacks for improved dispersion and air quality. Structural design included new mat foundations for the odor stacks and new aluminum frame for the air ducts.

Reverse Osmosis WTP, City of Punta Gorda, FL. Engineer-of-Record.

Design of process structures and building for a new 4-MGD plant. Structural design included a new CMU building for the RO equipment, clearwell basin, degasification equipment support, chemical storage/containment slabs, and generator slab.

West Hickman Wet Weather Storage and WWTP Improvements,

Lexington-Fayette Urban County Government, Lexington, KY. Lead

Structural Engineer. Modeling and design of a 1.8-MG wet weather storage basin and associated diversion structure and pump station. Structures designed as cast-in-place concrete with a bid alternate design of a prestressed concrete ground storage tank for the storage basin.

Odor Control and Ultraviolet Process, Grand Haven WWTP, Grand

Haven, MI. Lead Structural Engineer. Design of a new concrete masonry unit building on top of an in-ground chlorine contact basin. Interior walls on one side of the chlorine contact basin were removed and new walls and a mat foundation were designed to accommodate the new ultraviolet process and equipment. Designed a new concrete masonry unit building to house the odor control blower and equipment. Several large diameter clarifier tanks were analyzed and modified to accommodate new pre-engineered aluminum flat covers. Renovated a sludge thickener tank to contain the odor control filter media and analyzed it to accommodate a new aluminum flat cover.

Education

BS, Civil Engineering, (Structures Emphasis), University of Central Florida, 2003

MS, Civil Engineering (Structures and Foundations), University of Central Florida, 2005

Registrations/ Certificates

Professional Engineer: KY, AZ, CO, FL, GA, ID, KS, MO, MT, NM, TX, VA, WY

Structural Engineer: IL, HI, OK

Office Location

Louisville, KY

Years of Experience

18

Michael Sutherland, PE, CEM, LEED AP

Mechanical / HVAC

Mr. Sutherland has 14 years of engineering and management experience in building mechanical systems for municipal, federal, commercial, and industrial clients. His specific design experience includes heating, ventilation, and air conditioning (HVAC), plumbing design, fire protection design, LEED design submission, drafting, and construction administration for water and wastewater treatment plants and various other projects.



PROJECT RELEVANCE

Nansemond Treatment Plant Advanced Nutrient Reduction Improvements, Phase II Design-Build, Hampton Roads Sanitation District, Suffolk, VA.

Mechanical Engineer. Project includes design, permitting, funding assistance, construction, testing, start-up, and training services to increase the treatment plant capacity from 30.0 to 50.0 MGD to treat combined wastewater flows from two service areas and meet the client's Sustainable Water initiative for Tomorrow (SWIFT) influent water quality targets for future work. The expansion includes a new influent distribution box, primary clarifier, primary effluent equalization tanks, aeration basins and blowers, secondary clarifiers, return activated sludge and nitrate recycle pumping, chlorine contact tank, primary gravity thickeners with integrated fermentation, primary solids screening, dewatering centrifuges, and odor control systems. The project uses the design-build delivery method and receives federal funding from the Water Infrastructure Finance and Innovation Act (WIFIA) and state funding from the Virginia Water Quality Improvement Fund.

West Hickman Wet Weather Storage Facility, Lexington-Fayette Urban County Government, KY. Mechanical Engineer. Mechanical Engineer for the design and construction oversight of the 70.0 MGD combined influent pump station. Provided oversight for the HVAC and plumbing work for the new headworks facility including odor control systems, gas-fired makeup air systems, gas-fired unit heaters, washdown and sanitary systems, compressed air systems, administration area HVAC and plumbing system with toilet room, electrical building air conditioning systems, odor control equipment site work, modifications to existing screw pump lift station HVAC systems, and new generator building including fuel system design.

Coppermine Water Reclamation Facility Headworks Improvement Project, Paulding County, GA. Mechanical Engineer. Mr. Sutherland provided upgrades to the existing headworks of the treatment plant. Modifications consisted of removal of existing odor control system and design of a new foul air distribution system to the new odor control system. Mr. Sutherland also aided the client in designing a new hot water washdown station for the newly installed screens.

Hillsborough Northwest Water Reclamation Facility, Hillsborough County, FL. Mechanical Engineer of Record. Mr. Sutherland provided the HVAC/Plumbing and Fuel System design of the water reclamation expansion and renovation of existing facility. The Project consists of multiple electrical building air conditioning systems, blower building ventilation systems, modifications to existing fueling systems, and a new fueling system to meet the demands of the new facility. Mr. Sutherland is also providing design assistance for the plant wide odor control system.

Education

BS, Mechanical Engineering, University of Central Florida, 2009

Registrations/ Certificates

Professional Engineer: KY, FL, GA, OK, OH, TX, VA

Certified Energy Manager (CEM)

Leadership in Energy and Environmental Design Accredited Professional, Building Design & Construction (LEED AP BD+C)

Office Location

Orlando, FL

Years of Experience

14

T. Michelle Howlett, PE, LEED AP

Manga Engineers - Electrical

Ms. Howlett has 33 years of experience as project manager and electrical engineer for a broad array of projects up to \$270M in scope. Ms. Howlett has experience with projects using design-bid-build, design-build, and construction management delivery methods. Ms. Howlett's technical areas of expertise include low and medium voltage power distribution, communications systems including fiber optic systems and wireless, fire alarm systems, power quality, security systems, closed circuit video, indoor and outdoor lighting systems, supervisory control and data acquisition systems, control systems, variable frequency drive systems, and instrumentation.



PROJECT RELEVANCE

Biosolids Processing Solutions, Morris Forman Water Quality Treatment Center, Louisville, KY.

Electrical and instrumentation engineer for a \$270M upgrade which includes thermal hydrolysis processing, sidestream treatment, replacement of dewatering centrifuges, digester upgrades, cake silos and loadout, and odor control systems.

Hite Creek Water Quality Treatment Center Expansion, Louisville, KY.

Electrical and instrumentation engineer for a 6 MGD to 9 MGD expansion and dewatering addition. The project includes additional aeration tanks and blower upgrades, sludge holding tank and blower upgrades, dewatering centrifuge and associated pumps and equipment, odor control system, replacement of UV disinfection, and replacement of tertiary filters. The control system includes the addition of programmable logic controller to the existing plant SCADA system. The project also includes replacement of a unit substation and standby generator, as well as site lighting throughout the plant.

Sludge Storage Improvements, Cedar Creek Water Quality Treatment Center, Louisville, KY.

Electrical and instrumentation engineer for improvements to existing sludge holding tanks including decanting, tank covers, and odor control system.

Muddy Fork Interceptor SSO Storage Basin, Louisville, KY. Electrical and instrumentation engineer for a new wet weather holding facility for Louisville MSD. The project includes a diversion structure, screening, storage basin, pump station, odor controls, and control building. The design includes various instrumentation and controls including flow and level monitoring, PID control for variable speed pumps, gas monitoring, and washdown systems. Controls are PLC based, Ethernet networked, and connected to MSD's radio telemetry system.

Primary Sedimentation Basin Improvements, Morris Forman Water Quality Treatment Center, Louisville, KY. Electrical and instrumentation engineer for the replacement of primary sedimentation basin sludge collection equipment and primary sludge pumps. Gates were replaced and modernized with electric actuators. The project also included the replacement of aeration blowers, odor control improvements, and new chemical feed. Electrical and control systems were replaced, as well as interior and exterior lighting.

Education

BS, Electrical Engineering,
University of Kentucky, 1990

Registrations/ Certificates

Professional Engineer
(Electrical): KY, IN, OH, TN

Leadership in Energy and
Environmental Design
Accredited Professional
(LEED AP)

Office Location

Lexington, KY

Years of Experience

33



SECTION #3 & 4

Client & Reference Projects



TETRA TECH

CLIENT & REFERENCE PROJECTS

Listed below are three clients and contact information for which WEA has performed similar work that is included in the Odor Control Master Planning scope of work.

TOHO WATER AUTHORITY



Deb Beatty
Senior Engineer
dbeatty@tohowater.com
407.944.5023

LOUISVILLE MSD



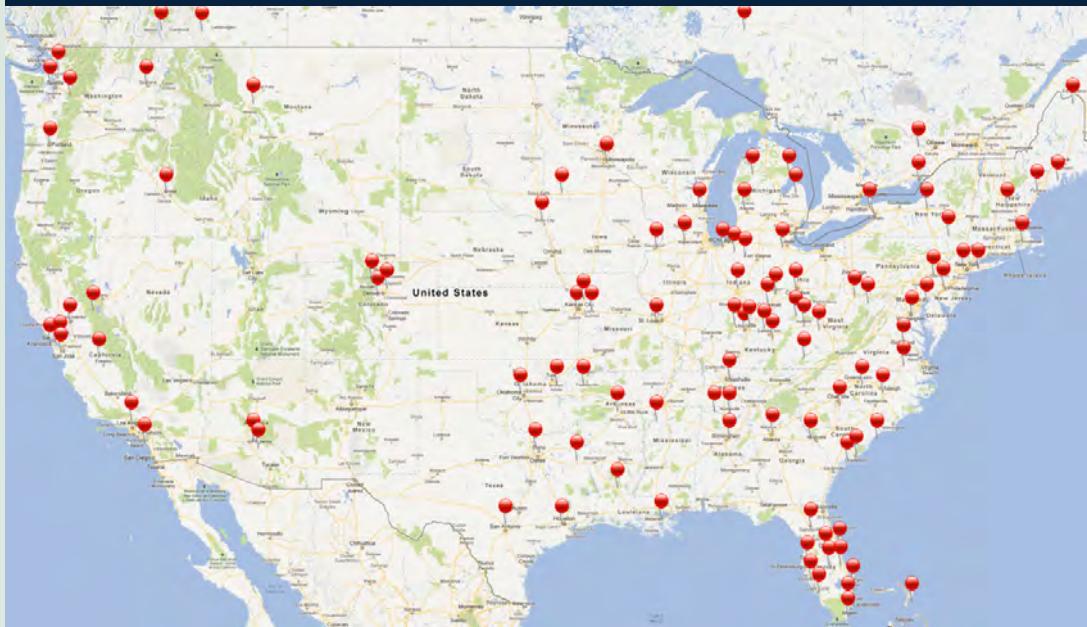
Mike Brazel
Deputy Chief of Operations
Mike.Brazel@louisvillemsd.org
502.587.5829

MILWAUKEE METROPOLITAN SEWER DISTRICT



Micki Klappa-Sullivan
Engineering Planning Manager
mklappasullivan@mmsd.com
414.225.2178

Tetra Tech and Webster Applicable Experience



800+

*Odor
and/or
Corrosion
Control
Projects*



Project Highlights

**Odor Control Consultant
Since 2011**

**Odor Studies at the WWTP
and Multiple Collection
System Facilities**

**Odor Control Designs
at WWTP and Multiple
Collection System Facilities**

**Performance Testing and
Condition Assessments of
Odor Control Systems**

Key Staff

**Jim Ross - Project Manager
Lee Blakeman - Project Engineer
Bruce Koetter - QA/QC**

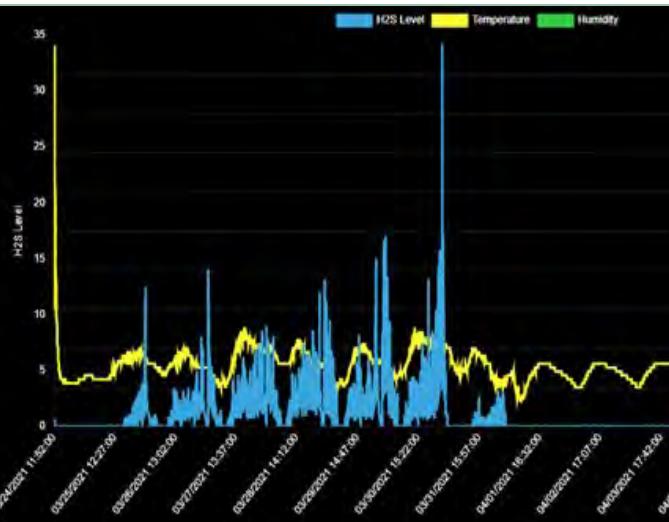
Odor Control Consultant for Toho Water Authority

ORLANDO, FL

WEA has served as an odor consultant to the Tohopekaliga Water Authority (TWA) since 2011. In this role WEA consults with TWA on odor related issues and conducts odor studies, odor control system designs, odor control system condition assessment and performance evaluations at TWA facilities.

Some of the major tasks have included:

- Odor studies at multiple TWA wastewater collection system facilities.
- Odor control designs at multiple TWA wastewater collection system facilities. Designs have included biotrickling scrubbers, biofilters, and multi-stage systems.
- Facility-wide odor study at the Sandhill WWTP to determine primary causes of off-site odors. Conducted sampling, testing, and odor dispersion modeling.
- Design of two new odor control systems at the Sandhill WWTP to treat odors from the headworks and influent structure.
- Performance testing of multiple odor control systems.
- Condition assessments of multiple, existing odor control systems.
- Odor control study for mitigating odors from air release valves in sensitive locations.
- Services during construction associated with odor control construction projects.



Project Highlights

Odor and Corrosion Study Identified Best Control Alternative

Oxygen Injection System was Designed to Prevent Anaerobic Conditions

Construction was Completed in 2021 with Outstanding Results

Key Staff

Bruce Koetter - Project Manager
Jim Ross - Project Engineer
Lee Blakeman - Project Engineer
Sharon Worley - MSD Project Manager

Louisville MSD Ohio River Force Main Odor Study & Control Design

LOUISVILLE, KY

The Ohio River Force Main (ORFM) consists of 8.5 miles of two parallel force mains (FMs) with diameters ranging from 16 to 24 inches and six cross connections. MSD has dealt with odors and corrosion along the forcemain and downstream for many years and commissioned this project to evaluate odor and corrosion control mitigation alternatives. Webster was selected as the prime consultant for the design of the odor control system and served as a sub-consultant to Jacobs for the study portion of the project.

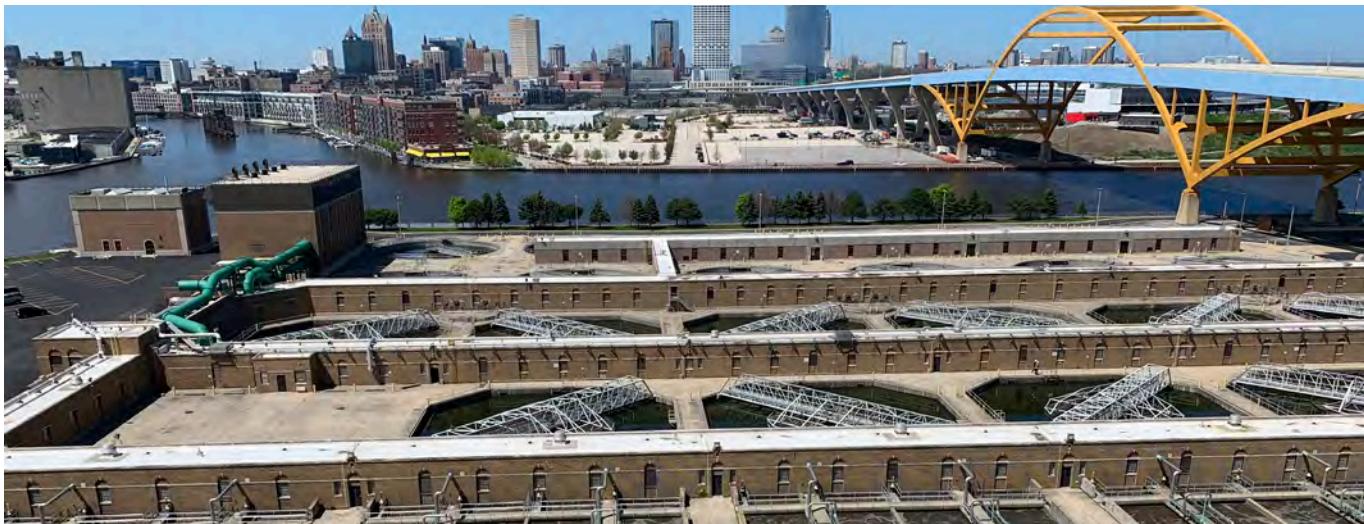
The project goals were:

- Reduce/eliminate odors at ARVs
- Reduce/Eliminate corrosion at ARVs and concrete vaults
- Mitigate high H2S release at ARVs and along downstream interceptor
- Reduce corrosion in the downstream interceptor

The study testing results were used to develop and evaluate several control alternatives including:

- Shutting off one barrel of the forcemain
- Vapor phase treatment of hot spots
- Chemical addition with iron, nitrates, oxygen
- Oxygen injection combined with vapor phase treatment

Findings showed that oxygen injection with a biofilter at one of the key ARVs was the most cost-effective alternative. WEA designed the biofilter and oxygen injection system improvements. The design was completed in April 2019 and construction was completed in April 2021. Preliminary testing results are outstanding as indicated by the chart above.



Project Highlights

Plant-Wide Odor Master Plan Identified Problem Areas

Modeling Used to Show Odor Impact of Baseline and Control Alternatives

Six Odor Control Alternatives Developed and Evaluated

Two Odor Control Projects Recommended and the First of Those Currently Under Construction

Key Staff

Bruce Koetter - Project Manager
Jim Ross - Project Engineer

Jones Island WRF Odor Assessment, Modeling & Capital Improvement Master Plan

MILWAUKEE, WI

The purpose of this project was to use air dispersion modeling in conjunction with source sampling and odor complaint locations to characterize odors, prioritize odor source reduction locations, identify odor mitigation strategies, and recommend a 20-year Capital Improvement Master Plan (CIP) for the Jones Island Water Reclamation Facility (JIWRF).

The JIWRF is a 300 MGD facility owned by the Milwaukee Metropolitan Sewer District (MMSD) that treats wastewater from the City of Milwaukee and surrounding areas. WEA conducted two rounds of extensive sampling and testing at the facility, sampling a total of 33 locations within the liquid and biosolids processing facilities. The samples were analyzed for odor detection threshold, reduced sulfur compounds, ammonia and H₂S and the results were used in air dispersion modeling. The testing and modeling results were then used to develop six Business Case Evaluations (BCE). Each of these BCEs were evaluated based on:

- Capital and operating costs
- Climate change vulnerability
- Sustainability
- Public Involvement
- Operating and Maintenance Reliability

The project was completed in April 2021 on schedule and under budget.



Project Highlights

2021 Michigan ACEC Merit Award

Equipment Performance Exceeded all Specified Criteria

Designed Biological System to be Operational During Winter Conditions

\$100,000 Loan Principal Forgiveness

Key Staff

Jim Ross - Odor Control Process Design
Brent Bode - Process Design

Saline Wastewater Treatment Plant Odor Control

SALINE, MI

Saline provides dozens of public services including wastewater treatment for approximately 9,500 residents. The City's wastewater treatment plant is unique in that it is near dozens of residences and located upwind of the community. While the City has provided odor control for over 15 years, in 2016, odor control complaints within the community increased. The complaints were so pronounced, downtown merchants complained about the odor impacting business. Theories as to the origin and proposed control of the odor were numerous, yet data to verify the origin was unavailable.

In response, the Saline City Council initiated a science-based approach to determine the cause and solution to the wastewater treatment plant odor. The City selected the team of Tetra Tech and Webster Environmental Associates (WEA) to complete a study of the existing treatment plant. The study concluded that older odor control equipment was no longer effective in treating foul air and recommended replacing the older equipment while also treating foul air from additional treatment processes. Tetra Tech and WEA were subsequently retained through a qualification-based selection process to lead the design and construction administration for the project.

The project used detailed measurements to initially determine the cause of increased odor was the failing chemical (chlorine) scrubbers and determine which processes needed odor control treatment. These measurements were critical for both design parameters and to demonstrate to the community the root cause of the increased odor.

The design consisted of both carbon adsorbers and biological odor control are proven technologies. However, this project implemented an optimal combination of both technologies, each targeted at specific processes and the odors generated by each, to arrive at the most effective and lowest cost solution for the community. The biological treatment component was uniquely designed to function down to -20 degrees Fahrenheit ambient air temperature. Instrumentation was provided to sense low temperatures and alert operators to needed system operations to protect the bioscrubbers.



SECTION #5

Local Office



TETRA TECH

LOCAL OFFICE

The project team will consist of Webster Environmental, Tetra Tech, Magna Engineers, and Salt River Engineering. The table below contains the firm and office information requested in the RFP.

Firm Information & Office Locations				
Firm	Year Established	Local Office Staffing	Services to be Performed	Estimated Local Office Utilization (Percent of Project Services)
Webster Environmental	1981	0	Air Dispersion Modeling, Air Sampling & Testing, Odor Evaluation, and Odor Control Process Design	47
Tetra Tech	1966	17	Design, Bidding, & Construction Administration	40
Magna Engineers	2011	8	Electrical Engineering	10
Salt River Engineering	2010	0	Technical Support on Cost Estimation & Construction Administration	3

*Local Office is defined in the RFP as Fayette, Franklin, Scott, Bourbon, Clark, Madison, Jessamine, or Woodford Counties.





SECTION #6

Disadvantaged Business Enterprise (DBE) Involvement



TETRA TECH

DISADVANTAGE BUSINESS ENTERPRISE (DBE) INVOLVEMENT

LFUCG has a MWDBE participation goal of 10% and a Veteran-Owned Business participation goal of 3%. Webster Environmental intends to meet these goals as follows:

- Magna Engineers, a Woman-Owned consulting engineering firm, will provide electrical engineering services on the design projects.
- Salt River Engineering, a Veteran-Owned consulting engineering firm, will provide technical support for cost-estimating and construction administration on the design projects.

MAGNA ENGINEERS

Magna Engineers is a woman-owned consulting engineering company providing electrical, mechanical, and instrumentation/controls engineering services. Magna was founded in 2011, and started with a group of mechanical and electrical engineers with a history of working together toward a common goal of innovative and solid engineering practices. Magna is based in Lexington, and has a branch office in Louisville.



Magna is a certified Economically Disadvantaged Woman-Owned Small Business in accordance with Small Business Administration (SBA) requirements, and is a certified Women Business Enterprise (WBE) with the Women's Business Enterprise National Council (WBENC). Magna Engineers is listed as an approved WBE with the Louisville-Jefferson County Metropolitan Sewer District.

SALT RIVER ENGINEERING

Salt River Engineering (SRE) is a DoD verified, veteran-owned small business specializing in engineering design and rate-making for water, wastewater, and stormwater utilities.



SRE has extensive experience in rate setting for municipal and regulated utilities. SRE's owner is both a professional engineer and certified construction manager. SRE provides agency construction management for municipal and private utility capital construction including time, cost, and general project management.



SECTION #7

Statement of Hourly Rates



TETRA TECH

STATEMENT OF HOURLY RATES

Classification	Employee Name	Actual Title	Hourly Rate (2024)*
Project Manager	Jim Ross	Project Manager	\$ 220
Senior Engineer	Lee Blakemen	Associate Engineer	\$ 182
	Sharon Worley	Principal Engineer	\$ 239
	Bruce Koetter	Senior Engineer	\$ 267
Engineer	Grant Thompson	Project Engineer	\$ 139
Survey Crew		Two-Person Survey Crew	\$ 150
Subcontractors			
Tetra Tech	Herb Lemaster	Design Manager	\$ 260
	Ryan Rathfon	Engineer 3	\$ 145
	Titus Maddela	Project Engineer 2	\$ 200
	Brent Bode	Senior Engineer 1	\$ 250
	Jason Burkett	Senior Engineer 1	\$ 250
	Michael Sutherland	Senior Engineer 1	\$ 250
	Pete Daukss	Senior Engineer 3	\$ 300
	Dean Vittitoe	Sr. Engineering Designer	\$ 160
	Shann Easterling	Senior Technician	\$ 120
	Mary Corbitt	Project Assistant 2	\$ 100
Magna Engineers	Michelle Howlett	Principal	\$ 170
	Matt Braun	Senior Engineer	\$ 160
	Allen Tucker	Senior Engineer	\$ 160
	Jim Martin	Senior Engineer	\$ 160
	Ben Auclair	Senior Engineer	\$ 160
	Dmitriy Radyk	Graduate Engineer	\$ 130
	Mikhail Moskalyuk	Graduate Engineer	\$ 130
	Rick Borntraeger	Graduate Engineer	\$ 130
	Yuriy Radyk	Technician I	\$ 100
	Troy Jones	Technician II	\$ 85
	Nadia Radyk	Clerical	\$ 60
Salt River Engineering	Connie Allen	Principal	\$ 180

*Note: The hourly rates are effective for calendar year 2024 and will be increased in subsequent years based on the federal Cost of Living Adjustment.



SECTION #8

Lump Sum Fee Estimate



TETRA TECH

LUMP SUM FEE ESTIMATE

FOR EARLY ACTION PROJECTS

TASK 1 – \$55,000

Scope of Work: Meet with the project team to develop and refine a project approach strategy that should include:

- a. Completing a thorough review of available record drawings to establish baseline operational data.
- b. Completing geometric measurements to verify that record drawing data matches actual field conditions.
- c. Reviewing any additional sampling results obtained by LFUCG.
- d. Reviewing, evaluating and selecting odor control equipment / strategies that can obtain a minimum removal efficiency of: 99.0% removal of H₂S and 90% removal of odor units (OU).
- e. Preparing a letter report intended to establish a basis and fee for the design / bidding / construction management services needed to replace the odor control equipment serving the four locations listed above.

TASK 2 – ESTIMATED ENGINEERING FEE - \$550,000

Early Action Project/Assumptions	Conceptual Level Construction Cost Estimate	Estimated Engineering for Design, Bidding, Inspection, and Construction Administration
West Hickman WWTP Gravity Thickeners <ul style="list-style-type: none"> ■ Option 1 - New Equipment, Carbon Technology, using existing pad ■ Option 2 - Relocate equipment from Town Branch WWTP, Carbon Technology, use existing pad 	Option 1 - \$900,000 Option 2 - \$300,000	\$135,000
West Hickman WWTP Ash Tanks <ul style="list-style-type: none"> ■ Bioscrubber Technology, new pad, no new building 	\$1,000,000	\$145,000
Town Branch WWTP North Primary Clarifiers <ul style="list-style-type: none"> ■ Bioscrubber Technology, new pad, no new building 	\$900,000	\$135,000
Town Branch WWTP South Primary Clarifiers <ul style="list-style-type: none"> ■ Bioscrubber Technology, new pad, no new building 	\$900,000	\$135,000
TOTAL		\$550,000

Notes:

- » Costs are conceptual level only. A detailed cost estimate shall be provided after the completion of Task 1 as described in the scope.
- » Costs assume the current system airflows are adequate and meet all applicable codes, this shall be verified in Task 1.
- » Costs assume that equipment will be outside and not require new buildings.
- » The estimated engineering fees assume that each early action project will be bid separately.
- » The estimated engineering fees were determined using the USDA Rural Development Fee Curve.



SECTION #9

Administrative Forms



TETRA TECH

GENERAL PROVISIONS

1. Each Respondent shall comply with all Federal, State & Local regulations concerning this type of service or good.

The Respondent agrees to comply with all statutes, rules, and regulations governing safe and healthful working conditions, including the Occupational Health and Safety Act of 1970, 29 U.S.C. 650 et. seq., as amended, and KRS Chapter 338. The Respondent also agrees to notify the LFUCG in writing immediately upon detection of any unsafe and/or unhealthful working conditions at the job site. The Respondent agrees to indemnify, defend and hold the LFUCG harmless from all penalties, fines or other expenses arising out of the alleged violation of said laws.

2. Failure to submit ALL forms and information required in this RFP may be grounds for disqualification.
3. Addenda: All addenda and IonWave Q&A, if any, shall be considered in making the proposal, and such addenda shall be made a part of this RFP. Before submitting a proposal, it is incumbent upon each proposer to be informed as to whether any addenda have been issued, and the failure to cover in the bid any such addenda may result in disqualification of that proposal.
4. Proposal Reservations: LFUCG reserves the right to reject any or all proposals, 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 a Respondent in the preparation of proposals.
6. Changes/Alterations: Respondent 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 proposal, and received by LFUCG prior to the scheduled closing time for receipt of proposals, will be accepted. The proposal, 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 proposal".
7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from a Respondent.
8. Bribery Clause: By his/her signature on the bid, Respondent 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 Respondent may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the Respondent's response. Additional documentation shall not serve as a substitute for other documentation which is required by this RFP to be submitted with the proposal,
10. Ambiguity, Conflict or other Errors in RFP: If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP, 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 this proposal, the Respondent agrees that it has carefully examined the specifications and all provisions relating to the work to be done attached hereto and made part of this proposal. By acceptance of a Contract under this RFP, proposer states that it understands the meaning, intent and requirements of the RFP and agrees to the same. The successful Respondent 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 Respondent shall be authorized for services or expenses reasonably covered under these provisions that the proposer omits from its Proposal.
12. Cancellation: If the services to be performed hereunder by the Respondent are not performed in an acceptable manner to the LFUCG, the LFUCG may cancel this contract for cause by providing written notice to the proposer, giving at least thirty (30) days notice of the proposed cancellation and the reasons for same. During that time period, the proposer may seek to bring the performance of services hereunder to a level that is acceptable to the LFUCG, and the LFUCG may rescind the cancellation if such action is in its best interest.

A. Termination for Cause

- (1) LFUCG may terminate a contract because of the contractor's failure to perform its contractual duties
- (2) If a contractor is determined to be in default, LFUCG shall notify the contractor of the determination in writing, and may include a specified date by which the contractor shall cure the identified deficiencies. LFUCG may proceed with termination if the contractor fails to cure the deficiencies within the specified time.
- (3) A default in performance by a contractor for which a contract may be terminated shall include, but shall not necessarily be limited to:
 - (a) Failure to perform the contract according to its terms, conditions and specifications;
 - (b) Failure to make delivery within the time specified or according

- to a delivery schedule fixed by the contract;
- (c) Late payment or nonpayment of bills for labor, materials, supplies, or equipment furnished in connection with a contract for construction services as evidenced by mechanics' liens filed pursuant to the provisions of KRS Chapter 376, or letters of indebtedness received from creditors by the purchasing agency;
- (d) Failure to diligently advance the work under a contract for construction services;
- (e) The filing of a bankruptcy petition by or against the contractor; or
- (f) Actions that endanger the health, safety or welfare of the LFUCG or its citizens.

B. At Will Termination

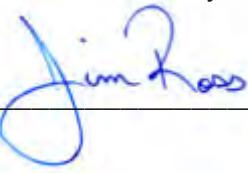
Notwithstanding the above provisions, the LFUCG may terminate this contract at will in accordance with the law upon providing thirty (30) days written notice of that intent, Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

- 13. Assignment of Contract: The contractor shall not assign or subcontract any portion of the Contract 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 Contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
- 15. Authority to do Business: The Respondent must be a duly organized and authorized to do business under the laws of Kentucky. Respondent must be in good standing and have full legal capacity to provide the services specified under this Contract. The Respondent must have all necessary right and lawful authority to enter into this Contract for the full term hereof and that proper corporate or other action has been duly taken authorizing the Respondent to enter into this Contract. The Respondent will provide LFUCG with a copy of a corporate resolution authorizing this action and a letter from an attorney confirming that the proposer is authorized to do business in the State of Kentucky if requested. All proposals must

be signed by a duly authorized officer, agent or employee of the Respondent.

16. Governing Law: This 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 Contract, the Parties agree that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division. All parties expressly consent to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to this Contract or any rights or obligations arising thereunder. Service of process may be accomplished by following the procedures prescribed by law.
17. Ability to Meet Obligations: Respondent affirmatively states that there are no actions, suits or proceedings of any kind pending against Respondent or, to the knowledge of the Respondent, threatened against the Respondent 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 Respondent to perform its obligations under this Contract, or which question the legality, validity or enforceability hereof or thereof.
18. Contractor understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Contractor is an independent contractor at all times during the performance of the services specified.
19. If any term or provision of this 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.
20. Contractor [or Vendor or Vendor's Employees] will not appropriate or make use of the Lexington-Fayette Urban County Government (LFUCG) name or any of its trade or service marks or property (including but not limited to any logo or seal), in any promotion, endorsement, advertisement, testimonial or similar use without the prior written consent of the government. If such consent is granted LFUCG reserves the unilateral right, in its sole discretion, to immediately terminate and revoke such use for any reason whatsoever. Contractor agrees that it shall cease and desist from any unauthorized use immediately upon being notified by LFUCG.

Signature



01/11/2024

Date

Affirmative Action Plan

All vendors must submit as a part of the proposal package the following items to the Urban County Government:

1. Affirmative Action Plan for his/her firm;
2. Current Work Force Analysis Form;

Failure to submit these items as required may result in disqualification of the submitter from award of the contract. All submissions should be directed to:

Director, Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street, 3rd Floor
Lexington, Kentucky 40507

All questions regarding this proposal must be directed to the Division of Central Purchasing, (859)-258-3320.

AFFIDAVIT

Comes the Affiant, Jim Ross, and after being first duly sworn, states under penalty of perjury as follows:

1. His/her name is Jim Ross and he/she is the individual submitting the proposal or is the authorized representative of Webster Environmental Associates, Inc., the entity submitting the proposal (hereinafter referred to as "Proposer").
2. Proposer will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the proposal 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. Proposer will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.
4. Proposer 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. Proposer 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 Proposer will not violate any provision of the campaign finance laws of the Commonwealth.
6. Proposer has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

Continued on next page

7. Proposer 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.

Jim Ross
STATE OF Kentucky
COUNTY OF Jefferson

The foregoing instrument was subscribed, sworn to and acknowledged before me
by Grant Thompson on this the 2nd day
of January, 2024.

My Commission expires: 4/10/2027

Grant Thompson
NOTARY PUBLIC, STATE AT LARGE



EQUAL OPPORTUNITY AGREEMENT

Standard Title VI Assurance

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

The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- 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 handicap.

- 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, Vietnam veterans, handicapped and aged persons.

Signature

Webster Environmental Associates

Name of Business

WORKFORCE ANALYSIS FORM

Name of Organization: Webster Environmental Associates

Categories	Total	White (Not Hispanic or Latino)		Hispanic or Latino		Black or African- American (Not Hispanic or Latino)		Native Hawaiian and Other Pacific Islander (Not Hispanic or Latino)		Asian (Not Hispanic or Latino)		American Indian or Alaskan Native (not Hispanic or Latino)		Two or more races (Not Hispanic or Latino)		Total	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Administrators	1		1														
Professionals	7	6	1														
Superintendents																	
Supervisors																	
Foremen																	
Technicians																	
Protective																	
Para-																	
Office/Clerical																	
Skilled Craft																	
Service/Maintena																	
Total:	8	6	2														

Prepared by: Jim Ross, Vice President

Date: 01 / 11 / 2024

(Name and Title)

Revised 2015-Dec-15

**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

Notice of requirement for Affirmative Action to ensure Equal Employment Opportunities and Disadvantaged Business Enterprises (DBE) Contract participation. Disadvantaged Business Enterprises (DBE) consists of Minority-Owned Business Enterprises (MBE) and Woman-Owned Business Enterprises (WBE).

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 Disadvantaged Business Enterprises, which is made up of MBEs and WBEs. The Lexington Fayette Urban County Government also has set a goal that not less than three percent (3%) of the total value of this Contract be subcontracted to Veteran-owned Small Businesses. The goal for the utilization of Disadvantaged Business Enterprises as well Veteran –owned Small Businesses as subcontractors is a recommended goal. Contractor(s) who fail to meet such goal will be expected to provide written explanations to the Director of the Division of Purchasing of efforts they have made to accomplish the recommended goal, and the extent to which they are successful in accomplishing the recommended goal will be a consideration in the procurement process. Depending on the funding source, other DBE goals may apply.

For assistance in locating Disadvantaged Business Enterprises Subcontractors contact:

Sherita Miller, MPA, Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street, 3rd Floor, Room 338
Lexington, Kentucky 40507
smiller@lexingtonky.gov

Firm Submitting Proposal: Webster Environmental Associates

Contact Name: Jim Ross Title: Vice President

Telephone Number: 502.253.3443 Fax Number: 502.253.3442

Email address: jim.ross@odor.net

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), Disadvantaged (DBE) Business Enterprises and Veteran-Owned Small Businesses (VOSB) 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, Woman-Owned or Veteran-Owned subcontractors and suppliers for work done or materials purchased for this contract. (See Subcontractor Monthly Payment Report)
- 2) Replacement of a Minority-Owned, Woman-Owned or Veteran-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, managed and controlled 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, managed and controlled by one or more women.

- 3) A Disadvantaged Business (DBE) is defined as a business which is certified as being at least 51% owned, managed and controlled by a person(s) that are economically and socially disadvantaged.
- 4) A Veteran-Owned Small Business (VOSB) is defined as a business which is certified as being at least 51% owned, managed and controlled 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 and Veteran-Owned 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 or delay in contract award.**

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 and/or Veteran 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 and Veteran-Owned businesses 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 and/or Veteran-Owned businesses of subcontracting opportunities
- e. Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses.
- f. Requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).
- g. Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.
- d. Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs and/or Veteran-Owned businesses 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.
- e. Followed up initial solicitations by contacting MWDBEs and Veteran-Owned Businesses to determine their level of interest.
- j. Provided the interested MWBDE firm and/or Veteran-Owned business 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 and/or Veteran-Owned businesses 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 and Veteran 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 and Veteran-Owned businesses 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 and Veteran-Owned businesses 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 and/or Veteran-Owned business's quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE and Veteran goals.

- o. Made an effort to offer assistance to or refer interested MWDBE firms and Veteran-Owned businesses 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 and Veteran-Owned businesses 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 and Veteran participation.

Note: 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 which is subject to review by the MBE Liaison. Documentation of Good Faith Efforts must 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 484-2017 – A Certified Minority, Women and Disadvantaged Business Enterprise ten percent (10%) minimum goal and a three (3%) minimum goal for Certified Veteran-Owned Small Businesses and Certified Service Disabled Veteran – Owned Businesses for government contracts.

The resolution states the following definitions shall be used for the purposes of reaching these goals (a full copy is available in Central Purchasing):

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

Certified Minority Business Enterprise (MBE) – a business in which at least fifty-one percent (51%) is owned, managed and controlled by an ethnic minority (i.e. African American, Asian American/Pacific Islander, Hispanic Islander, Native American/Native Alaskan Indian) as defined in federal law or regulation as it may be amended from time-to-time.

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

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

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

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

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 and Veteran-Owned Small Businesses in
(<https://lexingtonky.ionwave.net>)

Business	Contact	Email Address	Phone
LFUCG	Sherita Miller	smiller@lexingtonky.gov	859-258-3323
Commerce Lexington – Minority Business Development	Tyrone Tyra	ttyra@commercelexington.com	859-226-1625
Tri-State Minority Supplier Diversity Council	Susan Marston	smarston@tssdc.com	502-365-9762
Small Business Development Council	Shawn Rogers UK SBDC	shawn.rogers@uky.edu	859-257-7666
Community Ventures Corporation	Phyllis Alcorn	palcorn@cvky.org	859-231-0054
KY Transportation Cabinet (KYTC)	Melvin Bynes	Melvin.bynes2@ky.gov	502-564-3601
KYTC Pre-Qualification	Shella Eagle	Shella.Eagle@ky.gov	502-782-4815
Ohio River Valley Women's Business Council (WBENC)	Sheila Mixon	smixon@orvwbc.org	513-487-6537
Kentucky MWBE Certification Program	Yvette Smith, Kentucky Finance Cabinet	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	lavozdeky@yahoo.com	859-621-2106
The Key News Journal	Patrice Muhammad	production@keynewsjournal.com	859-685-8488



LFUCG MWDBE PARTICIPATION FORM

Bid/RFP/Quote Reference # RFP #51-2023

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

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. Magna Engineers 861 Corporate Drive, Suite 210 Lexington, KY 40503 859.309.2990 mhowlett@magnaengineers.com	WBE	Electrical Engineering	TBD	10%
2. Salt River Engineering 108 Poplar Street Harrodsburg, KY 40330 859.734.2334 conne@saltrivereng.com	VOSB	Cost Estimating	TBD	3%
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.

Webster Environmental Associates
Company

01/11/2024
Date

Jim Ross
Company Representative

Vice President
Title



LFUCG MWDBE SUBSTITUTION FORM

Bid/RFP/Quote Reference # RFP #51-2023

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

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

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

Webster Environmental Associates
Company
01/11/2024
Date

Jim Ross
Company Representative
Vice President
Title



MWDBE QUOTE SUMMARY FORM
Bid/RFP/Quote Reference # RFP #51-2023

The undersigned acknowledges that the minority and/or veteran subcontractors listed on this form did submit a quote to participate on this project. Failure to submit this form may cause rejection of the bid.

Company Name Webster Environmental Associates	Contact Person Jim Ross
Address/Phone/Email 13121 Eastpoint Park Blvd #E Louisville, KY 40223	Bid Package / Bid Date Odor Control Master Planning / January 11, 2024

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
N/A								

(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.

 Webster Environmental Associates
 Company

 01/11/2024
 Date

 Jim Ross
 Company Representative

 Vice President
 Title



LFUCG SUBCONTRACTOR MONTHLY PAYMENT REPORT

The LFUCG has a 10% goal plan adopted by city council to increase the participation of minority and women owned businesses in the procurement process. The LFUCG also has a 3% goal plan adopted by cited council to increase the participation of veteran owned businesses in the procurement process. In order to measure that goal LFUCG will track spending with MWDDBE and Veteran contractors on a monthly basis. By the signature below of an authorized company representative, you certify that the information is correct, and that each of the representations set forth below is true. Any misrepresentation may result in termination of the contract and/or prosecution under applicable Federal and State laws concerning false statements and false claims. Please submit this form monthly to the Division of Central Purchasing/ 200 East Main Street / Room 338 / Lexington, KY 40507.

Bid/RFP/Quote # RFP #51-2023

Total Contract Amount Awarded to Prime Contractor for this Project TBD

Project Name/ Contract #	Work Period/ From:	To:
Odor Control Master Planning		TBD
Company Name: Webster Environmental Associates	Address: 13121 Eastpoint Park Blvd #E Louisville, KY 40223	
Federal Tax ID: 61-1011402	Contact Person: Jim Ross	

Subcontractor Vendor ID (name, address, phone, email)	Description of Work	Total Subcontract Amount	% of Total Contract Awarded to Prime for this Project	Total Amount Paid for this Period	Purchase Order number for subcontractor work (please attach PO)	Scheduled Project Start Date	Scheduled Project End Date
Magna Engineers	TBD						
Salt Rivers Engineering	TBD						

By the signature below of an authorized company representative, you certify that the information is correct, and that each of the representations set forth below is true. Any misrepresentations may result in the termination of the contract and/or prosecution under applicable Federal and State laws concerning false statements and false claims.

Webster Environmental Associates
Company

Jim Ross
Company Representative

01/11/2024
Date

Vice President
Title

LFUCG STATEMENT OF GOOD FAITH EFFORTS**Bid/RFP/Quote #** RFP #51-2023

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 and Veteran-Owned 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 and Veteran-Owned businesses 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 and/or Veteran-Owned Businesses of subcontracting opportunities

Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses

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

Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses 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 and Veteran-Owned businesses to determine their level of interest.

Provided the interested MWBDE firm and/or Veteran-Owned business 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 and/or Veteran-Owned businesses 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 and Veteran participation, even when the prime contractor may otherwise perform these work items with its own workforce

Negotiated in good faith with interested MWDBE firms and Veteran-Owned businesses 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 and Veteran-Owned businesses 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 and/or Veteran-Owned business's quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE and Veteran goals.

Made an effort to offer assistance to or refer interested MWDBE firms and Veteran-Owned businesses 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 MWBE firms and Veteran-Owned businesses 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 and Veteran participation**.

NOTE: 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 which is subject to approval by the MBE Liaison. Documentation of Good Faith Efforts must 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.

Webster Environmental Associates

Company

01/11/2024

Date

Jim Ross

Company Representative

Vice President

Title



TETRA TECH

13121 Eastpoint Park Blvd, Ste E | Louisville, KY 40223

502.252.3443 | www.odor.net