



**LEXINGTON**

## Lexington-Fayette Urban County Government

Lexington, Kentucky  
Horse Capital of the World

Division of Procurement

Date of Issue: February 11, 2025

### INVITATION TO BID #23-2025 Sewer Collection System Odor Control Chemical Pilot Testing

**Bid Opening Date:** March 4, 2025

**Bid Opening Time:** 2:00 PM

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

**Type of Bid:** Price Contract

**Pre Bid Meeting:** February 19, 2025 (Non mandatory)

**Pre Bid Time:** 10:00 AM EST

**Address:** 301 Jimmie Campbell Drive Lexington, Ky. 40504

Sealed bids will ONLY be received online at <https://lexingtonky.ionwave.net/> until **2:00 PM**, prevailing local time on **03/04/2025**. Bids must be submitted/uploaded by the above-mentioned date and time.

Bids are to include all shipping, handling and associated fees to the point of delivery (unless otherwise specified in the bid documents below) located at: Various Locations, Lexington, KY

|   |  |  |
|---|--|--|
| <input checked="" type="checkbox"/> Bid Specifications Met _____<br><i>attached to bid proposal submitted.</i>  | <b>Check One:</b><br>_____ Exceptions to Bid Specifications. <i>Exceptions shall be itemized and</i> | <b>Proposed Delivery:</b><br>21 - 30 days after acceptance of bid. |
| <b>Procurement Card Usage</b> —The Lexington-Fayette Urban County Government may be using Procurement Cards to purchase goods and services and also to make payments. Will you accept Procurement Cards? _____ Yes <input checked="" type="checkbox"/> No |  |  |

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

Submitted by: Premier Magnesia, LLC  
Firm Name

75 Giles Pl  
Address

Waynesville, NC 28786  
City, State & Zip

**Bid must be signed:**

Charles Gehret - Contracts Manager  
Signature of Authorized Company Representative – Title

Charles Gehret  
Representative's Name (Typed or printed)

267 249 9176  
Area Code - Phone – Extension Fax #

E-Mail Address

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

**AFFIDAVIT**

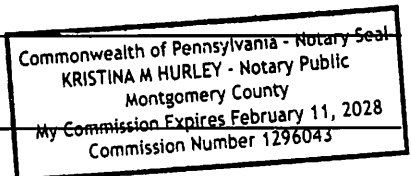
Comes the Affiant, Charles Gehret, and after being first duly sworn under penalty of perjury as follows:

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

Further, Affiant sayeth naught.

STATE OF Pennsylvania

COUNTY OF Montgomery



The foregoing instrument was subscribed, sworn to and acknowledged before me  
by Kristina M Hurley on this the 13 day  
of March, 2025

My Commission expires: 02/11/2028

Kristina M Hurley  
NOTARY PUBLIC, STATE AT LARGE

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

## **I. GREEN PROCUREMENT**

### **A. ENERGY**

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

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

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

#### Key Benefits

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

### **B. GREEN SEAL CERTIFIED PRODUCTS**

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

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

### **C. GREEN COMMUNITY**

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

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

Yes \_\_\_\_\_ No ✓

## **II. Bid Conditions**

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



or technical reasons, and to award each part of the bid separately, all parts to one vendor or all parts to multiple vendors.

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

or indirectly publicly funded contracts for supplies, materials, services, or equipment hereinafter entered into the following provisions:

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

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

The Act further provides:

**KRS 45.610. Hiring minorities - Information required**

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

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

- (1) If any contractor is found by the department to have engaged in an unlawful practice under this chapter during the course of performing under a contract or subcontract covered under KRS 45.560 to 45.640, the department shall so certify to the contracting agency and such certification shall be binding upon the contracting agency unless it is reversed in the course of judicial review.*
- (2) If the contractor is found to have committed an unlawful practice under KRS 45.560 to 45.640, the contracting agency may cancel or terminate the contract, conditioned upon a program for future compliance approved by the contracting agency and the department. The contracting agency may declare such a contractor ineligible to bid on further contracts with that agency until such time as the contractor complies in full with the requirements of KRS 45.560 to 45.640.*
- (3) The equal employment provisions of KRS 45.560 to 45.640 may be met in part by a contractor by subcontracting to a minority contractor or subcontractor. For the provisions of KRS 45.560 to 45.640, a minority contractor or subcontractor shall mean a business that is owned and controlled by one or more persons disadvantaged by racial or ethnic circumstances.*

**KRS 45.630 Termination of existing employee not required, when**

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

**KRS 45.640 Minimum skills**

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

It is recommended that all of the provisions above quoted to be included as special conditions in each contract.

In the case of a contract exceeding \$250,000, the contractor is required to furnish evidence that his work-force in Kentucky is representative of the available work-force in the area from which he draws employees, or to supply an Affirmative Action plan which will achieve such representation during the life of the contract.

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

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

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

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

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

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

Notice of appeal of a bid recommendation must be filed within 3 business days of the bid recommendation by (1) sending a written notice, including sufficient documentation to support appeal, to the Director, Division of Procurement or (2) submitting a written request for a meeting with the Director of Procurement to explain his appeal. After reviewing the documentation and/or hearing the vendor and consulting with the Commissioner of Finance and the Chief Administrative Officer, the Director of Procurement shall in writing, affirm or withdraw the recommendation.

### **III. Procurement Contract Bid Conditions**

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

## **EQUAL OPPORTUNITY AGREEMENT**

### **Standard Title VI Assurance**

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

### **The Law**


- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states: *The Contractor will not discriminate against any employee or applicant for employment because of physical or mental disability.*
- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states: *The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.*

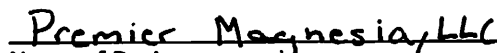
The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

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

### **Bidders**

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

  
\_\_\_\_\_  
Signature

  
\_\_\_\_\_  
Name of Business



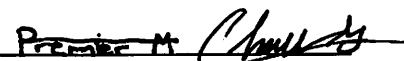
## **GENERAL PROVISIONS OF BID CONTRACT**

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

1. Bidder shall comply with all Federal, State & Local regulations concerning this type of service or good. All applicable state laws, ordinances and resolutions (including but not limited to Section 2-33 (Discrimination due to sexual orientation or gender identity) and Chapter 13 (Licenses and Regulations) of the Lexington-Fayette Urban County Government Code of Ordinances, and Resolution No. 484-17 (Minority, Women, and Veteran-Owned Businesses)) and the regulations of all authorities having jurisdiction over the project shall apply to the contract, and shall be deemed to be incorporated herein by reference.
2. Failure to submit ALL forms and information required by LFUCG may be grounds for disqualification.
3. Addenda: All addenda and IonWave Q&A, if any, must be considered by the bidder in making its response, and such addenda shall be made a part of the requirements of the bid contract. Before submitting a bid response, it is incumbent upon bidder to be informed as to whether any addenda have been issued, and the failure of the bidder to cover any such addenda may result in disqualification of that response.
4. Bid Reservations: LFUCG reserves the right to reject any or all bid responses, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
5. Liability: LFUCG is not responsible for any cost incurred by bidder in the preparation of its response.
6. Changes/Alterations: Bidder may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the bid response, and received by LFUCG prior to the scheduled closing time for receipt of bids, will be accepted. The bid response when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of bid response".
7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from any bidder.
8. Bribery Clause: By his/her signature on its response, bidder certifies that no employee of his/hers, any affiliate or subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.
9. Additional Information: While not necessary, the bidder may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the bid response. Additional documentation shall not serve as a substitute for other documentation which is required by the LFUCG to be submitted with the bid response.
10. Ambiguity, Conflict or other Errors: If a bidder discovers any ambiguity, conflict, discrepancy, omission or other error in the bid request of LFUCG, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
11. Agreement to Bid Terms: In submitting its bid response, the bidder agrees that it has carefully examined the specifications and all provisions relating to LFUCG's bid request, including but not limited to the bid contract. By submission of its bid response, bidder states that it understands the meaning, intent and requirements of LFUCG's bid request and agrees to the same. The successful bidder shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to bidder shall be authorized for services, expenses, or goods reasonably covered under these provisions that the bidder omits from its bid response.
12. Cancellation: LFUCG may unilaterally terminate the bid contract with the selected bidder(s) at any time, with or without cause, by providing at least thirty (30) days advance written notice unless a different advance written notice

period is negotiated prior to contract approval. Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

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

  
Signature

2/27/25  
Date

**WORKFORCE ANALYSIS FORM**

Name of Organization: Premier Magnesia, LLC

| Categories                 | Total | White<br>(Not Hispanic<br>or Latino) |    | Hispanic<br>or Latino |   | Black or<br>African-<br>American<br>(Not Hispanic<br>or Latino) |   | Native<br>Hawaiian<br>and<br>Other<br>Pacific<br>Islander<br>(Not Hispanic<br>or Latino) |   | Asian<br>(Not Hispanic<br>or Latino) |   | American<br>Indian or<br>Alaskan<br>Native<br>(not Hispanic<br>or Latino) |   | Two or<br>more races<br>(Not<br>Hispanic or<br>Latino) |   | Total |    |
|----------------------------|-------|--------------------------------------|----|-----------------------|---|---|---|--|---|--------------------------------------|---|---|---|--|---|-------|----|
|                            |       | M                                    | F  | M                     | F | M   | F | M  | F | M                                    | F | M   | F | M  | F | M     | F  |
| <b>Administrators</b>      | 63    | 46                                   | 11 | 2                     |   | 1   |   |  |   | 2                                    |   |   |   |  | 1 | 51    | 12 |
| <b>Professionals</b>       | 26    | 15                                   | 10 |                       |   |   |   |  |   | 1                                    |   |   |   |  |   | 16    | 10 |
| <b>Superintendents</b>     |       |                                      |    |                       |   |   |   |  |   |                                      |   |   |   |  |   |       |    |
| <b>Supervisors</b>         |       |                                      |    |                       |   |   |   |  |   |                                      |   |   |   |  |   |       |    |
| <b>Foremen</b>             |       |                                      |    |                       |   |   |   |  |   |                                      |   |   |   |  |   |       |    |
| <b>Technicians</b>         | 33    | 21                                   | 8  | 1                     | 2 | 1   |   |  |   |                                      |   |   |   |  |   | 23    | 10 |
| <b>Protective Service</b>  |       |                                      |    |                       |   |   |   |  |   |                                      |   |   |   |  |   |       |    |
| <b>Para-Professionals</b>  |       |                                      |    |                       |   |   |   |  |   |                                      |   |   |   |  |   |       |    |
| <b>Office/Clerical</b>     | 31    | 10                                   | 19 | 2                     |   |   |   |  |   |                                      |   |   |   |  |   | 12    | 19 |
| <b>Skilled Craft</b>       | 24    | 21                                   | 1  | 2                     |   |   |   |  |   |                                      |   |   |   |  |   | 25    | 2  |
| <b>Service/Maintenance</b> | 96    | 69                                   | 5  | 11                    | 1 | 5   |   |  |   |                                      |   | 4   |   | 1  |   | 90    | 6  |
| <b>Total:</b>              | 273   | 182                                  | 54 | 18                    | 3 | 7   |   |  |   | 3                                    |   | 4   |   | 1  | 1 | 217   | 59 |

Prepared by: Charles Gehret - Contracts Manager Date: 3 / 13 / 2025

(Name and Title)

Revised 2015-Dec-15



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

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

The Lexington-Fayette Urban County Government has a Certified Minority and Women Business Enterprise seventeen percent (17%) minimum goal including minimum subgoals of five percent (5%) for Minority Business Enterprises (MBE) and a subgoal of twelve percent (12%) for Women Business Enterprises (WBE); a three (3%) minimum goal for Certified Veteran-Owned Small Businesses and/or Certified Service- Disabled Veteran Owned Businesses; and a goal of utilizing Disadvantaged Business Enterprises (DBE), where applicable, for government contracts.

For assistance in locating certified DBEs, MBEs, WBEs, VOSBs and/or VOSBs, contact Sherita Miller at 859/258-3320 or by writing the address listed below:

Sherita Miller, MPA, CPSD  
Minority Business Enterprise Liaison  
Division of Procurement  
Lexington-Fayette Urban County Government  
200 East Main Street  
Lexington, Kentucky 40507  
[smiller@lexingtonky.gov](mailto:smiller@lexingtonky.gov)  
859-258-3323



# LEXINGTON

## MINORITY BUSINESS ENTERPRISE PROGRAM

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

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

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

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

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

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

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

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

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

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

The following certifications are recognized and accepted by the MBEP:

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

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

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





# LEXINGTON

## LFUCG MWDBE PARTICIPATION FORM

Bid/RFP/Quote Reference # 23-2025

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

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

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

Premier Magnesia, LLC  
Company

2/27/25  
Date

Charles Gehret  
Company Representative

Contracts Manager  
Title



# LEXINGTON

## LFUCG MWDBE SUBSTITUTION FORM

Bid/RFP/Quote Reference # 23-2025

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

| SUBSTITUTED<br>DBE/MBE/WBE/VOSB<br>Company Name,<br>Address, Phone, Email | DBE/MBE/WBE/VOSB/SDVOSB<br>Formally Contracted/ Name,<br>Address, Phone, Email | Work to Be<br>Performed | Reason for the<br>Substitution | Total Dollar<br>Value of the<br>Work | % Value of<br>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.

Premier Magnesia, LLC  
Company

2/27/25  
Date

Charles Gehret  
Company Representative

Contracts Manager  
Title



## DOCUMENTATION REQUIRED FOR GOOD FAITH EFFORTS AND OUTREACH PLANS

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

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

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



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

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

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

## OUTREACH EFFORTS EVALUATION

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

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

Proposer Name: Premier Magnesia, LLC Date: 2/27/25  
Project Name: 23-2025 Project Number: 23-2025  
Contact Name: Charles Gehret Telephone: 267-219-9176  
Email: CHGehret@premiermagnesia.com

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

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

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

Is the Bidder/ Proposer a certified firm? Yes ☐ No ☒



If yes, indicate all certification type(s):

DBE ☐ MBE ☐ WBE ☐ SBE ☐ VOSB/SDVOSB ☐

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

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

N/A

 Click or tap here to enter text. 

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



Yes ☐

No ☒

If no, please explain why in the field below. Do not complete the rest of this form and submit this first page with your bid and/or proposal. [Click or tap here to enter text.](#)

*Not needed*

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



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

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

- ☐ Bidder placed advertisements in search of prospective small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs for the solicitation.
- ☐ Bidder attended LFUCG Procurement Economic Inclusion Outreach event(s) within the past year.
- ☐ Bidder attended pre-bid and/or pre-proposal meetings for this solicitation.
- ☐ Bidder sponsored an Economic Inclusion Outreach event.
- ☐ Bidder requested a list of certified small, DBE, MBE, WBE, VOSB and/or SDVOSB subcontractors or suppliers from LFUCG.
- ☐ Bidder contacted organizations that work with small, DBE, MBE, WBE, VOSB and/or SDVOSB companies.
- ☐ Bidder sent written notices to certified small, DBE, MBE, WBE, VOSB and SDVOSB businesses.
- ☐ Bidder followed up to initial solicitations with interested small, DBE, MBE, WBE, VOSB and/or SDVOSB.
- ☐ Bidder provided small, DBE, MBE, WBE, VOSB and/or SDVOSB businesses interested in performing the solicited work with prompt access to the plans, specifications, scope of work, and requirements of the solicitation.
- ☐ Bidder made efforts to segment portions of the work to be performed by small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs, including dividing sub-bid/partnership opportunities into economically feasible units/parcels, to facilitate participation.

- ☐ Bidder negotiated in good faith with interested small, DBE, MBE, WBE, VOSB and/or SDVOSB businesses.
- ☐ Bidder provided adequate rationale for rejecting any small business', DBEs, MBEs, WBEs, VOSBs or SDVOSBs for lack of qualifications.
- ☐ Bidder offered assistance in obtaining bonding, insurance, financial, equipment, or other resources to small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs, in an effort to assist them in meeting project requirements.
- ☐ Bidder made efforts to expand the search for small businesses, DBEs MBEs, WBEs, VOSBs and/or SDVOSBs beyond the usual geographic boundaries.
- ☐ Bidder made other reasonable efforts to include small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs participation.

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

 Click or tap here to enter text. 

N/A

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

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

**Failure to submit the documentation requested may be cause for rejection of the bid. Bidders may include any other documentation deemed relevant to this requirement, which is subject to review by the MBE Liaison. Documentation of Good Faith and Outreach Efforts must be submitted with the bid, regardless of the proposed level of SBEs, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs participation in the procurement. If the Good Faith and Outreach Effort Form and associated documentation is not submitted with the bid response, the bid may be rejected.**

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

Premier Magnesia, LLC  
Company  
2/27/25  
Date

Charles Gehret  
Company Representative  
Contracts Manager  
Title

## **RISK MANAGEMENT PROVISIONS INSURANCE AND INDEMNIFICATION**

### **INDEMNIFICATION AND HOLD HARMLESS PROVISION**

- (1) It is understood and agreed by the parties that Contractor hereby assumes the entire responsibility and liability for any and all damages to persons or property caused by or resulting from or arising out of any act or omission on the part of Contractor or its employees, agents, servants, owners, principals, licensees, assigns or subcontractors of any tier (hereinafter "CONTRACTOR") under or in connection with this agreement and/or the provision of goods or services and the performance or failure to perform any work required thereby.
- (2) CONTRACTOR shall indemnify, save, hold harmless and defend the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, volunteers, and successors in interest (hereinafter "LFUCG") from and against all liability, damages, and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees that are in any way incidental to or connected with, or that arise or are alleged to have arisen, directly or indirectly, from or by CONTRACTOR's performance or breach of the agreement and/or the provision of goods or services provided that: (a) it is attributable to personal injury, bodily injury, sickness, or death, or to injury to or destruction of property (including the loss of use resulting therefrom), or to or from the negligent acts, errors or omissions or willful misconduct of the CONTRACTOR; and (b) not caused solely by the active negligence or willful misconduct of LFUCG.
- (3) In the event LFUCG is alleged to be liable based upon the above, CONTRACTOR shall defend such allegations and shall bear all costs, fees and expenses of such defense, including but not limited to, all reasonable attorneys' fees and expenses, court costs, and expert witness fees and expenses, using attorneys approved in writing by LFUCG, which approval shall not be unreasonably withheld.
- (4) These provisions shall in no way be limited by any financial responsibility or insurance requirements, and shall survive the termination of this agreement.
- (5) LFUCG is a political subdivision of the Commonwealth of Kentucky. CONTRACTOR acknowledges and agrees that LFUCG is unable to provide indemnity or otherwise save, hold harmless, or defend the CONTRACTOR in any manner.

### **FINANCIAL RESPONSIBILITY**

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

## **INSURANCE REQUIREMENTS**

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

### **Required Insurance Coverage**

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

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

The policies above shall contain the following conditions:

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

- c. The General Liability Policy shall include a Products and Completed Operations endorsement or Premises and Operations Liability endorsement unless it is deemed not to apply by LFUCG.
- d. LFUCG shall be provided at least 30 days advance written notice via certified mail, return receipt requested, in the event any of the required policies are canceled or non-renewed.
- e. Said coverage shall be written by insurers acceptable to LFUCG and shall be in a form acceptable to LFUCG. Insurance placed with insurers with a rating classification of no less than Excellent (A or A-) and a financial size category of no less than VIII, as defined by the most current Best's Key Rating Guide shall be deemed automatically acceptable.

#### Renewals

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

#### Deductibles and Self-Insured Programs

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

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

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

#### Safety and Loss Control

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

#### Verification of Coverage

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

#### Right to Review, Audit and Inspect

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

#### DEFAULT

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

00357187



**Lexington Fayette Urban County Government (LFUCG)**  
**Bid Specifications**  
**Sewer Collection System Odor Control Chemical Pilot Testing**

The LFUCG has issued this Bid for the sole purpose of obtaining responsive proposals and price quotes from responsible Bidders (Vendors). The work consists of providing all necessary materials, chemicals, personnel, equipment, and services for pilot testing of odor and corrosion control chemicals in LFUCG's wastewater collection system. The primary goal of this Work is to benchmark effective treatment options and associated costs that can be used by LFUCG to control odors and corrosion from hydrogen sulfide (H<sub>2</sub>S) in the pumped sewer system. Additionally, pilot testing will allow the LFUCG to assess compatibility of proposed chemicals with existing infrastructure and processes.

The intent of this Bid is to prequalify multiple viable Vendors so that they have the opportunity to demonstrate their product(s) and ability to be a cost effective solution to sewer odor and corrosion. Bidders must be regularly engaged in supplying these products/services and have significant experience providing liquid phase odor control for municipal wastewater collection systems. Bidder(s) must be able to demonstrate its experience of providing similar Odor and Corrosion Control products/services successfully to at least three (3) other municipal clients. *LFUCG will only consider proposals from Bidders who demonstrate similar experience with satisfactory reference verifications.*

If selected to perform pilot testing, it can be assumed that pilot testing would last a minimum of 30 days and a maximum of 90 days. It is intended that pilot testing will likely occur in a long force main (with greater than 10 hours detention time) with two chemical feed sites available (at pump station and at a midpoint location). It would be up to the Vendor(s) selected to perform pilot testing if chemical would be fed at one or both

It should not be assumed that a prequalified vendor will be selected to perform pilot testing.

LFUCG requires that the selected bidder(s) perform the activities associated with the provision of the odor/corrosion control services of LFUCG's collection system in accordance with this agreement. Services shall be provided in a safe, secure, effective, and efficient manner and in accordance with all applicable laws, rules, and regulations. All costs for services provided shall be paid in accordance with the payment provisions as described in Bid.

**SCOPE OF WORK**

LFUCG will designate specific locations for pilot test applications. In designating those specific locations, LFUCG will provide both a power supply, (115 VAC, 60Hz, 1 phase), for Vendor's pumping equipment and a connection point (manhole, tap, etc.) for dosing into the collection system.

**Vendor Responsibilities:**

**A. CHEMICAL**

Provide Chemical to reduce and control odors/corrosion caused by hydrogen sulfide. The chemical shall:

- be free of any objectionable odor-producing compounds.
- be provided with quality control procedures to ensure a consistent and reliable concentration of active ingredient is supplied.

**B. EQUIPMENT**

Provide the following equipment for each of the two (2) feed sites:

- Suitable storage for the chemical. The chemical may be stored on the back of a flatbed truck or sitting on the ground but must be stored in a method which meets all applicable safety regulations. Storage shall be provided without making modifications to the sites.
- Chemical feed and control equipment. Vendor is responsible for mobilization and demobilization of equipment from the two sites, operation and maintenance of the chemical feed systems and adjustment of chemical dosages as approved by LFUCG.
- Equipment for continuous H<sub>2</sub>S monitoring.

The cost for equipment (including mobilization/demobilization of equipment) shall be provided in the Mobilization Cost on the price proposal form; the cost for chemical shall be included in the Volumetric price.



### **C. CHEMICAL DELIVERY**

1. Providing chemical will include delivery of the chemical to the designated test site(s) and maintaining sufficient volume to meet the needs of the pilot study. LFUCG employees may or may not be present during deliveries, but assistance from LFUCG should not be assumed.
2. The Vendor shall provide prompt clean-up, in accordance with Vendor provided Safety Data Sheet, of any spills made during delivery or during the test.
3. Vendor is responsible for providing the appropriate size of truck to meet the site conditions without modifications to the sites.
4. Trucks shall comply with all local, state, and federal road and highway weight restrictions and other applicable shipping regulations. All deliveries shall be accompanied by a U.S. Department of Labor Safety Data Sheet (OSHA Form 28) for the product. A Certificate of Analysis shall accompany all shipments.
5. If chemical is to be delivered into storage tanks, all hoses and fittings required to unload the truck and fill the tanks shall be provided by the Vendor.
6. Each load must be accompanied by a Bill of Lading, a certified weight ticket, and a Certificate of Analysis listing the specific gravity of the product.

### **D. MAINTENANCE OF EQUIPMENT**

Provide all parts, tools, labor, and equipment required to keep the feed system in operation throughout the pilot study.

### **E. SAMPLING AND MONITORING**

Provide knowledgeable, trained representatives to collect/analyze liquid samples (sulfides, pH and temperature) and monitor for H<sub>2</sub>S. H<sub>2</sub>S monitoring shall be provided during the Pilot study plus at least 1 week prior to and 1 week after the study. It can be assumed that H<sub>2</sub>S monitoring will be required at a minimum of two (2) locations.

All sampling and monitoring data as well as dosage adjustments shall be documented by the Vendor and submitted to LFUCG.

### **F. REPORTS**

Prepare a report to include all data collected prior to and during the pilot study including documentation of dosage adjustments. Provide the report summarizing results, cost analysis, and recommendations to LFUCG following the completion of the pilot study.

### **BID SUBMITTAL REQUIREMENTS**

The following items must be submitted in response to this Bid. NOTE: If Vendor proposes more than one product, a separate Bid response must be submitted for each product.

Information to be provided in this order:

**1. Company Information:**

- Name of Company
- Brief narrative description of company
- Contact information for company representative

**2. Product Description:**

- Name and narrative description of proposed chemical

**3. Safety Documentation:**

- Safety Data Sheet (SDS) for proposed chemical
- Description of safe handling and storage methods

**4. References:**

- Contact information (name, phone number and email address) from three (3) municipal wastewater clients demonstrating your company's experience in Liquid Phase Odor Control using the proposed chemical under contract for at least two (2) years.
- Brief description of services provided to each of the three clients.

**5. Pricing:**

- Pricing listed as specified in the Price Proposal Form below:

| <b>Price Proposal Form</b> |   |   |  |
|----------------------------|---|---|--|
| <b>Name of Product</b>     | <b>Equipment plus<br/>Mobilization /<br/>Demobilization Price<br/>(\$/site)</b> | <b>Chemical Solution<br/>Unit Price<br/>(\$/unit)</b> | <b>Specify Price Units<br/>(\$/Gallon or \$/Pound)</b> |
| Thioguard                  | \$12,600/site   | \$6.65/gallon   | \$/gallon  |

- Questions must be submitted in Ionwave

# Municipal User Verification References

|    | Name                                   | Application  | Name/Address/Phone   | Tank Size, gal | MGD     |
|----|--|--|--|----------------|---------|
| 1. | Town of<br>Clarksville, IN             | Odor control and<br>Alkalinity/pH control  | Matt Taylor<br>2000 Broadway St<br>Clarksville, IN 47129<br>(502) 609-0724     | 6000           | 2-5 MGD |
| 2. | Kent County, DE                        | Odor control for three<br>regions  | Barb Dorsey<br>139 Milford Neck Rd,<br>Milford, DE 19963<br>302-335-6000 x-222 | 2500           | 6.8 MGD |
| 3. | South Monmouth<br>RSA,<br>Wall Twp, NJ | Odor control to treat total<br>flow into plant from 5<br>miles away, improved<br>biogas and digestion<br>retention | Ryan Krause<br>1235 18 <sup>th</sup> Ave<br>Wall Twp, NJ 07719<br>732-558-5765 | 6000           | 5 MGD   |



#### Executive Summary:

Premier Magnesia, LLC is a global market leader in magnesia-based products and solutions for dozens of applications ranging from agricultural to industrial and environmental markets. We are one of the world's principal manufacturers and suppliers of high purity calcined magnesium oxide and magnesium hydroxide products. For over 50 years, the Company and its predecessors have owned and operated a magnesia mine and processing plant located in Gabbs, Nevada that will continue to offer the only domestically-mined source of magnesia ore in the United States well into the future.

Our Giles Chemical Division is the largest producer of magnesium sulfate, commonly known as Epsom Salt, in North America. Premier Magnesia and Giles Chemical are your essential magnesia mineral source, assuring consistent quality, technical expertise, and long term reliable supply.

Considerable research and development capital has been, is currently and will be invested into our current brands, products and services. Over \$100 million in mine development, processing and research has been invested over the past 20 years to assure our clients have the best performing and most cost efficient technical grade magnesium oxide, magnesium hydroxide and magnesium sulfate available in the US. Premier Magnesia, LLC retains ownership and thus offers complete control of production from our secure US raw material source to formulated client solutions create the highest quality and most trusted products and brands.

Our USA-made products are proven in a range of industries and applications from agriculture to environmental, to industry and manufacturing. Our goal is to help our clients maximize their performance quality, mitigate risks, sustain resources, and comply with regulatory requirements. Our brands include Amphomag®, AquaMag®, EnviroBlend®, Giles®, Magox®, Thioguard®, Thioguard® Omega-S, Nutri-Mg++®, TG 325 OX®, Magriculture®, PREVent-C® and PREMAG Cements.



#### **Mission Statement:**

- To own and maintain USA-based production from mineral to final product; ensuring reliability of supply, quality control, and cost-effectiveness.
- To set a standard-of-excellence in client experience through our responsiveness, technical expertise, and innovative solutions.
- To be advocates for magnesia as a natural mineral that is safe, reliable, and adds value to numerous product applications in multiple industries.

Magnesia-based product chemistries are Generally-Recognized-As-Safe (GRAS) and non-hazardous, offering environmentally responsible solutions to complex problems.



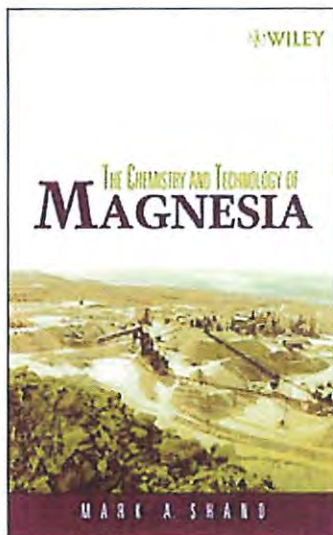
#### **Some Historical Facts About the Mineral Magnesium:**

- In 1808, Sir Humphrey Davy first isolated several of the alkaline earth metals, naming them after their oxides as barium, strontium, calcium, and magnesium. Davy derived the term "magnesium" from the common name for magnesium oxide: magnesia.
- Magnesium is the 8th most abundant compound in the earth's crust, and the 11th most abundant element in the human body.
- Magnesia is considered a "universal neutralizer", which makes it ideal for applications where pH control is essential for safety and treatment, such as in environmental, industrial, and spill response applications.
- Magnesium oxide is an essential nutrient in many animal feeds for providing mineral nutrition for digestive health and well-being.
- Discovered in Epsom, England, magnesium sulfate heptahydrate (aka Epsom Salt) has been used as a therapeutic / soaking treatment for aching muscles and joints for over 300 years.





**We Wrote the Book on Magnesia:**



"The Chemistry and Technology of Magnesia" by Dr. Mark. A Shand, Director of Product Development and Process Technology

A Complete Guide to Magnesia - From Mining to End Use

MARK A. SHAND is the Director of Product Development and Process Technology for Premier Magnesia LLC, where he is responsible for the research and development of magnesia chemicals. He has technical experience with dispersion technologies, industrial and municipal applications, and production of magnesia and oxide products. Mark is also a member of the American Chemical Society.



# SAFETY DATA SHEET

Issue Date 01-Dec-2014

Revision Date 19-October-2023

Version 4

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product Name THIOGUARD®

### Other means of identification

Product Code THIOGUARD®

Synonyms Magnesium Hydroxide,  
Mag Hydroxide, Hydrated Magnesia,  $Mg(OH)_2$

### Recommended use of the chemical and restrictions on use

Recommended Use Waste water treatment. Hydrogen sulfide control.

Uses advised against No information available

### Details of the supplier of the safety data sheet

#### Manufacturer Address

Premier Magnesia, LLC, 75 Giles Place, Waynesville, NC 28786

### Emergency telephone number

Company Phone Number 828-452-4784

24 Hour Emergency Phone Number Chemtrec 1-800-424-9300

Emergency Telephone Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

#### OSHA Regulatory Status

Not hazardous in normal industrial use. Dust from dried product slurry is classified as a "nuisance particulate, not otherwise regulated" as specified by ACGIH and OSHA.

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

### Label elements

#### Emergency Overview

White to off-white aqueous slurry. Not toxic in normal industrial use. Dust is classified as a "nuisance particulate not otherwise regulated" as specified by ACGIH and OSHA. Do not store in drums or tanks constructed of aluminum! See section 7.

**Appearance** Slurry

**Physical state** Liquid

**Odor** Odorless

Particulate may cause eye irritation

Low toxicity by skin contact.

Ingestion is an unlikely route of exposure. If ingested in large amounts it may cause irritation, nausea, vomiting, diarrhea, abdominal pain, black stool, pink urine, coma and possibly death.

### Hazards not otherwise classified (HNOC)

### Other Information

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Common name** Magnesium Hydroxide #1309-42-8.  
**Synonyms** Magnesium Hydroxide, Hydrated Magnesia

Formula #1

Mg(OH)<sub>2</sub>

| Chemical Name       | CAS No.   | Weight-% | Trade Secret |
|---------------------|-----------|----------|--------------|
| Water               | 7732-18-5 | 39-47    |              |
| Magnesium Hydroxide | 1309-42-8 | 53-61    |              |

#### 4. FIRST AID MEASURES

##### First aid measures

**Eye contact** Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists: Get medical advice/attention.

**Skin Contact** Wash skin with soap and water.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately.

**Ingestion** Ingestion is an unlikely route of exposure. If ingested in sufficient quantity and victim is conscious, give 1-2 glasses of water or milk. Never give anything by mouth to an unconscious person. Leave decision to induce vomiting to qualified medical personnel, since particles may be aspirated into the lungs. Seek immediate medical attention.

##### Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

##### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Firefighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus and full protective clothing when appropriate.

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.

##### Specific hazards arising from the chemical

No information available.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

##### Environmental precautions



**Environmental precautions** See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Carefully clean up and place material into a suitable container, being careful to avoid creating excessive dust. If conditions warrant, clean up personnel should wear approved respiratory protection, gloves and goggles to prevent irritation from contact and/or inhalation.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Do not allow product to freeze. Do not store in drums or tanks constructed of aluminum!.

**Incompatible materials** Maleic anhydride; Aluminum metal in contact with product may produce hydrogen.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

**Engineering Controls** Provide sufficient ventilation, in both volume and air flow patterns to control mist/dust concentrations below allowable exposure limits.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** The use of eye protection is recommended.

**Skin and body protection** The use of eye protection, gloves and long sleeve clothing is recommended.

**Respiratory protection** Provide workers with NIOSH approved respirators in accordance with requirements of 29 CFR 1910. 134 for level of exposure incurred.

**General Hygiene Considerations** Avoid contact with eyes, skin and clothing. After handling this product, wash hands before eating or drinking.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

|                               |  |                       |                          |
|-------------------------------|--|-----------------------|--------------------------|
| <b>Physical state</b>         | Liquid   | <b>Odor</b>           | Odorless                 |
| <b>Appearance</b>             | Slurry   | <b>Odor threshold</b> | No information available |
| <b>Color</b>                  | White to off-white   |                       |                          |
| <b>Property</b>               | <b>Values</b>  | <b>Remarks</b>        | <b>Method</b>            |
| pH                            | 10-11  |                       |                          |
| Melting point/freezing point  | 2100 °C >3800 °F   |                       |                          |
| Boiling point / boiling range | Loses free water at 100 °C<br>Chemically combined water at 350°C |                       |                          |

|                              |                          |                |
|------------------------------|--------------------------|----------------|
| Flash point                  | No information available |                |
| Evaporation rate             | Same as water            |                |
| Flammability (solid, gas)    | No information available |                |
| Flammability Limit in Air    |                          |                |
| Upper flammability limit:    | No information available |                |
| Lower flammability limit:    | No information available |                |
| Vapor pressure               | No information available |                |
| Vapor density                | No information available |                |
| Specific Gravity             | 1.45                     |                |
| Water solubility             | No information available | Aqueous Slurry |
| Solubility in other solvents | No information available |                |
| Partition coefficient        | No information available |                |
| Autoignition temperature     | No information available |                |
| Decomposition temperature    | No information available |                |
| Kinematic viscosity          | No information available |                |
| Dynamic viscosity            | No information available |                |
| Explosive properties         | No information available |                |
| Oxidizing properties         | No information available |                |

**Other Information**

|                  |                          |
|------------------|--------------------------|
| Softening point  | No information available |
| Molecular weight | No information available |
| VOC Content (%)  | No information available |
| Density          | No information available |
| Bulk density     | 12.71-13.19 lb/gal       |

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous polymerization**

Hazardous polymerization does not occur.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

Maleic anhydride; Aluminum metal in contact with product may produce hydrogen.

**Hazardous Decomposition Products**

Heat and steam.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

|                     |   |
|---------------------|---|
| Product Information | Product does not present an acute toxicity hazard based on known or supplied information. |
| Inhalation          | No data available.  |
| Eye contact         | No data available.  |
| Skin Contact        | No data available.  |
| Ingestion           | No data available.  |

| Chemical Name                    | Oral LD50            | Dermal LD50 | Inhalation LC50 |
|----------------------------------|----------------------|-------------|-----------------|
| Water<br>7732-18-5               | > 90 mL/kg ( Rat )   | -           | -               |
| Magnesium Hydroxide<br>1309-42-8 | = 8500 mg/kg ( Rat ) | -           | -               |

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** May cause eye irritation.  
**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** No information available.  
**Reproductive toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information****12. ECOLOGICAL INFORMATION****Ecotoxicity**

No data available on any adverse effects of this material on the environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

**Disposal of wastes** This produce does not exhibit any characteristics of a hazardous waste. The product is suitable for landfill disposal once the free water component is evaporated or absorbed by a suitable absorbent (earth). Follow all applicable federal, state and local regulations for safe disposal.

**Contaminated packaging** Do not reuse container.

**14. TRANSPORT INFORMATION**

**Note:** WARNING! Premier Magnesia, LLC prohibits this product from transportation or storage in tanks constructed of aluminum! See section 10.

**DOT**

Not regulated by DOT as a hazardous material. No hazard class, label or placard required, no UN or NA number assigned.

## 15. REGULATORY INFORMATION

### International Inventories

| TSCA                |  | Complies        |
|---------------------|--|-----------------|
| Chemical Name       |  | TSCA            |
| Water               |  | X               |
| Magnesium Hydroxide |  | X               |
| DSL/NDSL            |  | Complies        |
| EINECS/ELINCS       |  | Complies        |
| ENCS                |  | Does not comply |
| IECSC               |  | Complies        |
| KECL                |  | Complies        |
| PICCS               |  | Complies        |
| AICS                |  | Complies        |

### X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

### US Federal Regulations

#### SARA 313

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

#### SARA 311/312 Hazard Categories

|                                   |    |
|-----------------------------------|----|
| Acute health hazard               | No |
| Chronic Health Hazard             | No |
| Fire hazard                       | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard                   | No |

#### CWA (Clean Water Act)

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

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### US State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals This product does not contain chemicals known to the state of California to cause birth defects or other reproductive harm.

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

| Chemical Name      | New Jersey | Massachusetts | Pennsylvania |
|--------------------|------------|---------------|--------------|
| Water<br>7732-18-5 | -          | -             | X            |

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not Applicable

**16. OTHER INFORMATION**

|             |                  |                |                    |                                    |
|-------------|------------------|----------------|--------------------|------------------------------------|
| <b>NFPA</b> | Health hazards 0 | Flammability 0 | Instability 0      | Physical and Chemical Properties - |
| <b>HMIS</b> | Health hazards 0 | Flammability 0 | Physical hazards 0 | Personal protection X              |

Issue Date 01-Dec-2014  
Revision Date 19-October-2023  
Revision Note

No information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**





**Product Data Bulletin**  
**THIOGUARD®**  
**Technical-Grade Magnesium**  
**Hydroxide Slurry**

THIOGUARD® is a proven superior quality technical grade product, manufactured through a proprietary process for conditioning in municipal water and wastewater treatment. Thioguard has the following qualities:

- Thioguard is a highly reactive, technical-grade magnesium hydroxide slurry produced from highly reactive caustic calcined magnesium oxide.
- Thioguard is sourced and processed exclusively by Premier in the USA. 100% Made in the USA.
- Thioguard has the highest available surface area and reactivity as a result of Premier's proprietary manufacturing process.
- Wastewater treatment is performed in a sensitive biological environment wherein operation is performed at near-neutral or slightly alkaline conditions, requiring the highest reactive grade magnesium hydroxide available.
- Lower reactive grades are incapable of sufficiently neutralizing the acid generated in these environments and will pass through the system unused.
- Thioguard is manufactured to exacting particle size, specific surface area and particle size distribution to provide the highest reactivity and proper stability for transportation, pumping and handling. This provides consistent performance, better dispersion and suspension stability that is critical to collection system and treatment plant operation while reducing acute in-plant sludge generation associated with lime and lower grade brucite magnesium hydroxides.
- Thioguard is produced through a proprietary production process to insure the highest percent solids, highest surface area, and thus highest reactivity within municipal wastewater.
- Thioguard will also aid in solids settling by supplying a non-carbonate, divalent magnesium cation that enhances bio-floc formation.
- Thioguard supplies a non-carbonate, divalent magnesium cation that enhances bio-floc formation and solids dewatering resulting in reduced polymer requirements and higher percentage biosolids cake that reduces dewatering and disposal costs.
- Premier offers distribution terminals throughout the USA.



# THIOGUARD® Specifications:

|  | Typical   | Maximum | Minimum |
|--|---|---------|---------|
| <b>Slurry Basis</b>  |   |         |         |
| Mg(OH) <sub>2</sub> contained lb/gal   | 7.74  | 8.37    | 7.53    |
| <b>Dry Solids Basis</b>  |   |         |         |
| MgO, wt%   | 91.2  |         |         |
| CaO, wt%   | 4.2   |         |         |
| Insoluable, wt%  | 3.5   |         |         |
| R <sub>2</sub> O <sub>3</sub> , wt%  | 1.1   |         |         |
| Median Particle Size, Micron   | 8.56  | 9.96    | 7.28    |
| Specific Surface Area, m <sup>2</sup> /g   | 16.0  | 25.0    | 14.0    |
| Lbs Alkalinity/Gallon  | 11.8  | 13.19   | 11.71   |
| Caustic Magnesia Activity/Sec  | 75  | 140     |         |
| % Passing 325 Mesh Sieve   | 98  |         |         |
| Compacted Stabilized Residuals, grams  | 34.0  | 59.0    | 24.0    |
| NaOH Equivalent  | 1 lb Equivalent to .73 lb Mg(OH) <sub>2</sub> 60% |         |         |
| CaCO <sub>3</sub> Equivalent   | 1 lb Equivalent to .59 lb Mg(OH) <sub>2</sub> 60% |         |         |
| Physical Properties:   |   |         |         |
| Density, lbs/gal   | 12.8  | 13.23   | 12.76   |
| Solids, Weight Percent %   | 60  | 63      | 58      |
| Viscosity, cps**   | 150   | 300     | 100     |
| **Brookfield RVT Viscometer #3 spindle @ 100 rpm, 60 seconds at 70°F   |   |         |         |
| Certifications:  |   |         |         |
| NSF International Certifies that the technical grade magnesium hydroxide with struvite control technology conforms to the requirements of NSF/ANSI Standard 60 – Drinking Water Treatment Chemicals – Health Effects |   |         |         |

## Packaging and Storage:

THIOGUARD® is shipped in bulk tank trucks and can be easily pumped and stored in steel, fiberglass or polypropylene tanks. Thioguard should be kept from freezing.

THIOGUARD® is a registered trademark of Premier Magnesia, LLC  
**Visit our Web Site** [www.THIOGUARD.com](http://www.THIOGUARD.com) / [www.PREMIERMAGNESIA.com](http://www.PREMIERMAGNESIA.com)



# THIOGUARD®

## EFFECTIVE, ENVIRONMENTALLY SAFE TOTAL SYSTEM TREATMENT FOR MUNICIPAL WASTEWATER



THIOGUARD® - Milk of Magnesia, technical grade Mg(OH)<sub>2</sub>, is the safest and most beneficial single chemistry available for wastewater treatment. Offering the broadest range of applications and potential savings, THIOGUARD is backed by the MgWater™ group of Premier Magnesia, LLC, the most knowledgeable magnesia professionals in the industry. THIOGUARD often successfully replaces multiple chemistries with a single total treatment system. Benefits include reduced wastewater conveyance costs, reduced total sludge production/processing/disposal, optimized plant alkalinity, facilitated nutrient control/recovery, increased methane recovery, and more.

| THIOGUARD vs.<br>Competitors                         | Premier Magnesia, LLC<br>THIOGUARD® | Alternative Source<br>(Competitors) | Alternative Source<br>(Competitors) |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
|  | 60% Mg(OH) <sub>2</sub> Slurry      | 55% Mg(OH) <sub>2</sub> Slurry      | 50% Mg(OH) <sub>2</sub> Slurry      |
| Density (lbs/gal)                                    | 12.72                               | 12.21                               | 11.69                               |
| Active Chemical (lbs/gal)                            | 7.63                                | 6.74                                | 5.85                                |
| Equivalent CaCO <sub>3</sub> Alkalinity<br>(lbs/gal) | 13.2                                | 11.65                               | 10.1                                |
| 8 Days Inventory                                     | 40,000                              | 46,139                              | 52,277                              |

15-30%  
less to do  
MORE!

- ✓ Reduced Costs
- ✓ Reduced Corrosion
- ✓ Reduced Odor
- ✓ Enhanced Dewatering



# Harness the Power of Technical Grade Magnesium Hydroxide For Your System

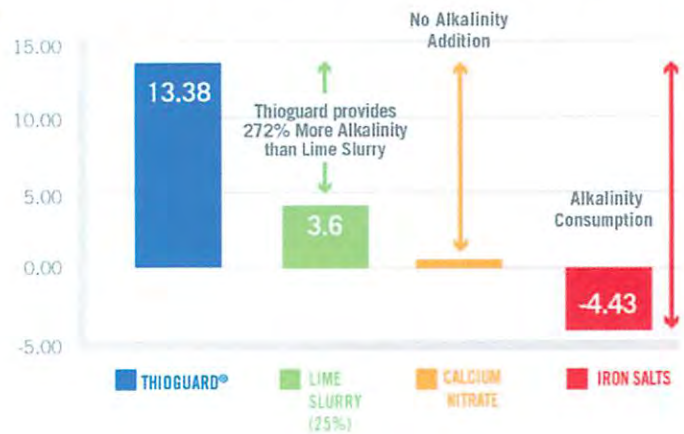
THIOGUARD's unique physical and chemical properties as a highly reactive, two-state alkaline source and divalent, essential-mineral nutrient make it ideally suited to enhance the physical, chemical and biological processes found in wastewater treatment plants.

When applied properly, THIOGUARD reduces operating costs for the treatment of wastewater, recovery of methane and disposal of biosolids.

Typical cost savings:

- 5-10% for odor control
- 10-40% in sludge production
- 10-20% in energy savings

LBS ALKALINITY PER GALLON



## One great product, many problems solved!

- Sewer Overflows (SSOs) related to FOG/Corrosion
- Foul Sewer Odors
- Corrosion and Rehab
- Biosolids Processing and Disposal
- Alkalinity for Biological Treatment of BOD, TSS, NH<sub>3</sub>, TN, TP
- Nutrient/Struvite Prevention/Management
- Enhanced Energy/Methane Recovery



## About MgWater™

Our industry demands reliability, consistency and optimal performance. The MgWater™ group of Premier Magnesia, LLC delivers with economical, effective, environmentally sound solutions. Let's talk about how our superior magnesium hydroxide products can start improving your facility today.

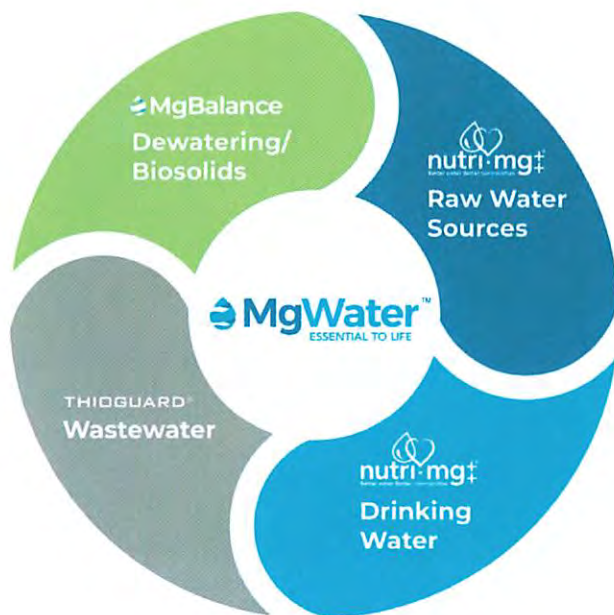
[mgwaterinfo@premiermagnesia.com](mailto:mgwaterinfo@premiermagnesia.com)

[www.mg-water.com](http://www.mg-water.com)

75 Giles Pl., Waynesville, NC 28786







|                        |      |
|------------------------|------|
| <b>nutri-mg+</b>       |      |
| Ease TOC removal rules | 👍👍   |
| Magnesium for health   | 👍👍❤️ |
| Alkalinity source      | 👍👍   |
| Improved settling      | 👍👍   |

|                        |    |
|------------------------|----|
| <b>THIOGUARD®</b>      |    |
| Alkalinity source      | 👍👍 |
| Nutrient / FOG control | 👍👍 |
| Less odor / corrosion  | 👍👍 |
| Polymer reduction      | 👍👍 |

|                      |    |
|----------------------|----|
| <b>MgBalance™</b>    |    |
| Helps settle/thicken | 👍👍 |
| Nutrients captured   | 👍👍 |
| Drier cake           | 👍👍 |
| Polymer reduction    | 👍👍 |



## CONTACT US

Our industry demands reliability, consistency and optimal performance. The MgWater™ group delivers with economical, effective, environmentally sound solutions. Let's talk about how our superior magnesium hydroxide products can start improving your facility today.

✉ [mgwaterinfo@premiermagnesia.com](mailto:mgwaterinfo@premiermagnesia.com)

🌐 [www.mg-water.com](http://www.mg-water.com)

📍 75 Giles Pl., Waynesville, NC 28786



## 30+ YEARS OF UNMATCHED QUALITY IN MAGNESIUM HYDROXIDE

The most experienced team of experts delivering the most advanced products available, achieving improved water treatment results at lower dosage rates.

[www.mg-water.com](http://www.mg-water.com)



# Leadership through Innovation

Premier Magnesia, LLC pioneered the most innovative and beneficial uses of magnesium hydroxide for water and wastewater treatment in America, including corrosion and odor control, biological process optimization and stabilization, and nutrient treatment and recovery.

Our 60% Magnesium Hydroxide Slurry is the most concentrated form of consistent and reliably superior aqueous alkalinity commercially available. It is more chemically robust than competing products and can deliver more consistent results at lower dosage rates, leading to cost savings and increased efficiency. For example, using a less reliable 50% product could necessitate plant operators to adjust daily usage rates and requirements as much as +/- 30% with every truckload.

## THIOGUARD vs. Competitors

|   | Premier Magnesia, LLC<br>THIOGUARD® | Alternative Source<br>(Competitors) | Alternative Source<br>(Competitors) |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
|   | 60% Mg(OH) <sub>2</sub> Slurry      | 55% Mg(OH) <sub>2</sub> Slurry      | 50% Mg(OH) <sub>2</sub> Slurry      |
| Density (lbs/gal)                                 | 12.72                               | 12.21                               | 11.69                               |
| Active Chemical (lbs/gal)                         | 7.63                                | 6.74                                | 5.85                                |
| Equivalent CaCO <sub>3</sub> Alkalinity (lbs/gal) | 13.2                                | 11.65                               | 10.1                                |
| 8 Days Inventory (gal)                            | 40,000                              | 46,139                              | 52,277                              |

After 30+ years of success with our legacy solution, THIOGUARD®, MgWater expands the benefits of Mg(OH)<sub>2</sub> to raw water and drinking water with Nutri-Mg++® and to dewatering and resource recovery with MgBalance™.



THIOGUARD®  
TST ΩMEGA-S OX

MgBalance™

# The MgWater™ Advantage

## Audit and Analysis

MgWater™ group guides each customer through the crucial process of developing a baseline for each plant, which informs the suite of products and services specifically tailored to solve any range of treatment challenges.

## Custom Treatment Solution

Adding mid to high levels of biologically available alkalinity while raising pH only modestly. Adding divalent cations (Mg+2) which improves the Monovalent/Divalent (M/D) cation ratio, a predictor in efficient settling and dewatering.

## Cost Efficiency

When added to a system, generally through a single feed unit, our custom solution suppresses hydrogen sulfide system-wide, eliminating odor problems, and in many cases reducing total gases released from the wastewater stream. Facilities effectively maintain and extend the engineered life of existing infrastructure, minimize sludge production, enhance clarification and improve dewatering.

- ✓ More Alkalinity/Gal
- ✓ TOC Removal
- ✓ pH Adjustment
- ✓ Odor Elimination
- ✓ Corrosion Control
- ✓ Nitrogen Removal
- ✓ Phosphorous Removal
- ✓ Biosolids Digestion
- ✓ Biosolids Dewatering
- ✓ Sludge Management

1.800.227.4287

www.mg-water.com





# THE EVENING NEWS

## Officials optimistic about getting rid of odor

■ **Clarksville  
leaders say latest  
effort is promising**

By JOHN L. GILKEY  
Senior Editor

Officials at the Clarksville Wastewater treatment plant say they are optimistic they are on the right track for resolving a long-standing odor problem. Plant Manager Joe Woodward told the town's Board of Public Works last week that a new chemical being tested at the plant is showing great promise.

"While I'm not ready to tell you that we have solved the problem," Woodward told the board of works, "I am here to tell you that it appears we may have found the solution."

He was referring to a trial that has been conducted over the past few weeks in injecting a new chemical into wastewater flows entering the plant. The chemical is designed to inhibit the production of hydrogen sulfide, a gas which exhibits an odor like rotten eggs that is most often identified as the smell that comes from the plant.

"Basically, the chemical raises the pH of the sewage, and keeps hydrogen sulfide from forming," Woodward said.

The town has faced a serious problem with odors from the wastewater treatment plant from the time it added sewage from its northern end. Because sewer lines and wet wells along the route were built large enough to handle future capacity, they have been operating at minimal levels of flow. When oxygen in the wastewater is depleted by

SEE ODOR, PAGE A4

## ODOR

CONTINUED FROM PAGE A1

bacteria, the sewage becomes septic and starts to emit the foul odors.

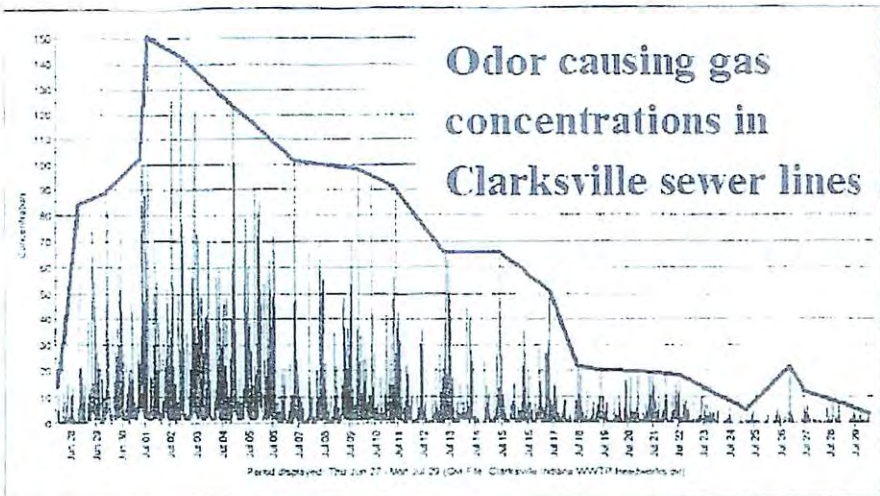
Woodward said a series of problems have been identified that resulted in the odors being released, and he said the wastewater treatment plant is working to resolve each of those issues.

New blowers are being installed at various pumps, lift stations and wet wells along the route to inject air into the wastewater flow and keep the oxygen level high enough that hydrogen sulfide does not start to form.

Additionally, he said the flow from the town's north end enters a pump station near subdivisions to the east of the plant, and must pass through a large pipe beneath Brown Station Way before entering the plant.

A screen designed to remove debris from the flow routinely becomes clogged, causing the liquid level in the pipe beneath the expressway to fill the pipe completely. As a result, gases in that pipe are forced out near the subdivisions, rather than passing beneath the highway and entering the plant.

To resolve that part of the problem, the treatment plant has been manually clearing the screen to keep wastewater levels from filling the pipe. A new screen has been ordered that



This chart shows the levels of hydrogen sulfide gas recorded at measuring stations in the Clarksville wastewater system from June 28 through July 29 showing the effect of a new chemical being tested to reduce odors. The higher the lines in the chart, the stronger the hydrogen sulfide concentration. The lower the lines, the lower the concentration of the gas and its accompanying rotten egg odor.

GRAPH SUPPLIED BY CLARKSVILLE WASTEWATER TREATMENT PLANT

will automatically clean the debris more effectively, keeping the fluid levels down low enough to allow the gases to enter the plant. The pit where the screen is located will be covered, and the gases routed through an air scrubber in the plant before they are released into the atmosphere.

When all three steps are combined, Woodward told the board of works, they should eliminate most of the odor problems.

He said the tests with the new chemical were conducted through the recent heat wave

that hit the area in what he called the "worst case scenario." He said high heat and low wastewater flows create the highest levels of hydrogen sulfide gas, and he added, "Our tests showed the odors were significantly reduced during those periods."

There are even a few benefits that make the solution sound even better, Woodward said because the wastewater is in better shape when it enters the plant, staff has been able to operate blowers in the primary settling tanks at much lower levels creating major savings in

cost for electricity.

Additionally, he said, the new chemical costs only about half of the town was paying for its previous chemicals. The reduced electrical costs coupled with the lower cost of the new chemical could result in savings in excess of \$50,000 a year, Woodward said.

The board of works applauded the efforts and said it is waiting for the final report to see the combined results of all of the efforts which hopefully will be in place by the end of the year.



# THIOGUARD® TST

EFFECTIVE, ENVIRONMENTALLY SAFE TOTAL SYSTEM TREATMENT FOR MUNICIPAL WASTEWATER



## NEWSLETTER ARCHIVE

Online Archive of the  
**THIOGUARD®** Newsletter Series



## RESOURCES

Website links and information  
related to **THIOGUARD®**



**THIOGUARD® TST** is a non-hazardous  
application with no required  
reportable quantities (RQ = None)

**THIOGUARD.COM**  
**1.800.227.4287**



OWNED, MINED  
AND PRODUCED  
IN THE USA

© PREMIER MAGNESIA | ISO 9002:1994

## PRESERVING AND MAINTAINING ASSETS:

When implementing asset management/ Infrastructure Planning, consider **THIOGUARD®** to ensure future integrity and reliability to critical infrastructure while enhancing operating efficiencies & costs.

## ASSET MANAGEMENT EXAMPLE: SAVE 50% A YEAR IN PUMP STATIONS POWER COSTS BY CHOOSING THIOGUARD®



### CHOOSING THIOGUARD® WILL:

- ✓ Decrease maintenance
- ✓ Decrease operating power costs
- ✓ Decrease FOG related SSOs and ARV malfunction
- ✓ Improve efficiency due to reduced discharge pressure in manifolded force mains
- ✓ Save money
- ✓ Neutralize acidic corrosion on contact over long distances

**THIOGUARD®** is the ONLY commonly used product that has a direct mechanism to PREVENT CORROSION. The benefits of adding **THIOGUARD®** to your treatment processes are not limited to the prevention or reduction of corrosion. You will also benefit from a reduction in the formation of sludge - significantly reducing your handling and transportation costs. The benefits are numerous and system-wide, making **THIOGUARD®** the Practical Choice for your system.



**DOWNLOAD OUR TOTAL  
SYSTEM TREATMENT MAP**



Premier Magnesia, LLC is a global market leader in magnesia-based products and solutions.

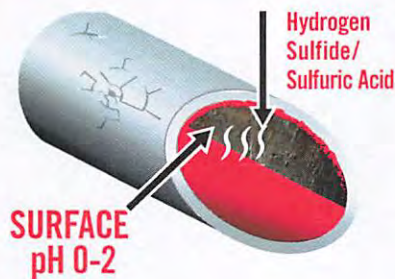


# THIOGUARD® TST

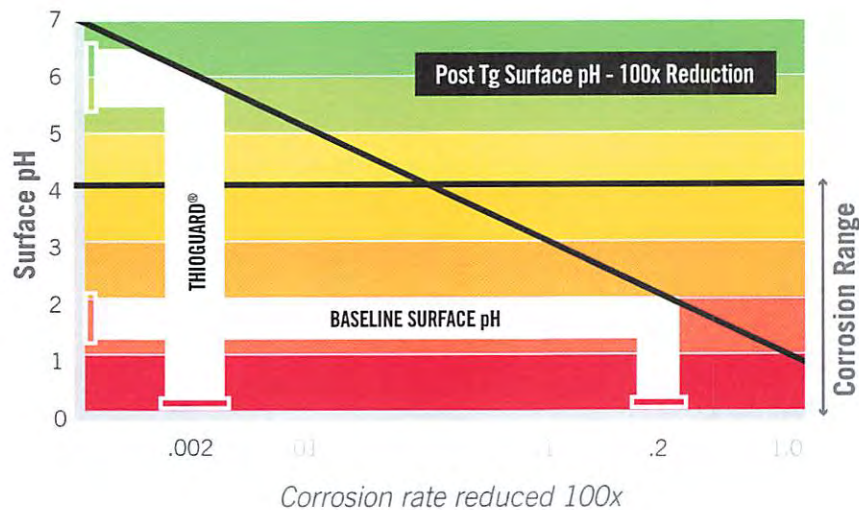
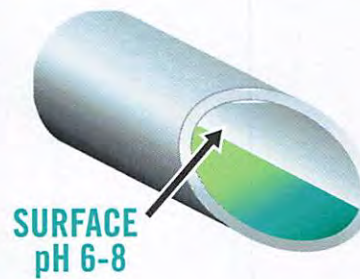
EFFECTIVE, ENVIRONMENTALLY SAFE TOTAL SYSTEM TREATMENT FOR MUNICIPAL WASTEWATER

## ADDITION OF THIOGUARD® THROUGHOUT YOUR SYSTEM

### UNTREATED INFRASTRUCTURE PIPE



### PIPE TREATED WITH THIOGUARD®



The measured surface pH can then be used to correlate corrosion rate and subsequently, remaining years of useful life of a concrete structure.

Wastewater's Contribution to Concrete Corrosion

Maintaining U.S. wastewater collection systems alone costs **\$4.5 BILLION** per year

- RWL Water / Global Water Solutions

DRINKING WATER SUPPLY AND SEWER SYSTEMS

The total annual direct cost of corrosion for drinking water and sewer systems is **\$36 BILLION**

- NACE

EPA

**\$271 BILLION** needed for Nation's Wastewater Infrastructure

- EPA



# THIOGUARD® TST

EFFECTIVE, ENVIRONMENTALLY SAFE TOTAL SYSTEM TREATMENT FOR MUNICIPAL WASTEWATER

## FORCE MAIN GAS BINDING

### PROBLEM STATEMENT:

Pumping and conveying of wastewater from end user through the collection system to wastewater treatment plants can result in negative conditions including gas binding, blockages associated with fats, oils and greases (FOG), and system corrosion. There may be other contributing conditions, but these factors appear to be the greatest contributors to O&M costs including energy consumption, maintenance costs, and Sanitary Sewer Overflows (SSOs).

### BACKGROUND:

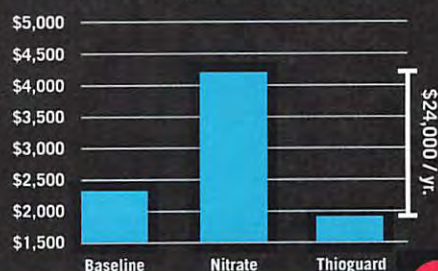
A collection system line is a unique conveyance system. The transfer of wastewater can result in the release of gases such as  $O_2$  – Oxygen,  $CO_2$  – Carbon Dioxide,  $N_2$  – Nitrogen Gas,  $H_2S$  – Hydrogen Sulfide,  $CH_4$  – Methane, VOCs – Volatile Organic Compounds, and VOSCs – Volatile Organic Sulfur Compounds among others. Some of these gases are drawn into the system through pumping and ventilation, while others are generated within the system either chemically or biologically. These gases can result in the development of gas binding in the system, especially with the utilization of calcium nitrate, as well as contribute to odors and corrosion.

DOWNLOAD OUR TOTAL SYSTEM TREATMENT MAP



### THIOGUARD® VS NITRATE

■ 500,000 GPD Pump Station Monthly Power Cost

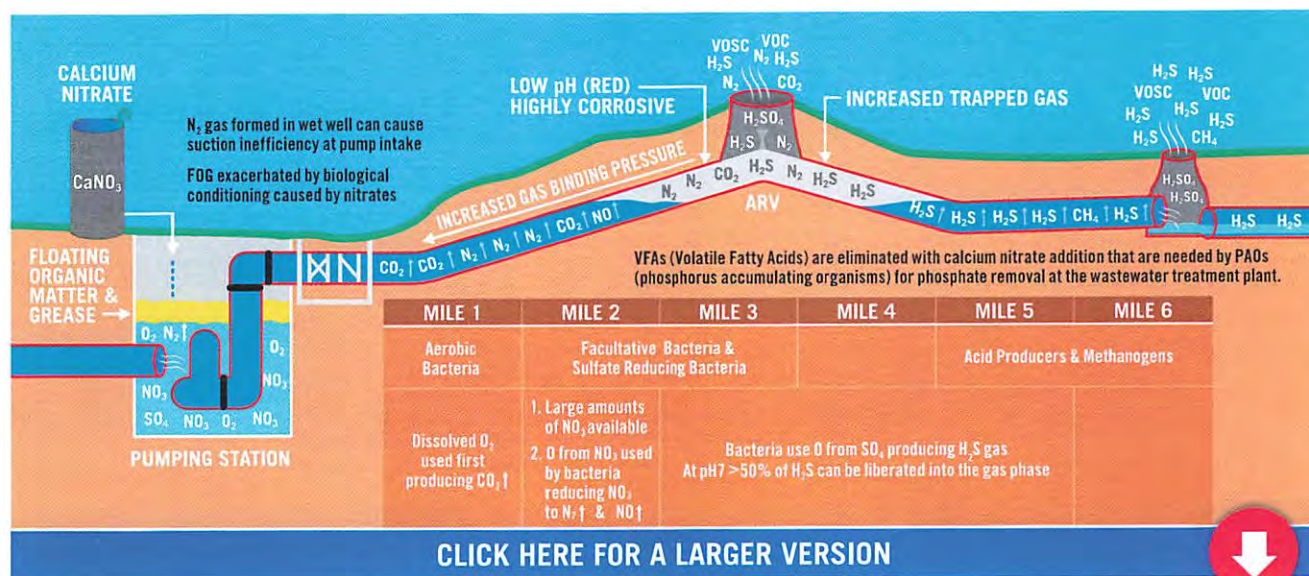


CLICK HERE FOR A LARGER VERSION



Save up to 50% per year in pump station power costs by choosing **THIOGUARD®** as your odor, FOG and corrosion control process in your collection system.

## FORCE MAIN GAS BINDING DRAMATICALLY INCREASED WITH CALCIUM NITRATE ( $CaNO_3$ ) ADDITION



### SOLUTION:

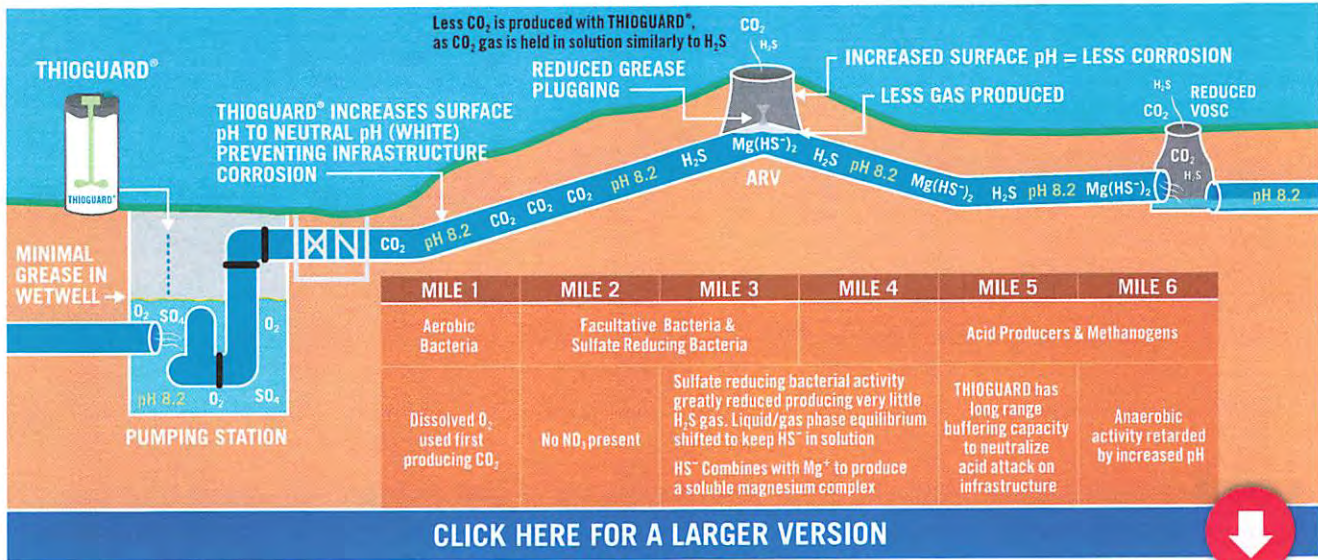
**THIOGUARD®** can overcome these issues by reducing or eliminating gas emissions from wastewater, dissolving FOG blankets and reducing corrosion to pumps and infrastructure. No other product can match **THIOGUARD®**'s ability to neutralize both collection system surface acid and wastewater acid over short and long distances to and through the wastewater treatment plant.



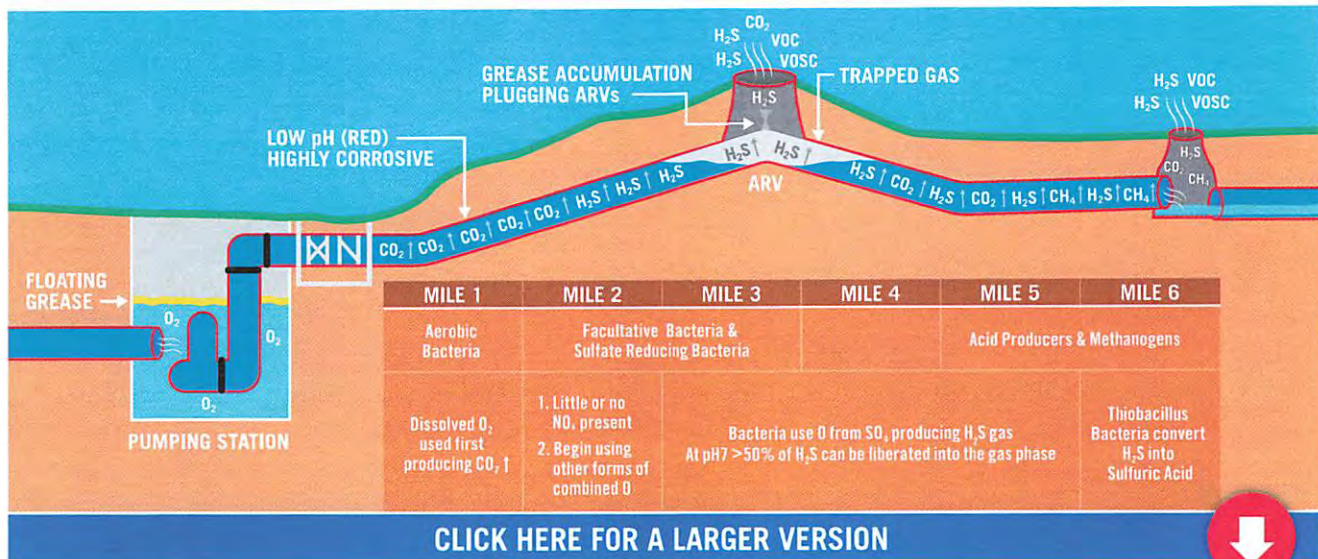
# THIOGUARD® TST

EFFECTIVE, ENVIRONMENTALLY SAFE TOTAL SYSTEM TREATMENT FOR MUNICIPAL WASTEWATER

## FORCE MAIN WITH THIOGUARD® TREATMENT



## FORCE MAIN WITH NO LIQUID PHASE TREATMENT



Call 1.800.227.4287 or Email [thioguard2@premiermagnesia.com](mailto:thioguard2@premiermagnesia.com)

Visit [www.thioguard.com](http://www.thioguard.com) to learn more about how THIOGUARD® can help your plant!

**THIOGUARD.COM | 1.800.227.4287**

THIOGUARD® HEADQUARTERS: 1275 Drummers Lane, Suite 102 | Wayne, PA 19087



# THIOGUARD® TST

EFFECTIVE, ENVIRONMENTALLY SAFE TOTAL SYSTEM TREATMENT FOR MUNICIPAL WASTEWATER



## NEWSLETTER ARCHIVE

Online Archive of the  
**THIOGUARD®** Newsletter Series



## RESOURCES

Website links and information  
related to **THIOGUARD®**



**THIOGUARD® TST** is a non-hazardous  
application with no required  
reportable quantities (RQ = None)

**THIOGUARD.COM**  
**1.800.227.4287**



**OWNED, MINED  
AND PRODUCED  
IN THE USA**

© PREMIER MAGNESIUM | ISO 9002:1994



**EPA**

## REPORT TO CONGRESS

Impacts and Control of CSOs and SSOs



**47%**  
OF BLOCKAGE EVENTS  
ARE CAUSED BY  
**GREASE**

The accumulation of fats, oils, and grease can be dramatically reduced through the use of **THIOGUARD®** technical grade magnesium hydroxide. **THIOGUARD®** is a strong base, and a moderate pH adjuster, which adds non-carbonate alkalinity to the wastewater. As pH increases, fats, oils, and grease become more soluble. The practical effect on municipal wastewater systems is a **rapid, dramatic reduction in fat, oils, and grease buildup** within the collection, transport and treatment structures.

**Note: THIOGUARD® does NOT move F.O.G. problems "downstream," only to reappear in your plant.**

**THIOGUARD®** eliminates the problem, by improving the immediate environment, allowing "good bacteria" to perform their function. By the time the wastewater reaches your reclamation facility, the majority of the F.O.G. has been either consumed or reduced to simpler organics.



**DOWNLOAD THE FULL EPA  
REPORT TO CONGRESS**



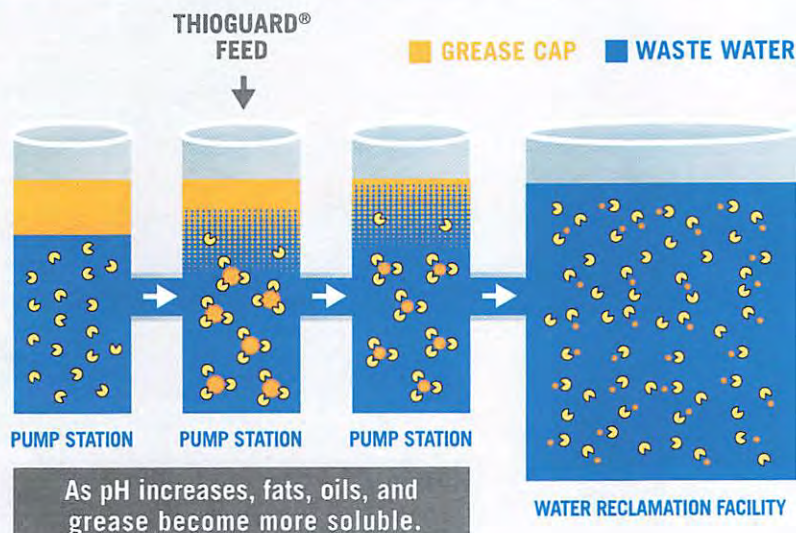
Premier Magnesium, LLC is a global market leader in magnesia-based products and solutions.



# THIOGUARD® TST

EFFECTIVE, ENVIRONMENTALLY SAFE TOTAL SYSTEM TREATMENT FOR MUNICIPAL WASTEWATER

## LONG DISTANCE F.O.G. CONTROL FOR YOUR ENTIRE SYSTEM

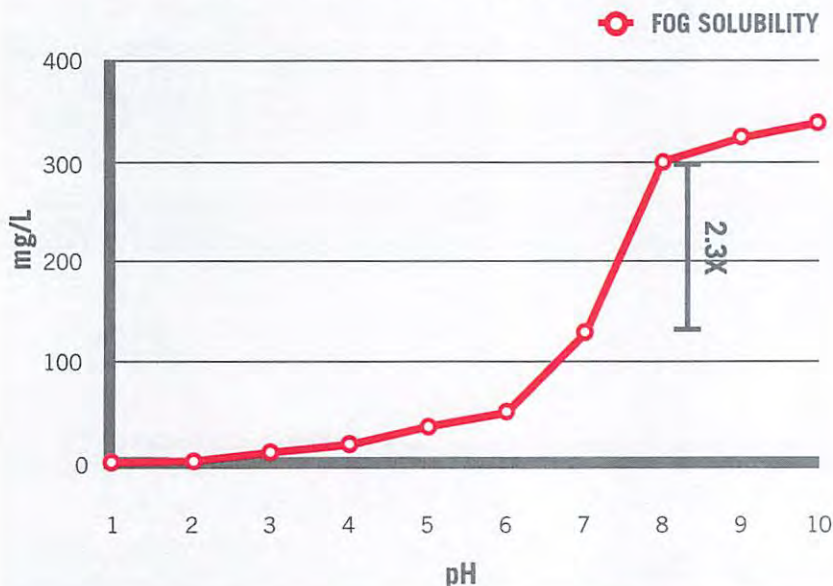


This illustration shows **THIOGUARD®** Total System Treatment working to enhance biological activity throughout your entire system, encouraging the reduction of an existing grease "cap" layer, as well as F.O.G. in solution.

The addition of **THIOGUARD®** boosts pH levels, **THROUGHOUT** your system, **PREVENTING** the conditions that encourage the deposition of grease, which can clog lines, and accumulate on the surface of pump stations and your treatment plant. With improved pH, solubility is increased significantly, by a factor of 10x in some cases. **THIOGUARD®** is typically added through a single Feed Unit, and provides multiple benefits throughout your system, from source to discharge.

## pH EFFECTS ON F.O.G. SOLUBILITY

San Ardo Oil Field | Monterey County, CA



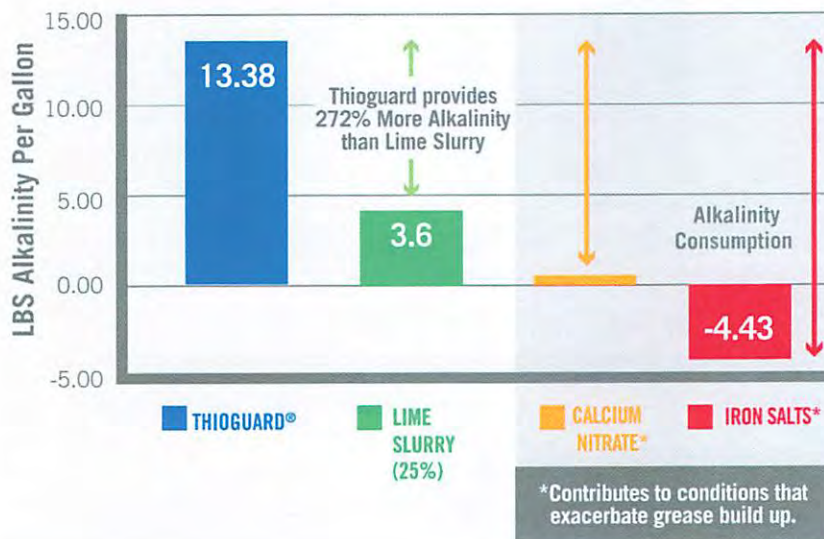
**THIOGUARD®** provides the greatest power to **neutralize acid over long infrastructure distances**, while providing additional benefits to your waste water treatment plant's biological treatment processes. The chart below compares alkalinity per gallon, illustrating the superiority of **THIOGUARD®** against other commonly used treatment options.



# THIOGUARD® TST

EFFECTIVE, ENVIRONMENTALLY SAFE TOTAL SYSTEM TREATMENT FOR MUNICIPAL WASTEWATER

## LBS ALKALINITY PER GALLON



## THIOGUARD® Cuts through F.O.G. and Delivers Multiple System-Wide Benefits

The benefits of adding **THIOGUARD®** to your treatment processes are not limited to the prevention or reduction of F.O.G., through sustainable and balanced pH levels. **THIOGUARD®** also prevents corrosion and dramatically reduces the formation of sludge - significantly reducing your handling and transportation costs. The benefits are numerous and system-wide, making **THIOGUARD®** the best and most practical choice for your system.

## F.O.G CAN BECOME A COSTLY, SYSTEMIC PROBLEM

# THIOGUARD® TST

IS A PROVEN SOLUTION TO MAINTAINING & EXTENDING THE LIFE OF OUR NATION'S WATER INFRASTRUCTURE WHILE PROVIDING MULTIPLE BENEFITS DOWNSTREAM.

FOR MORE INFORMATION CALL 1.800.227.4287 OR  
EMAIL [THIOGUARD2@PREMIERMAGNESIA.COM](mailto:THIOGUARD2@PREMIERMAGNESIA.COM)

**THIOGUARD.COM | 1.800.227.4287**

THIOGUARD HEADQUARTERS: 300 Barr Harbor Drive, Suite 250 West Conshohocken, PA 19548



# THIOGUARD® TST

EFFECTIVE, ENVIRONMENTALLY SAFE TOTAL SYSTEM TREATMENT FOR MUNICIPAL WASTEWATER



## NEWSLETTER ARCHIVE

Online Archive of the  
**THIOGUARD®** Newsletter Series



## RESOURCES

Website links and information  
related to **THIOGUARD®**



**THIOGUARD® TST** is a non-hazardous  
application with no required  
reportable quantities (RQ = None)

**THIOGUARD.COM**  
**1.800.227.4287**



**OWNED, MINED  
AND PRODUCED  
IN THE USA**

© PREMIER MAGNESIA | ISO 9002:1994

## CONTROL ODOR. PREVENT CORROSION. ACHIEVE MULTIPLE PLANT BENEFITS.

Addressing odor problems is a pressing concern in the WWT industry. One of those problems that has to be "fixed and fixed now!" Sometimes the first answer is installing a carbon, chemical, or biological scrubber. An alternative approach to the same problem is the addition of **THIOGUARD®**, which will offer superior odor reduction results, while at the same time delivering the most crucial cost saving benefit of all – **system-wide corrosion prevention**.

Infrastructure Corrosion is undoubtedly the most significant problem facing today's plant operators and engineers. The EPA puts the funds required for infrastructure repair and replacement at \$271 Billion.



**EVEN AT LOW CONCENTRATIONS,  
H<sub>2</sub>S CAN CAUSE EXTENSIVE DAMAGE**



Corrosion of Water Collection Systems Cost  
**\$13.25 BILLION annually**



Premier Magnesia, LLC is a global market leader in magnesia-based products and solutions.



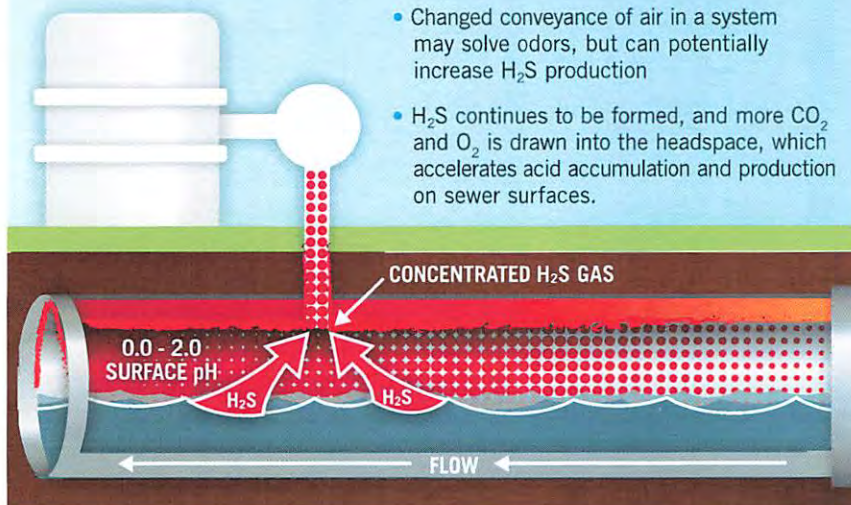
# THIOGUARD® TST

EFFECTIVE, ENVIRONMENTALLY SAFE TOTAL SYSTEM TREATMENT FOR MUNICIPAL WASTEWATER

## SYSTEM USING H<sub>2</sub>S SCRUBBER

CARBON, CHEMICAL, OR BIOLOGICAL AIR SCRUBBER TO ADDRESS ODOR CONCERNS

- Unlike odor problems, corrosion is a year-round challenge that doesn't necessarily follow seasonal effects on biology or odors.
- Changed conveyance of air in a system may solve odors, but can potentially increase H<sub>2</sub>S production
- H<sub>2</sub>S continues to be formed, and more CO<sub>2</sub> and O<sub>2</sub> is drawn into the headspace, which accelerates acid accumulation and production on sewer surfaces.

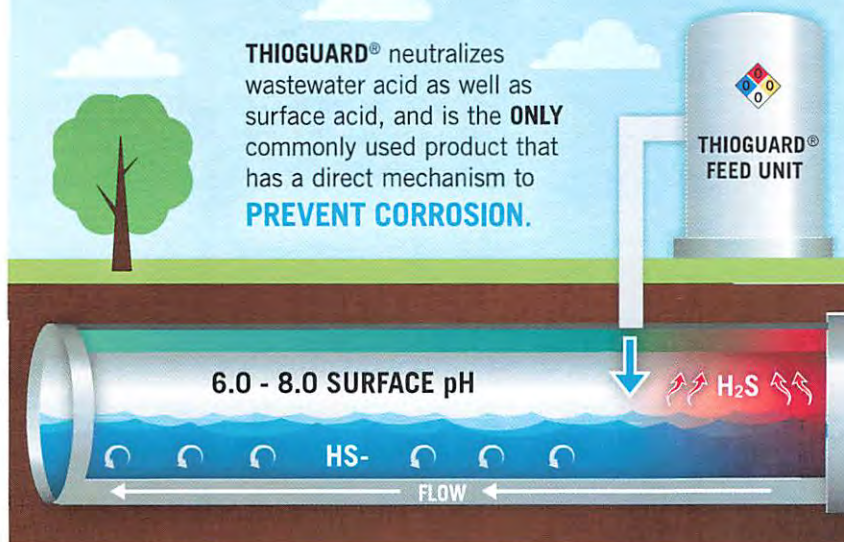


So, when you are faced with an odor problem, and you are considering adding a scrubber to your lines, you may want to ask yourself this question – **Will adding an expensive scrubber help prevent corrosion and maintain and extend the engineered life of my infrastructure?**

Carbon, chemical, or biological scrubbers are not designed to prevent corrosion. Scrubbers, by design, draw air through your lines, potentially pulling more H<sub>2</sub>S out of solution, and contributing to corrosion – specifically in crown and manhole infrastructure.

## SYSTEM UTILIZING THIOGUARD®

THIOGUARD® neutralizes wastewater acid as well as surface acid, and is the **ONLY** commonly used product that has a direct mechanism to **PREVENT CORROSION**.



**THIOGUARD®**, when added to your system, generally through a single feed unit, suppresses H<sub>2</sub>S system-wide, eliminating your odor problem, and in many cases reducing total gases released from the wastewater stream. The benefits to your infrastructure and your plant are immediate and lasting. Through a single application point, you are effectively maintaining and extending the engineered life of your existing infrastructure. Other downstream benefits include a reduction in the production of sludge, and enhanced clarification and dewatering.



# THIOGUARD® TST

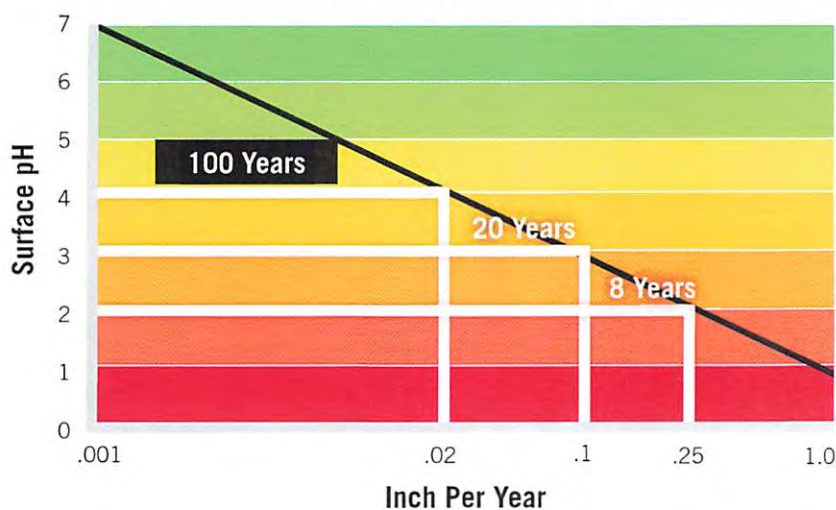
EFFECTIVE, ENVIRONMENTALLY SAFE TOTAL SYSTEM TREATMENT FOR MUNICIPAL WASTEWATER

## THIOGUARD® TST DELIVERS MULTIPLE DOWNSTREAM BENEFITS

|  |     |
|--|-----|
| Sustainable pH   | YES |
| Alkalinity Supplements Above 25 mg/L without pH spikes | YES |
| Produces sludge  | NO  |
| Metabolic Stimulant                                    | YES |
| Enhances Clarification and Dewatering                  | YES |
| Improves cake solids                                   | YES |
| Hazardous to handle                                    | NO  |
| Causes Pipe scale                                      | NO  |

## YEARS OF LIFE

### 2" Sacrificial Concrete



Where scrubbers are currently in use, **THIOGUARD®**, added upstream, will greatly reduce the overall  $H_2S$  load, thereby reducing operating costs and increasing the lifespan of existing equipment and structures.



# THIOGUARD® TST

EFFECTIVE, ENVIRONMENTALLY SAFE TOTAL SYSTEM TREATMENT FOR MUNICIPAL WASTEWATER

**THE ADDITION OF THIOGUARD® INCREASES LIQUID & SURFACE pH LEVELS, PREVENTING THE ACIDIC CONDITIONS THAT CAUSE CORROSION.**



In an acidic environment (pH=2), corrosion is rampant, tearing through 2" of concrete in as little as 8 years.

When effective surface pH=4, similar corrosion levels are pushed out to as much as 100 years.

By reducing the acidity in your system, you'll reduce corrosion dramatically, in some cases by as much as 100X, when compared to other treatments. **THIOGUARD®** is typically added through a single Feed Unit, and provides "corrosion-controlling" benefits throughout your system, from collection system source to treatment plant discharge.

**PROBLEM:** Corrosion is an **INCREDIBLY COSTLY** problem facing America's Water System Infrastructure.

## **SOLUTION: THIOGUARD® TST**

is a proven solution to maintaining & extending the life of our nation's water infrastructure while providing **MULTIPLE BENEFITS IN PLANT AND DOWNSTREAM.**

**FOR MORE INFORMATION CALL 1.800.227.4287 OR  
EMAIL [THIOGUARD2@PREMIERMAGNESIA.COM](mailto:THIOGUARD2@PREMIERMAGNESIA.COM)**

**THIOGUARD.COM | 1.800.227.4287**

THIOGUARD® HEADQUARTERS: 1275 Drummers Lane, Suite 102 | Wayne, PA 19087





**ADDENDUM #1**

Bid Number: **#23-2025**

Date: February 18, 2025

Subject: **Sewer Collection System Odor Control Chemical Pilot Testing**

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

**TO ALL PROSPECTIVE SUBMITTERS:**

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

1. The electronic bid opening date has been extended to March 11, 2025, at 2:00 PM EST in Iowave.
2. **The non-mandatory prebid meeting is in person and has been changed to February 26, 2025 at 10:00 AM EST 301 Jimmie Campbell Drive Lexington, Kentucky, due to impending weather.**

Todd Slatin, Director  
Division of Procurement

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

COMPANY NAME: Premier Magnesia, LLC

ADDRESS: 75 Giles Pl, Waynesville, NC 28786

SIGNATURE OF BIDDER:





**ADDENDUM #2**

Bid Number: **#23-2025**

Date: February 28, 2025

Subject: **Sewer Collection System Odor Control Chemical Pilot Testing**

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

**TO ALL PROSPECTIVE SUBMITTERS:**

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

1. The electronic bid opening date has been extended to March 18, 2025, at 2:00 PM EST in Ionwave.

Attached Prebid Powerpoint  
Attached Prebid Sign in Sheet

Todd Slatin, Director  
Division of Procurement

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

COMPANY NAME: Premier Magnesia, LLC

ADDRESS: 75 Giles Pl, Waynesville, NC 28786

SIGNATURE OF BIDDER:





**LEXINGTON**

---

# **Lexington-Fayette Urban County Government**

**Invitation to Bid #23-2025  
Sewer Collection System Odor Control Chemical Pilot Testing**

**Pre-Bid Meeting 02/26/2025**





## Introductions

- Rick Bowman, Odor Control Manager, City of Lexington
- Sharon Worley, Senior Engineer, Webster Environmental Associates
- Brian Marcum, Procurement Officer Sr., Division of Procurement
- Sherita Miller, Minority Business Enterprise Liaison, Division of Procurement







## General Explanation: What and Why

- Lexington has long sewage force mains that promote the formation of odor causing compounds.
- Lexington currently feeds a nitrate-based chemical at nine pump stations – results are a “mixed bag”.
- Lexington wants to evaluate a variety of products to determine the most cost-effective approach in the reduction of odor/corrosion causing compounds.
- Lexington wants to evaluate feeding chemicals at different locations, including on long force mains using multiple feed locations.







## Expected Outcome From This Advertisement

- All viable proposals will be accepted as a pre-qualified chemical (meaning that chemicals can be tested without further procurement paperwork).
- Viable chemical applications will be considered for pilot testing, with testing to begin in 2025 and continue indefinitely.
- Peak odor season is July 1 to November 1 - pilot testing likely limited to that timeframe.
- Given the limited testing timeframe and potential number of responders, there is no guarantee that your product will be tested in 2025 or in the future.



## What Makes a Proposal “Viable”?

- Documented experience in the municipal or industrial wastewater odor control sector.
- References in the municipal or industrial wastewater odor control sector that can be verified by Lexington.
- Verification that chemical applications proposed will not upset the treatment biological processes.
- NOTE: A separate proposal is required for each product.





## Proposed Plan for Pilot Testing

2025 Goal - Pilot test at least four different proposer's applications. Tentative plan:

### South Elkhorn force main

- Test One - 7/1/25 to 7/30/25
- Test Two - 8/15/25 to 9/15/25
- Test Three - 10/1/25 to 10/30/25

### Lower Cane Run force main

- Test One - 7/1/25 to 7/30/25
- Test Two - 8/15/25 to 9/15/25
- Test Three - 10/1/25 to 10/30/25

| PS Name        | PS Address             | FM Material | FM Length | FM Diameter | No. of ARVs | PS Ave Daily Flow | Ave Detention Time |
|----------------|------------------------|-------------|-----------|-------------|-------------|-------------------|--------------------|
|                |                        |             | feet      | inches      |             | gpd               | hours              |
| South Elkhorn  | 2500 Bowman Mill Rd    | DI          | 33,730    | 36          | 24          | 4,000,000         | 11                 |
| Lower Cane Run | 1760 Mc Grathiana Pkwy | DI          | 24,260    | 30          | 9           | 1,100,000         | 19                 |







## Scope of Work for Pilot Tests

### LFUCG expects to provide:

- Flat gravel area (approximately 13' x 18')
- At Pump Stations:
  - Power at SE and LCR PSs: two 115V circuits (one 15-20 AMP, one 20-25 AMP)
  - Power at other PSs: 115 VAC, 60Hz, 1 phase
  - Access to wet wells
- At Midpoint on SE FM:
  - Two SS 1" diameter taps into the force main each with a shutoff valve and a check valve

### Vendor to provide:

- Chemical delivery to feed site
- Equipment/materials for safe chemical storage, handling, feeding, & control
- Labor to include mob/demob, maintenance, sampling and monitoring
- Reports



# Division of Procurement Comments

## SCHEDULE

**Bid Close Date: 3/11/2025 2:00 PM (ET)**

**Questions Cut Off: 3/3/2025 4:00 PM (ET)**

**ALL questions must be submitted via Ionwave**

- **Award Notices Issued Upon Evaluation Completion & Council Approval**
- **Pilot Testing Begins – see prior slide**
- **All submittals and all required information must be submitted electronically in Ionwave, please include all DBE forms completed, and Good Faith Efforts documented.**





# QUESTIONS






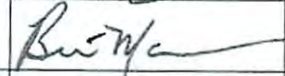
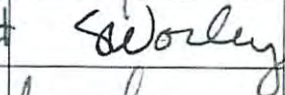
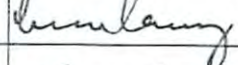
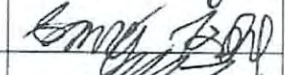
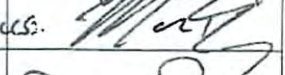
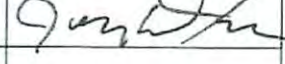


# LEXINGTON

Division of Water Quality  
125 Lisle Industrial Ave., Suite 180  
Lexington, KY 40511

## PRE-BID MEETING FORM

|                 |                                    |
|-----------------|------------------------------------|
| Bid Number      | 23-2025                            |
| Bid Title       | Odor Control Chemicals Pilot Study |
| Date of Pre-Bid | 2/26/2025                          |
| Time            | 10:00am                            |

|                            | Name            | Contact Info   | Signature   |
|----------------------------|-----------------|--|---|
| Procurement Representative |                 |  |   |
| DWQ Representative         | Rick Bowman     | <a href="mailto:rbowman@lexingtonky.gov">rbowman@lexingtonky.gov</a>                     |  |
| Procurement Representative | Brian Marcum    | <a href="mailto:brianm@lexingtonky.gov">brianm@lexingtonky.gov</a>                       |  |
| WEA – Consultant           | Sharon Worley   | <a href="mailto:sharon.worley@odor.net">sharon.worley@odor.net</a>                       |  |
| Xylem/Evodata              | Kenneth Lowery  | <a href="mailto:kenneth.lowery@xylem.com">kenneth.lowery@xylem.com</a><br>502 480-6704   |  |
| USP Technologies           | Sammy Stahl     | <a href="mailto:stahl@usp-technologies.com">stahl@usp-technologies.com</a>               |  |
| SOURCE TECH.               | MARCUS BULLOCK  | <a href="mailto:mbullocc@source-tech-handling.com">mbullocc@source-tech-handling.com</a> |  |
| Source Technologies        | Jeff Dombroskas | <a href="mailto:jeffd@source-technologiesllc.com">jeffd@source-technologiesllc.com</a>   |  |
|                            |                 |  |   |
|                            |                 |  |   |
|                            |                 |  |   |
|                            |                 |  |   |

MAYOR LINDA GORTON



LEXINGTON

TODD SLATIN  
DIRECTOR  
CENTRAL PURCHASING

**ADDENDUM No. 3**

Bid Number: **#23-2025**

Date: March 10, 2025

Subject: Sewer Collection System Odor Control Chemical  
Pilot Testing

Address inquiries to:

Q&A Module on Ion Wave

Brian Marcum  
[brianm@lexingtonky.gov](mailto:brianm@lexingtonky.gov)  
(859) 258-3325

**TO ALL PROSPECTIVE SUBMITTERS:**

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

**Please see the attached questions and answers.**

Todd Slatin, Director  
Division of Central Purchasing

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

COMPANY NAME: Premier Magnesia, LLC

ADDRESS: 75 Giles Pl, Waynesville, NC 28786

SIGNATURE OF BIDDER: Chuck Geo





# LEXINGTON

Division of Water Quality  
125 Lisle Industrial Ave., Suite 180  
Lexington, KY 40511

## Bid #23-2025 ODOR CONTROL CHEMICALS PILOT STUDY

| # | SUPPLIER SUBMITTED QUESTIONS   | LFUCG RESPONSE   |
|---|--|--|
| 1 | <ul style="list-style-type: none"><li>Is the odor control required AT the two sites mentioned OR downstream from them?</li><li>If needed at the two sites, are there stations just ahead that flow into each?</li></ul>  | <ul style="list-style-type: none"><li>The chemical would be fed at the PS and may also be fed at the midpoint.</li><li>A schematic of the two FMs is provided in <a href="#">Appendix A</a>.</li></ul>   |
| 2 | <ul style="list-style-type: none"><li>Are Lower Cane Run and South Elkhorn in series with each other?</li></ul>  | <ul style="list-style-type: none"><li>No, they are not in series with each other. See <a href="#">Appendix A</a>.</li></ul>  |
| 3 | <ul style="list-style-type: none"><li>Will the City use the chemical unit trial price stated here for the trial to be the permanent application price used to award for trial? Less than bulk deliveries affect delivery costs, the trial price is typically higher than a permanent application bulk delivered price.</li></ul> | <ul style="list-style-type: none"><li>Chemical unit trial price would apply only to the specified pilot testing. If any odor control chemicals are to be used by LFUCG for long term solutions, those chemicals would be procured under a separate contract.</li></ul> |
| 4 | <ul style="list-style-type: none"><li>How soon must the trials start, after award?</li></ul>   | <ul style="list-style-type: none"><li>Proposed schedule for pilot testing was included in Addendum 1.</li></ul>  |
| 5 | <ul style="list-style-type: none"><li>What is the procedure to get subcontractor approval?</li></ul>   | <ul style="list-style-type: none"><li>Preapproval of subcontractors is not done prior to submittal</li></ul>   |
| 6 | <ul style="list-style-type: none"><li>Is there regular FOG control done (mechanical or chemical), due to blankets forming at the stations or at the plant?</li><li>If so, is it much more at these stations, and downstream of them, than the rest of the collection system?</li></ul>   | <ul style="list-style-type: none"><li>Wet Wells are scheduled to be cleaned at LCR-monthly, SELK-Quarterly, Sandersville-Bi-yearly.</li><li>Lexington's FOG control in pump station wet wells is handled mechanically, no chemical methods are used.</li></ul>         |
| 7 | <ul style="list-style-type: none"><li>How much of the total flow to the WWTP does the flow at South Elkhorn represent?</li></ul>   | <ul style="list-style-type: none"><li>The SE PS contributes roughly 20% of the flow to the West Hickman WWTP.</li></ul>  |
| 8 | <ul style="list-style-type: none"><li>Is there alkalinity addition or caustic trimming at the effluent of the plant?</li></ul>   | <ul style="list-style-type: none"><li>No, there is not.</li></ul>  |



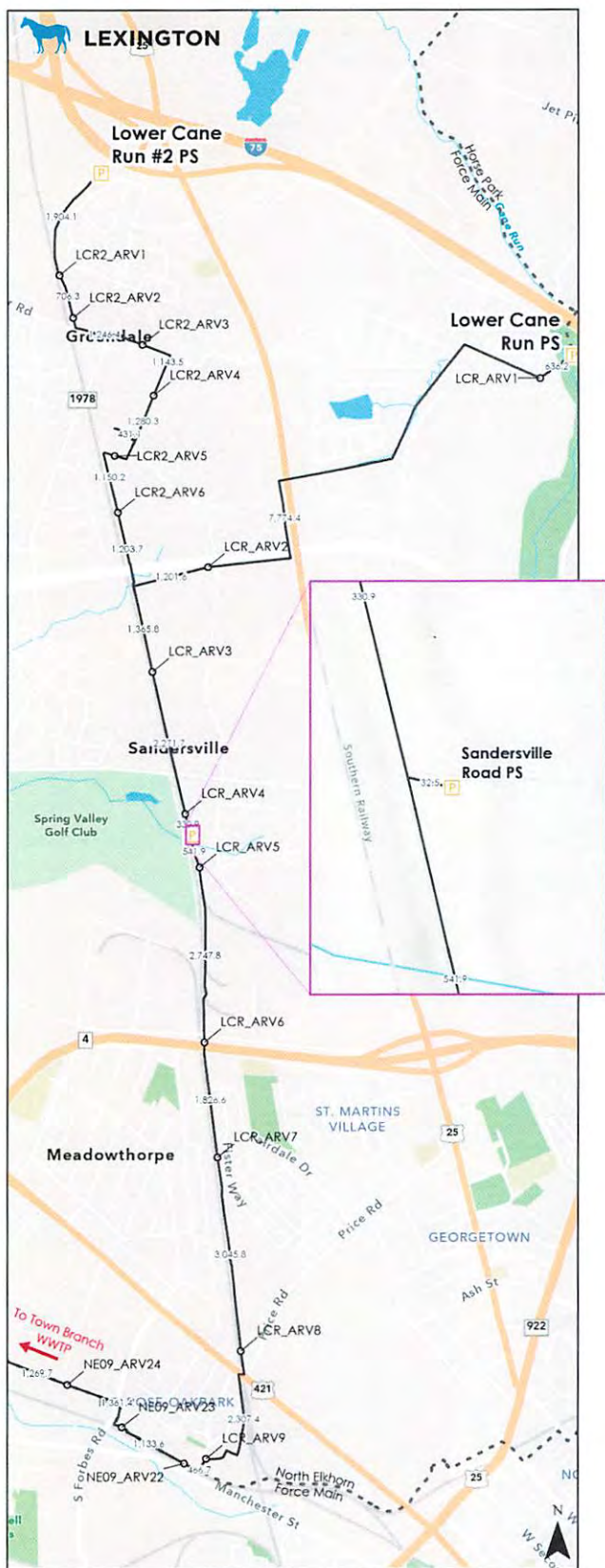
| #  | SUPPLIER SUBMITTED QUESTIONS  | LFUCG RESPONSE  |
|----|---|---|
| 9  | <ul style="list-style-type: none"> <li>Are you, WWTP dosing chemicals for supplemental carbon?</li> </ul>   | <ul style="list-style-type: none"> <li>No</li> </ul>  |
| 10 | <ul style="list-style-type: none"> <li>What was the monthly Nitra-NOx feed rate at South Elkhorn PS and Lower Cane PS?</li> </ul>   | <ul style="list-style-type: none"> <li>See <u><b>Appendix B</b></u></li> </ul>  |
| 11 | <ul style="list-style-type: none"> <li>May we have access to H<sub>2</sub>S data (liquid and vapor) at current control points?</li> <li>If not, what are the annual ranges and averages of vapor H<sub>2</sub>S and aqueous sulfide loadings at the control points</li> </ul> | <ul style="list-style-type: none"> <li>See <u><b>Appendix B</b></u></li> </ul>  |
| 12 | <ul style="list-style-type: none"> <li>What is your current price for Nitra Nox?</li> </ul>   | <ul style="list-style-type: none"> <li>This information is not needed for vendors to respond to this RFP.</li> </ul>  |
| 13 | <ul style="list-style-type: none"> <li>What was the 2024 annual treatment spend on both lines in question?</li> </ul>   | <ul style="list-style-type: none"> <li>This information is not needed for vendors to respond to this RFP.</li> </ul>  |
| 14 | <ul style="list-style-type: none"> <li>Bid Conditions II, L requires a bid bond. What is the percent of the bid price required? Document states "XX percent".</li> </ul>  | <ul style="list-style-type: none"> <li>A bid bond is not required for this Bid.</li> </ul>  |
| 15 | <ul style="list-style-type: none"> <li>Lower Cane Run: Can you provide a map of the LCR forcemain as well as the ARV locations and discharge point?</li> </ul>  | <ul style="list-style-type: none"> <li>A schematic of the two FM's is provided in <u><b>Appendix A</b></u>.</li> </ul>  |
| 16 | <ul style="list-style-type: none"> <li>LCR: Is there odor control coming into this Class A station?</li> <li>What chemical(s) are being used?</li> <li>What is the average daily feed rate?</li> </ul>  | <ul style="list-style-type: none"> <li>Odor control chemical is fed at the LCR PS and also at the upstream Horse Park PS.</li> <li>Nitrates.</li> <li>See <u><b>Appendix B</b></u></li> </ul> |
| 17 | <ul style="list-style-type: none"> <li>LCR: Are there historical sulfide readings from the influent wetwell that can be provided?</li> <li>Residual Nitrate?</li> <li>pH?</li> </ul>  | <ul style="list-style-type: none"> <li>No, LFUCG does not have historical sulfide, Residual Nitrate, and/or pH readings from the influent wetwell for LCR</li> </ul>                          |
| 18 | <ul style="list-style-type: none"> <li>LCR: Are there historical sulfide readings from the discharge point or ARV's that can be provided?</li> <li>Residual Nitrate?</li> <li>pH?</li> <li>Hydrogen sulfide graphs?</li> </ul>  | <ul style="list-style-type: none"> <li>See <u><b>Appendix B</b></u></li> </ul>  |
|    | <ul style="list-style-type: none"> <li></li> </ul>  | <ul style="list-style-type: none"> <li></li> </ul>  |

| #  | SUPPLIER SUBMITTED QUESTIONS   | LFUCG RESPONSE   |
|----|--|--|
| 19 | <ul style="list-style-type: none"> <li>Could you provide a system schematic for both Force mains to be treated showing any potential sidestream flow contributors?</li> </ul>  | <ul style="list-style-type: none"> <li>Please refer to <b><u>Appendix A</u></b> included with this Addendum.</li> </ul>  |
| 20 | <ul style="list-style-type: none"> <li>LCR: Are there any odor complaints coming from this Force main?</li> <li>If Yes, where are the main pain points?</li> <li>Are there other contributing force mains to consider for odor complaints nearby?</li> </ul> | <ul style="list-style-type: none"> <li>Yes.</li> <li>LCR_ARV 8 has been a source of odor complaints.</li> <li>A schematic of the two FMs (including contributing FMs) is provided in <b><u>Appendix A</u></b>.</li> </ul>  |
| 21 | <ul style="list-style-type: none"> <li>What type of pump operation do SE, LCR, and Sandersville employ? (ON/OFF or more constant flow on VFDs)</li> </ul>  | <ul style="list-style-type: none"> <li><b>SELK:</b> Has VFD's. During the day it consistently runs and alternates pumps every 4 hours. During Low flows (overnight) Pumps cycle ON &amp; off, <b><u>see Appendix C</u></b>.</li> <li><b>LCR:</b> Has 2 large constant speed pumps for wet weather events and 2 smaller pumps that run on VFD's. Normal operation VFD's running always and switching pumps every 8 hours, <b><u>see Appendix D</u></b>.</li> <li><b>Sandersville:</b> Has 2 pumps running off across the line starters. Runs ON/OFF depending on flow, <b><u>see Appendix E</u></b>.</li> </ul> |
| 22 | <ul style="list-style-type: none"> <li>Is there detailed flow information available to view hourly variability in flows from the prospective dosing locations?</li> </ul>  | <ul style="list-style-type: none"> <li>Addressed in response to item #21.</li> </ul>   |
| 23 | <ul style="list-style-type: none"> <li>Sandersville PS: What is the Average daily flow?</li> </ul>   | <ul style="list-style-type: none"> <li>Avg 60 mins of run time, Avg 615 gpm, Avg gpd 36,900.</li> </ul>  |
| 24 | <ul style="list-style-type: none"> <li>Could you provide flow data for Sandersville Pump Station?</li> <li>Could you provide pipe distance/diameter information?</li> </ul>  | <ul style="list-style-type: none"> <li>See response to item #23.</li> <li>6" FM from Sandersville PS to LCR FM Tie in, 32FT</li> </ul>   |
| 25 | <ul style="list-style-type: none"> <li>Sandersville: What are the forcemain dimensions? (Length, diameter)</li> </ul>  | <ul style="list-style-type: none"> <li>See response to item #24.</li> </ul>  |
| 26 | <ul style="list-style-type: none"> <li>Will there be an analog sewage flow signal available to connect to feed systems installed at pump stations?</li> </ul>  | <ul style="list-style-type: none"> <li>LFUCG does not believe it is necessary to tie in to "flow signal" to do chemical pilot as we are dripping chemical at all three sites in well (Sandersville) or first incoming manhole into station (LCR, SELK) . There is a 4-20ma signal Loop at SELK and LCR for Level and to turn pumps on and off. SELK and LCR have OUT going Strap on flow meters but as of now, service is spotty at best. Sandersville has nothing.</li> </ul>   |
| 27 | <ul style="list-style-type: none"> <li>Will there be specified monitoring locations (control points) Discharge locations, i.e., manhole, wet well?</li> </ul>  | <ul style="list-style-type: none"> <li>Yes, the discharge MH and intermediate ARVs.</li> </ul>   |

| #  | SUPPLIER SUBMITTED QUESTIONS   | LFUCG RESPONSE   |
|----|--|--|
| 28 | <ul style="list-style-type: none"> <li>Sandersville: What are the pump run times (starts and draw down times)?</li> </ul>  | <ul style="list-style-type: none"> <li>See response to item #23 and <b><u>see Appendix E and Appendix F</u></b></li> </ul>   |
| 29 | <ul style="list-style-type: none"> <li>What are the treatment goals for performance on these lines?</li> <li>Will there be both liquid phase sulfide treatment goals in addition to vapor phase treatment goals?</li> </ul>  | <ul style="list-style-type: none"> <li>Specific goals have not yet been established but looking for most effective means of controlling odors and corrosion.</li> <li>Yes.</li> </ul>  |
| 30 | <ul style="list-style-type: none"> <li>Sandersville: Are there odor complaints near where this ties into the LCR forcemain?</li> </ul>   | <ul style="list-style-type: none"> <li>None documented.</li> </ul>   |
| 31 | <ul style="list-style-type: none"> <li>Sandersville: Are there historical sulfide readings from the influent wetwell that can be provided?</li> <li>Residual Nitrate?</li> <li>pH?</li> </ul>  | <ul style="list-style-type: none"> <li>No, LFUCG does not have historical sulfide, Residual Nitrate, and/or pH readings from the influent wetwell for the Sandersville Pump Station</li> </ul>   |
| 32 | <ul style="list-style-type: none"> <li>Will products that are considered "hazardous materials" be considered for treatment in these pilots?</li> <li>Will temporary safety water supply setups be acceptable at locations where there is not currently access to water?</li> </ul>                             | <ul style="list-style-type: none"> <li>Yes, but as stated in the RFP: "Services shall be provided in a safe, secure, effective, and efficient manner and in accordance with all applicable laws, rules, and regulations."</li> <li>Yes as long as the water supply meets the safety requirements for the product.</li> </ul> |
| 33 | <ul style="list-style-type: none"> <li>Is LFUCG mostly concerned with Odor Complaints or is there also a concern for corrosion control to protect infrastructure?</li> </ul>   | <ul style="list-style-type: none"> <li>RFP states: "The work consists of providing all necessary materials, chemicals, personnel, equipment, and services for pilot testing of <u>odor and corrosion control</u> chemicals in LFUCG's wastewater collection system."</li> </ul>  |
| 34 | <ul style="list-style-type: none"> <li>Will LFUCG be available to make the physical chemical discharge connection on the force main injection connection(s)?</li> </ul>  | <ul style="list-style-type: none"> <li>LFUCG will provide the "tap," each selected Vendor/Bidder will be required to make the physical chemical discharge connection of their equipment to the provided tap</li> </ul>   |
| 35 | <ul style="list-style-type: none"> <li>Will LFUCG be sharing RFP results with other vendors?</li> <li>Will LFUCG be sharing Pilot Data Reports with other vendors?</li> </ul>  | <ul style="list-style-type: none"> <li>Results to be posted on ionwave.</li> <li>No.</li> </ul>  |
| 36 | <ul style="list-style-type: none"> <li>How will efficacy of different treatments be evaluated over the time frame of the testing? Meaning different pilot periods may experience drastically different weather conditions and wastewater temperatures, resulting in differing demand in the system.</li> </ul> | <ul style="list-style-type: none"> <li>Differing conditions will be taken into account in the evaluation.</li> </ul>   |

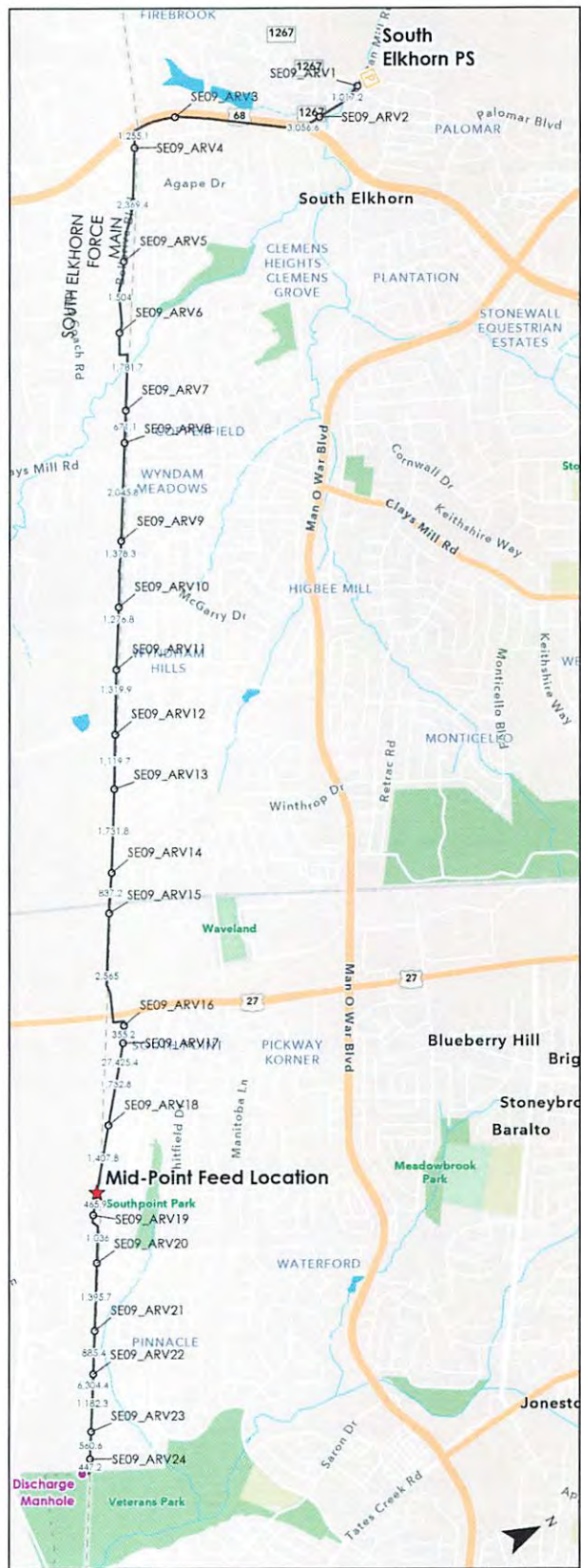


**APPENDIX A**  
**LOWER CANE RUN and SOUTH ELKHORN FORCE MAIN**  
**SCHEMATICS**



Lower Cane Run Force Main

| Pipe Segment                            | Length (ft) |
|---|-------------|
| LCR Pump Station To Sandersville Tie in | 13,580.7    |
| Sandersville to LCR ARV08               | 8,162.1     |
| LCR ARV08 to Town Branch WWTP           | 6,538.7     |
| SandersvillePS to LCR Force Main        | 32.5        |



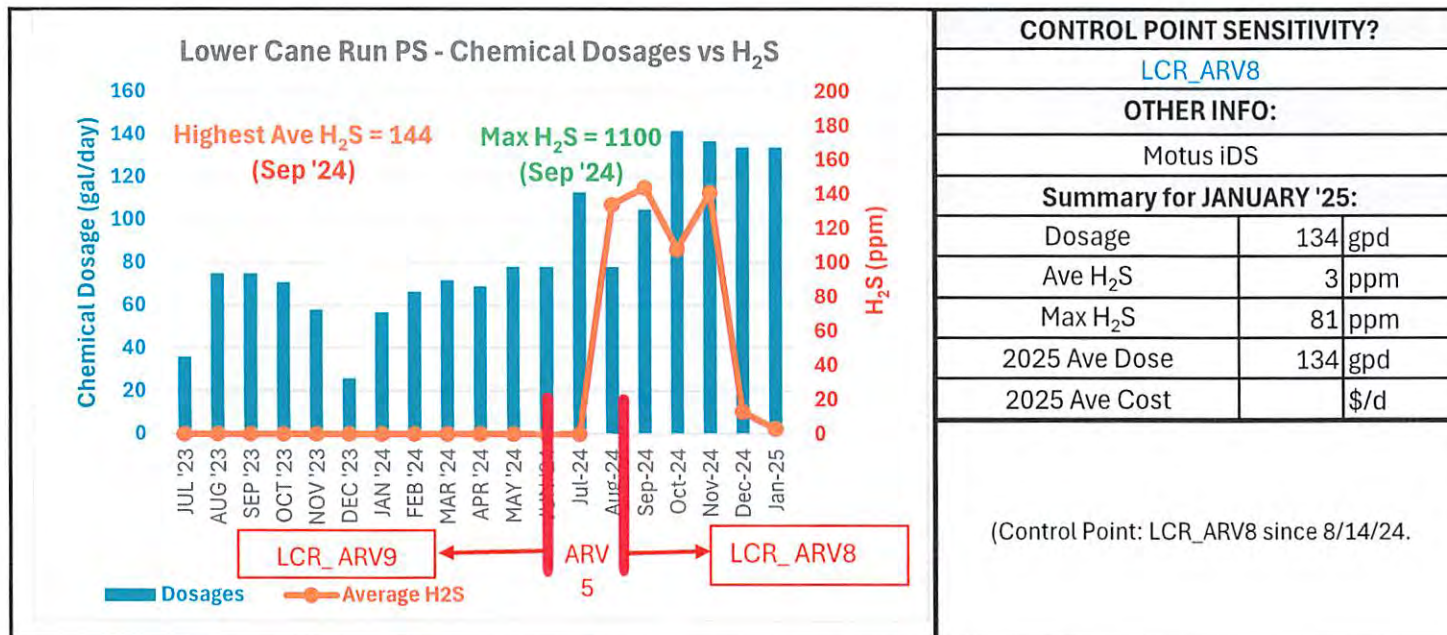
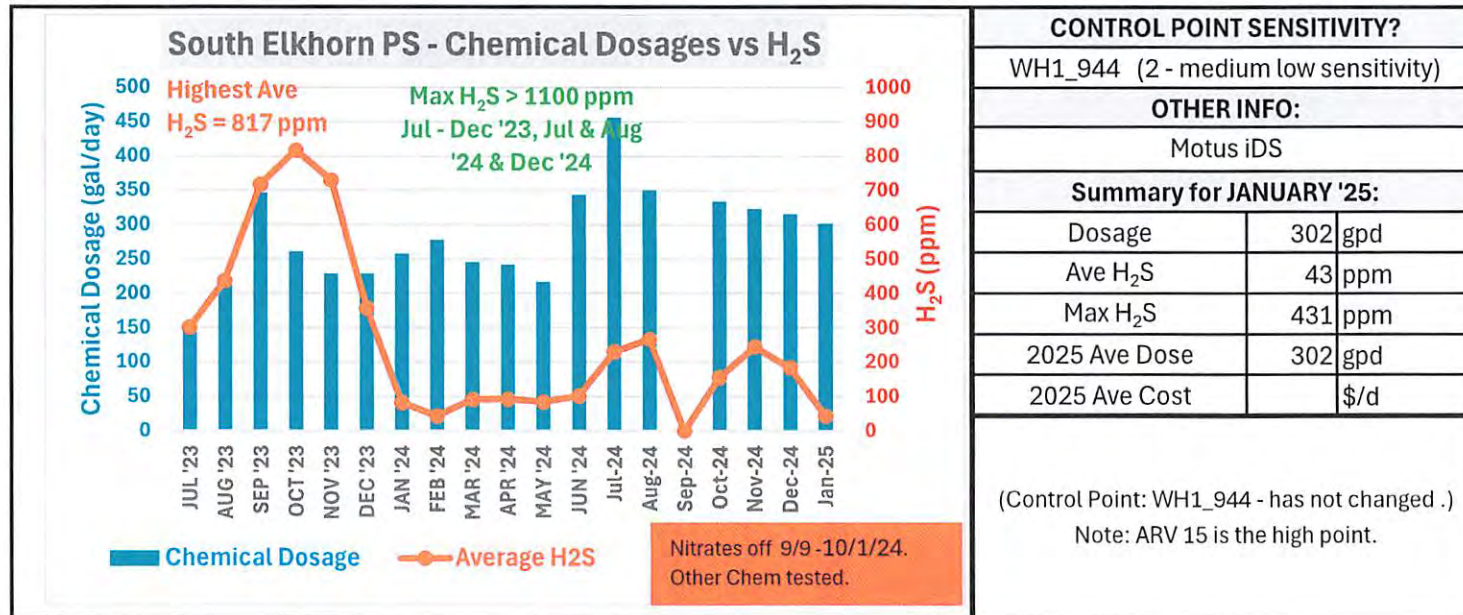
South Elkhorn Force Main

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

**APPENDIX B**  
**SOUTH ELKHORN and LOWER CANE RUN MONITORING DATA**

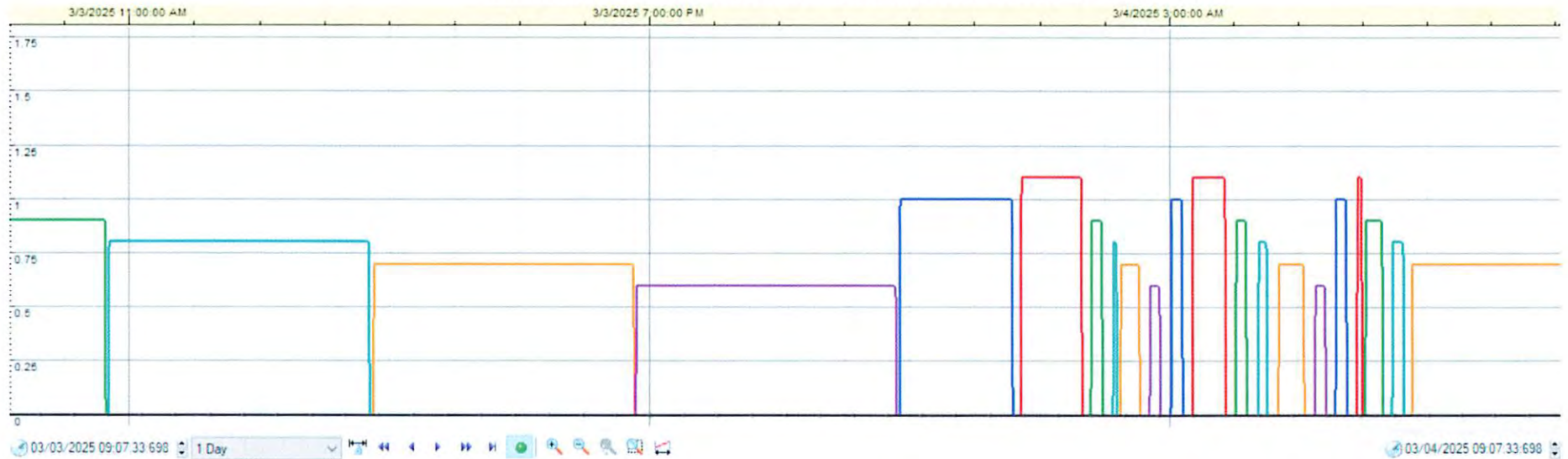


## SOUTH ELKHORN and LOWER CANE RUN MONITORING DATA



**APPENDIX C**  
**SOUTH ELKHORN PS PUMP RUN CYCLES**

## SOUTH ELKHORN PS PUMP RUN CYCLES

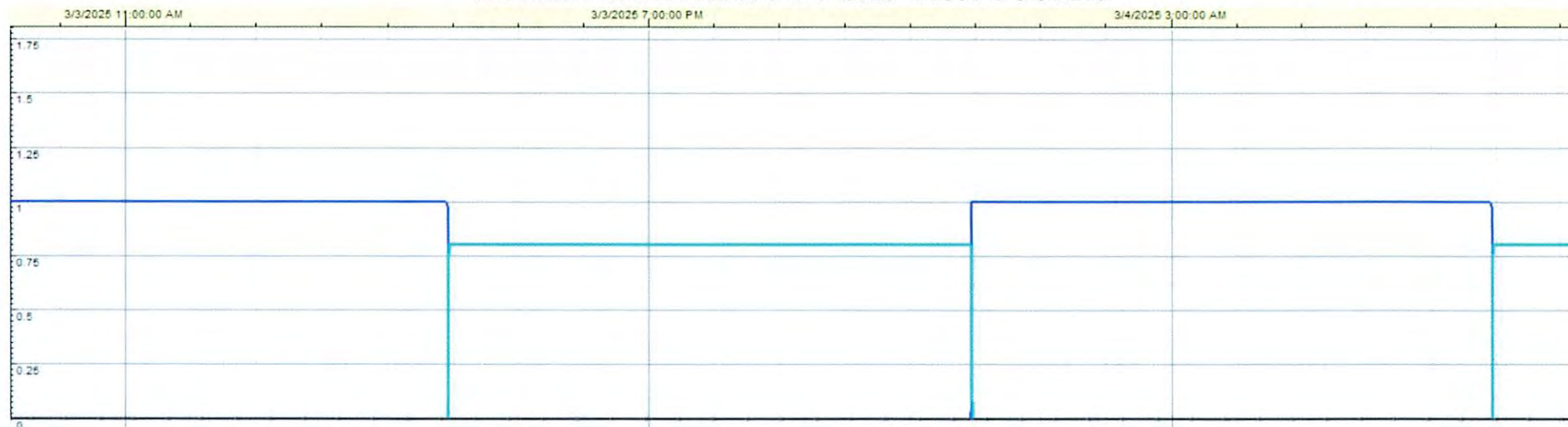


| Object Tree   | Scale   | Engineering Units | Duration    | Tag                                  | Cluster     | Trend Type | Error |
|---|---------|-------------------|-------------|--------------------------------------|-------------|------------|-------|
| <div> <div></div> <div> <div></div> <div></div> </div> <div>Pump 1</div> </div> | 0 - 1.8 |                   | 1d 00:00:00 | PS_Cluster.SOUTH_ELKHORN_SCALE_PUMP1 | PS_CLUST... | Periodic   |       |
| <div> <div></div> <div> <div></div> <div></div> </div> <div>Pump 2</div> </div> | 0 - 1.8 |                   | 1d 00:00:00 | PS_Cluster.SOUTH_ELKHORN_SCALE_PUMP2 | PS_CLUST... | Periodic   |       |
| <div> <div></div> <div> <div></div> <div></div> </div> <div>Pump 3</div> </div> | 0 - 1.8 |                   | 1d 00:00:00 | PS_Cluster.SOUTH_ELKHORN_SCALE_PUMP3 | PS_CLUST... | Periodic   |       |
| <div> <div></div> <div> <div></div> <div></div> </div> <div>Pump 4</div> </div> | 0 - 1.8 |                   | 1d 00:00:00 | PS_Cluster.SOUTH_ELKHORN_SCALE_PUMP4 | PS_CLUST... | Periodic   |       |
| <div> <div></div> <div> <div></div> <div></div> </div> <div>Pump 5</div> </div> | 0 - 1.8 |                   | 1d 00:00:00 | PS_Cluster.SOUTH_ELKHORN_SCALE_PUMP5 | PS_CLUST... | Periodic   |       |
| <div> <div></div> <div> <div></div> <div></div> </div> <div>Pump 6</div> </div> | 0 - 1.8 |                   | 1d 00:00:00 | PS_Cluster.SOUTH_ELKHORN_SCALE_PUMP6 | PS_CLUST... | Periodic   |       |



**APPENDIX D**  
**LOWER CANE RUN PS PUMP RUN CYCLES**

## LOWER CANE RUN PS PUMP RUN CYCLES



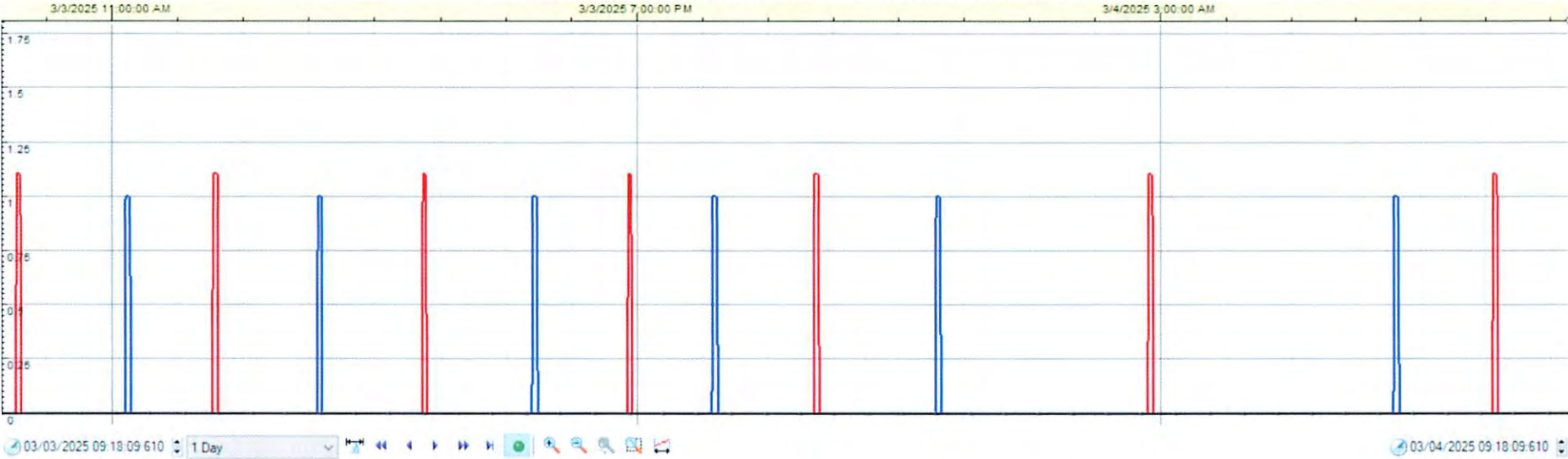
03/03/2025 09:13:52:481 1 Day 03/04/2025 09:13:52:481

| Object Tree   | Scale   | Engineering Units | Duration    | Tag                                   | Cluster     | Trend Type | Error |
|---|---------|-------------------|-------------|---------------------------------------|-------------|------------|-------|
| <div> <div></div> <div>Pump 1</div> </div> <div> <div></div> <div>Pump 2</div> </div> <div> <div></div> <div>Pump 3</div> </div> <div> <div></div> <div>Pump 4</div> </div> | 0 - 1.8 |                   | 1d 00:00:00 | PS_Cluster.LOWER_CANE_RUN_SCALE_PUMP1 | PS_CLUST... | Periodic   |       |
|   | 0 - 1.8 |                   | 1d 00:00:00 | PS_Cluster.LOWER_CANE_RUN_SCALE_PUMP2 | PS_CLUST... | Periodic   |       |
|   | 0 - 1.8 |                   | 1d 00:00:00 | PS_Cluster.LOWER_CANE_RUN_SCALE_PUMP3 | PS_CLUST... | Periodic   |       |
|   | 0 - 1.8 |                   | 1d 00:00:00 | PS_Cluster.LOWER_CANE_RUN_SCALE_PUMP4 | PS_CLUST... | Periodic   |       |

**APPENDIX E**  
**SANDERSVILLE PS PUMP RUN CYCLES**



SANDERSVILLE PS PUMP RUN CYCLES



03/03/2025 09:18:09.610 1 Day 03/04/2025 09:18:09.610

| Object Tree                                | Scale   | Engineering Units | Duration    | Tag                                      | Cluster     | Trend Type | Error |
|--|---------|-------------------|-------------|--|-------------|------------|-------|
| Pane1                                      |         |                   |             |  |             |            |       |
| <input checked="" type="checkbox"/> Pump 1 | 0 - 1.8 |                   | 1d 00:00:00 | PS_Cluster.SANDERSVILLE_ROAD_SCALE_PUMP1 | PS_CLUST... | Periodic   |       |
| <input checked="" type="checkbox"/> Pump 2 | 0 - 1.8 |                   | 1d 00:00:00 | PS_Cluster.SANDERSVILLE_ROAD_SCALE_PUMP2 | PS_CLUST... | Periodic   |       |

**APPENDIX F**  
**SANDERSVILLE PS DRAW DOWN DATA**

## SANDERSVILLE PS DRAW DOWN DATA

|          |                     |              |            |
|----------|---------------------|--------------|------------|
| Station: | Sandersville Road   | Mechanic(s): | Dallas     |
| Address: | 1673 Jaggie Fox Way | Date:        | 07/07/2021 |

| Inflow Time (Sec) |         | Station Design |        | Run Time / Starts |    |
|-------------------|---------|----------------|--------|-------------------|----|
| 1                 | 1136.00 | GPM            | 500.00 | P1 RT             | 25 |
| 2                 | 1120.00 | HD FT          | 46.00  | P1 Starts         | 6  |
| 3                 | 1180.00 | PSI            | 19.92  | P2 RT             | 29 |
| Average           | 1145.33 |                |        | P2 Starts         | 7  |

### Pump 1

| Sec / DD |       | GPM    | Head Pressure / Amps |       |
|----------|-------|--------|----------------------|-------|
| 1        | 59.00 | 621.03 | PSI                  | 9     |
| 2        | 59.00 |        | Amps L1              | 22.40 |
| 3        | 61.00 |        | Amps L2              | 22.60 |
| Average  | 59.67 |        | Amps L3              | 23.30 |

### Pump 2

| Sec / DD |       | GPM    | Head Pressure / Amps |       |
|----------|-------|--------|----------------------|-------|
| 1        | 59.00 | 611.30 | PSI                  | 9     |
| 2        | 60.00 |        | Amps L1              | 20.80 |
| 3        | 63.00 |        | Amps L2              | 22.40 |
| Average  | 60.67 |        | Amps L3              | 22.80 |

### Pumps 1 and 2

| Sec / DD |       | GPM     | Head Pressure (PSI) |
|----------|-------|---------|---------------------|
| 1        | 30.00 | 1191.85 | 9                   |
| 2        | 29.00 |         |                     |
| 3        | 32.00 |         |                     |
| Average  | 30.33 |         |                     |