

# **BID PROPOSAL**

# BID #35-2022 FRP REPAIR AND SCRUBBER SERVICES FOR EMERGENCY VAPOR SCRUBBER SYSTEMS AT TOWN BRANCH AND WEST HICKMAN - LEXINGTON, KY



IMS File No.: S21-052 Prepared on: March 30, 2022 Bid Date: March 31, 2022 – 2 P.M. EDT

# CONTACT

Kingston Leung Integrity Municipal Systems, LLC 13135 Danielson St., Suite 204 Poway, CA 92064

Tel: (858) 218-3762 Email: Kingston@integrityms.net

**IMPORTANT NOTICE:** All information in this Proposal is confidential and has been prepared for Buyer's use solely in considering the purchase of the Equipment described. Transmission of all or any part of this Proposal to others or use by Buyer for other purposes is unauthorized without Seller's advance written consent.



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March 30, 2022

Mr. Brian Marcum Lexington-Fayette Urban County Government 200 East Main Street Lexington, KY 40507 Office: (859) 258-3325

Dear Brian,

Thank you for giving Integrity Municipal Systems (IMS) the opportunity to submit this bid proposal for providing FRP repair and scrubber services for the Lexington-Fayette Urban County Government (LFUCG) Emergency Vapor Scrubber Systems located at the Town Branch and West Hickman WWTP's.

The attached Proposal includes detailed information covering the following topics:

I. Bid Bond and Bid Forms

Email: brianm@lexingtonky.gov

- II. Scope of Supply of Services
- III. Case Studies

IMS is a recognized leader in the aftermarket service care of emergency vapor scrubbers. IMS has provided emergency vapor scrubber system services since its inception in 2006. IMS is a company dedicated to the thorough servicing of the RJ-2000® emergency vapor scrubber systems and other similar products.

A summary of the key points of our qualifications and experience for emergency scrubber services are as follows:

- 1. Roop C. Jain, CEO & President of IMS, invented the RJ-2000® emergency chlorine vapor scrubber system over 20 years ago (U.S. patent No. 5,518,696 author) and commercialized the product through RJ Environmental Products a company he developed and owned. RJ Environmental was subsequently acquired by US Filter in 1997 and then Siemens. Today, RJ Environmental is a subsidiary of Evoqua Water Technologies LLC. RJ Environmental (RJE) manufactured the RJ-2000® scrubber systems at LFUCG while under Roop's leadership.
- 2. IMS has the experienced staff and capacity to take on the scope of this project. IMS personnel has been involved in the design, operation, servicing, commissioning, testing, parts supply and refurbishing of emergency scrubbers for over 30 years. IMS' experience with the RJ-2000 chlorine scrubber and similar scrubber systems is critical to ensuring the quality repair, thorough acid cleaning of build-up within the scrubber, proper/safe handling of chemicals, and quality overall servicing of the scrubber.
- 3. Wet scrubber services involve the handling of corrosive chemicals; sodium hydroxide which is stored and used in the scrubber system, and hydrochloric acid which is used to acid wash the system. IMS's technicians have the training and experience required to safely and properly repair and acid wash the City's emergency scrubber systems.



In summary, IMS brings substantial technical resources and employs the experienced personnel for the repair and servicing of the emergency vapor scrubbers at the Town Branch and West Hickman WWTP's. The stellar reputation of IMS and its staff and its <u>specialization servicing the system specified</u> represents the guarantee that IMS is the right partner for the completion of the maintenance service required.

If you have any questions regarding our scope of work, or need any additional information, please do not hesitate to contact me.

Thank you.

Sincerely,

Kingston Leung
Kingston Leung
Aftermarket Service Manager

Cc: Mr. Roop C. Jain, P.E.; CEO & President

Mr. Jason Beck; HP Thompson

\*RJ-2000® is a registered trademark of Evoqua Water Technologies LLC. Reference to the RJ-2000® trademark does not imply endorsement of IMS's service by Evoqua Water Technologies LLC.

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# **SECTION I**

**BID BOND AND BID FORMS** 

# **BID BOND**

# Travelers Casualty and Surety Company of America Hartford, CT 06183

(Name, legal status and principal place of business)

1

Travelers Casualty and Surety Company of America

SURETY:

One Tower Square

Hartford, CT 06183

### CONTRACTOR:

(Name, legal status and address) Integrity Municipal Systems 13135 Danielson St., Suite 204 Poway, CA 92064

### OWNER:

(Name, legal status and address)
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, Kentucky 40507

BOND AMOUNT: Five Percent (5%) of the amount bid

# PROJECT:

(Name, location or address, and Project number, if any)

#35-2022 FRP Repair and Scrubber Services for Emergency Vapor Scrubbing Systems

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

The Company executing this bond vouches that this document conforms to American Institute of Architects Document A310, 2010 edition

Signed and sealed this30thday ofMarch	2022 
(Witness)	Integrity Municipal Systems  (Principal)  CEO President  (Title)
Docusigned by:  Jussica d. McMalion	Travelers Casualty and Surety Company of America  Docusting by: (Surety) Unstitu M. Suft

-0D6060BF59F345A. (Title)

Christine M. Scott, Attorney-in-Fact

DocuSign Envelope ID: EBA09CCF-419A-4FBD-A4C5-F7B19F76114A

Jessica A. McMahon, Witness

The Company executing this bond vouches that this document conforms to American Institute of Architects Document A310, 2010 edition



Travelers Casualty and Surety Company of America Travelers Casualty and Surety Company St. Paul Fire and Marine Insurance Company

### POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint CHRISTINE M SCOTT of PITTSBURGH

Pennsylvania

Their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this 21st day of April, 2021.

HARTFORD, SP





State of Connecticut

City of Hartford ss.

On this the 21st day of April, 2021, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the 30th day of June, 2026



Anna P. Nowik, Notary Public

Robert L. Raney, Senior Vice President

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Senior Vice President, any Vice President, any Senior Vice President, any Senior Vice President, any Senior Vice President, any Vice President, any Vice President, any Senior Vice President, any Vice President, any Vice President, any Vice President, any Senior Vice President, any Vice

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary or (b) duly executed (under seal, if required) by one or more Attorneys-In-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Executive Vice Preside

I, Kevin E. Hughes, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this 30th day of March

March 2022



Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.

Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.



# **Lexington-Fayette Urban County Government**

Lexington, Kentucky Horse Capital of the World

Division of Central Purchasing

Date of Issue: March 16, 2022

# INVITATION TO BID #35-2022 FRP Repair and Scrubber Services for Emergency Vapor Scrubbing Systems

<b>Bid Opening Date:</b> Address:	March 31, Ionwave C	The state of the s	id Opening Time: 2:00 PM
Type of Bid:	Firm Bid		
Pre Bid Meeting: Address:	NA	Pre Bid Ti	me:
submitted/uploaded by	y the above-n	nline at <a href="https://lexingtonky.ionwave.net/">https://lexingtonky.ionwave.net/</a> until <a href="mailto:2:00 PM">2:00 PM</a> , prevailing lochentioned date and time.	
		dling and associated fees to the point of delivery located at: Town Brand Required for all bids over \$50,000.	ranch & West Hickman WWTPs
X Bid Specifi	ications Met sal submitted.	<u>Check One:</u> Exceptions to Bid Specifications. Exceptions shall be itemized and	Proposed Delivery: 56-70 days after acceptance of bid.
Procurement Care services and also to	d Usage—Th make payme	ne Lexington-Fayette Urban County Government may be using Procure ents. Will you accept Procurement Cards?Yes	
Sub	omitted by:	Integrity Municipal Systems LLC	
	Dry Dryfe 34	Firm Name	
		13135 Danielson St., Suite 204	
		Address	
		Poway, CA 92064	
		City, State & Zip	
Bid must b	e sianed:	Bookant 2	
(original signal		Signature of Authorized Company Representative - Ti	tle

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Representative's Name (Typed or printed)

Roop C. Jain, P.E.

Area Code - Phone - Extension

roop@integrityms.net

858-486-1620

E-Mail Address

616-772-2693

Fax #

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

		R	AFFIDAVIT
ре	Comes the Affiant rjury as follows:	,Roop C. Jain	, and after being first duly sworn under penalty
1.	His/her name is	Roop C. Jain	and he/she is the individual submitting the bid or is the
	authorized representativ	e ofIntegrity Munic	cipal Systems LLC
	the entity submitting the	e bid (hereinafter referred to	as "Bidder")
2.	Bidder will pay all taxes is submitted, prior to aw life of the contract.	and fees, which are owed to ard of the contract and will m	the Lexington-Fayette Urban County Government at the time the baintain a "current" status in regard to those taxes and fees during t
3.	Bidder will obtain a Lex contract.	ington-Fayette Urban Count	y Government business license, if applicable, prior to award of the
4.	Bidder has authorized the Revenue and to disclose not been obtained.	ne Division of Central Purcha to the Urban County Counci	asing to verify the above-mentioned information with the Division il that taxes and/or fees are delinquent or that a business license has
5.	Bidder has not knowingly past five (5) years and the Commonwealth.	violated any provision of the ne award of a contract to the	campaign finance laws of the Commonwealth of Kentucky within the Bidder will not violate any provision of the campaign finance laws
6.	Bidder has not knowingly Ordinances, known as "E	violated any provision of Cha Ethics Act."	apter 25 of the Lexington-Fayette Urban County Government Code
7.	Bidder acknowledges that described by a statute or is of that nature or that the Further, Affiant saye	ordinance defining an offens the circumstance exists.	of this Affidavit means, with respect to conduct or to circumstance se, that a person is aware or should have been aware that his conduction.
STA	ATE OF CALIF	FORNIA	
со	UNTY OF  The foregoing instru	ment was subscribed, sworn	to and acknowledged before me
by_			on this the day
of _	M. Commission out		
	My Commission expir		VALUE OF AT LABOR
0			Y PUBLIC, STATE AT LARGE
0	EE ATTACHN	MENT Pa	ge 2 of 32

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# **CALIFORNIA JURAT**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA 3
$-i$ ( $A_{i}$ )
COUNTY OF SAMILY
Subscribed and sworn to (or affirmed) before me on this 30 th day of MARCH 3000
by ROOF OHAND JAM
Name of Signers
proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.
JODI L. BREWER Notary Public - California
Signature: Signature: San Diego County Commission # 2378470 My Comm. Expires Oct 14, 2025
signature of Notary Public
Seal
Place Notary Seal Above
OPTIONAL
Though this section is optional, completing this information can deter alteration of the document or fraudulent attachment of this form to an unintended document.
Description of Attached Document
Title or Type of Document:
Document Date:
Number of Pages:
Signer(s) Other Than Named Above:

### 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 <a href="https://www.Energystar.gov">www.Energystar.gov</a>). If these products are available, but not submitted in your pricing, your bid will be rejected as <a href="https://www.energystar.gov">non-compliant</a>.

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 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 <a href="www.Greenseal.org">www.Greenseal.org</a> 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?

No

## II. Bid Conditions

- A. No bid may be withdrawn for a period of sixty (60) days after the date and time set for opening.
- B. No bid may be altered after the date and time set for opening. In the case of obvious errors, the Division of Central Purchasing may permit the withdrawal of a bid. The decision as to whether a bid may be withdrawn shall be that of the Division of Central Purchasing.
- C. Acceptance of this proposal shall be enactment of an Ordinance by the Urban County Council.

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- D. The bidder agrees that the Urban County Government reserves the right to reject <u>any</u> and <u>all</u> 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 Central Purchasing. The Urban County Government may waive technicalities and informalities where such waiver would best serve the interests of the Urban County Government.
- F. Manufacturer's catalogue numbers, trade names, etc., where shown herein are for descriptive purposes and are to guide the bidder in interpreting the standard of quality, design, and performance desired, and shall not be construed to exclude proposals based on furnishing other types of materials and/or services. However, any substitution or departure proposed by the bidder must be clearly noted and described; otherwise, it will be assumed that the bidder intends to supply items specifically mentioned in this Invitation for Bids.
- G. The Urban County Government may require demonstrations of the materials proposed herein prior to acceptance of this proposal.
- H. Bids must be submitted on this form and must be signed by the bidder or his authorized representative. Unsigned bids will not be considered.
- 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 <a href="https://lexingtonky.ionwave.net/">https://lexingtonky.ionwave.net/</a>
- 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 <u>5</u> percent of the bid price must be attached hereto for bids greater than \$50,000. 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

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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:

- 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.

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

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

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

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

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

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

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

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

# **LFUCG Non-Appropriation Clause**

Contractor acknowledges that the LFUCG is a governmental entity, and the contract validity is based upon the availability of public funding under the authority of its statutory mandate.

In the event that public funds are unavailable and not appropriated for the performance of the LFUCG's obligations under this contract, then this contract shall automatically expire without penalty to the LFUCG thirty (30) days after written notice to Contractor of the unavailability and non-appropriation of public funds. It is expressly agreed that the LFUCG shall not activate this non-appropriation provision for its convenience or to circumvent the requirements of this contract, but only as an emergency fiscal measure during a substantial fiscal crisis, which affects generally its governmental operations.

In the event of a change in the LFUCG's statutory authority, mandate and mandated functions, by state and federal legislative or regulatory action, which adversely affects the LFUCG's authority to continue its obligations under this contract, then this contract shall automatically terminate without penalty to the LFUCG upon written notice to Contractor of such limitation or change in the LFUCG's legal authority.

# SPECIAL INSTRUCTIONS TO THE BIDDER

# (DO NOT SUBMIT PERFORMANCE SECURITY WITH BID)

<u>Performance Security:</u> The <u>APPARENT LOW BIDDER</u> shall furnish, before recommendation by the Division of Central Purchasing to the Urban County Council that the <u>BIDDER'S</u> bid be accepted, a <u>Performance Bond, Certified Check or Cashier's Check, payable to the Lexington-Fayette Urban County Government, in the penal sum of <u>100%</u> of the price of the materials and/or services proposed in the bid.</u>

The performance bond will not be returned to the bidder after delivery of the materials/services specified herein unless the bidder requests that the performance bond be returned.

The certified / cashier's check will be returned when the materials and/or services specified herein have been delivered.

In the event of bidder's failure to perform as specified herein, it is agreed that the monies represented by the performance bond or certified / cashier's check shall be retained by the Lexington-Fayette Urban County Government as liquidated damages.

Contracts that are less than \$50,000 will not require a 5% bid security or a performance and payment bond.

# 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

Integrity Municipal Systems LLC

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:

- 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.
- 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. I	If any term or provision of this bid co contract shall remain in full force and s	ontract shall be found to be illegal or unenforceable, the remainder of the such term or provision shall be deemed stricken.
4	Doglanz	March 30, 2022
	Signature	Date

Name of Organization: Integrity Municipal Systems LLC

Categories	Total	(N Hisp	hite Not panic patino)	С	oani or ino	Afrid Ame (N Hisp	ck or can- erican lot panic atino	Haw Ot Pac Isla	tive valian nd her cific nder lot panic	(N Hisp	ian lot oani or tino	Indi Ala Nativ Hispa	erican an or skan ve (not anic or tino	rra (I His	vo or nore noes Not spani or	Te	otal
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	М	F
Administrators	0				1.1		-3										
Professionals	8	4								3	1					7	1
Superintendents	0										-						
Supervisors	6	1	2							3				-11		4	2
Foremen	1									1						1	
Technicians	5	4			11		1			1						5	
Protective Service	0	-	4 1														
Para-Professionals	0																
Office/Clerical	3		1111		122									1		2	1
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Service/Maintenanc	0																
Total:	23	10	2						1 = 1	8	2			1		19	4

Prepared by: Kingston Leung, Aftermarket Service Manager

(Name and Title)

Date: 03 / 30 / 22

Revised 2015-Dec-15

# LFUCG STATEMENT OF GOOD FAITH EFFORTS Bid/RFP/Quote #\_35-2022

following Good Faith Efforts to obtain the maximum participation by MWDBE and Veteran-Owned business enterprises on the project and can supply the appropriate documentation.
Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses to participate.
Included documentation of advertising in the above publications with the bidders good faith efforts package
Attended LFUCG Central Purchasing Economic Inclusion Outreach event
Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned Businesses of subcontracting opportunities
Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses
Requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).
Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.  Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.
Followed up initial solicitations by contacting MWDBEs and Veteran-Owned businesses to determine their level of interest.
Provided the interested MWBDE firm and/or Veteran-Owned business with adequate and timely information about the plans, specifications, and requirements of the contract.
Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MWDBE and Veteran participation, even when the prime contractor may otherwise perform these work items with its own workforce
Negotiated in good faith with interested MWDBE firms and Veteran-Owned businesses not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.

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Included documentation	on of quotations received from interested MWDBE firms and
unacceptable and/or copies of a bid.	ich were not used due to uncompetitive pricing or were rejected as responses from firms indicating that they would not be submitting
fact that the bidder has the abi will not be considered a sound	and reasons why the quotations were considered unacceptable. The lity and/or desire to perform the contract work with its own forces reason for rejecting a MWDBE and/or Veteran-Owned business's on shall be construed to require the bidder to accept unreasonable DBE and Veteran goals.
	assistance to or refer interested MWDBE firms and Veteran-Owned sary equipment, supplies, materials, insurance and/or bonding to of the bid proposal
Made efforts to expand the usual geographic boundaries	he search for MWBE firms and Veteran-Owned businesses beyond es.
	ce that the bidder submits which may show that the bidder has made include MWDBE and Veteran participation.
rejection of bid. Bidders may in	of the documentation requested in this section may be cause for clude any other documentation deemed relevant to this requirement the MBE Liaison. Documentation of Good Faith Efforts must be articipation Goal is not met.
The undersigned acknowledges that all information of the contract and/or be subject to applicable l	tion is accurate. Any misrepresentations may result in termination Federal and State laws concerning false statements and claims.
Integrity Municipal Systems LLC	Roop C. Jain, P.E.
Company March 30, 2022	Company Representative Chief Executive Officer & President
Date	Title

Integrity Municipal Systems LLC (IMS) is an equipment manufacturer that provides specialty services on emergency vapor scrubber systems. Emergency vapor scrubber services involve the handling of corrosive chemicals; sodium hydroxide which is stored and used in the scrubber system, and hydrochloric acid which is used to acid wash the system. The systems are specialty equipment that also require extensive experience in order to service properly. Due to the equipment and service experience required to safely and properly repair and acid wash the emergency scrubber systems, IMS will not be able to meet the MBE participation goals.

# AMENDMENT 1 — CERTIFICATION OF COMPLIANCE FOR AMERICAN RESCUE PLAN ACT EXPENDITURES

The Lexington-Fayette Urban County Government ("LFUCG") <u>may</u> classify the subject matter of this bid as an expenditure under the American Rescue Plan Act of 2021. Expenditures under the American Rescue Plan Act of 2021 require evidence of of the contractor's compliance with Federal law. Therefore, by the signature below of an authorized company representative, you certify that the information below is understood, agreed, and correct. Any misrepresentations may result in the termination of the contract and/or prosecution under applicable Federal and State laws concerning false statements and false claims.

The bidder agrees and understands that in addition to all conditions stated within the attached bid documents, the following conditions will also apply to any Agreement entered between bidder and LFUCG, if LFUCG classifies the subject matter of this bid as an expenditure under the Amerian Rescue Plan Act. The bidder further certifies that it can and will comply with these conditions, if this bid is accepted and an Agreement is executed:

- 1. Any Agreement executed as a result of acceptance of this bid may be governed in accordance with 2 CFR Part 200 and all other applicable Federal law and regulations and guidance issued by the U.S. Department of the Treasury.
- 2. Pursuant to 24 CFR 85.43, any Agreement executed as a result of acceptance of this bid can be terminated if the contractor fails to comply with any term of the award. This Agreement may be terminated for convenience in accordance with 24 CFR 85.44 upon written notice by LFUCG. Either party may terminate this Agreement with thirty (30) days written notice to the other party, in which case the Agreement shall terminate on the thirtieth day. In the event of termination, the contractor shall be entitled to that portion of total compensation due under this Agreement as the services rendered bears to the services required. Either party may terminate this Agreement for good cause shown with forty-five (45) days written notice, which shall explain the party's cause for the termination. If the parties do not reach a settlement before the end of the 45 days, then the Agreement shall terminate on the forty-fifth day.
- 3. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:
  - (1) Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
  - (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
  - (3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding,

- hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part, and the contractor may be declared ineligible for further government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance.

Provided, however, that in the event a contractor becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

- 4. If fulfillment of the contract requires the contractor to employ mechanic's or laborers, the contractor further agrees that it can and will comply with the following:
  - (1) Overtime requirements: No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such a workweek unless such laborer or mechanic receives compensation at a rate not less than one and onehalf times the basic rate of pay for all hours worked in excess of forty hours in such a workweek.
  - (2) Violation: liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

- (3) Withholding for unpaid wages and liquidated damages. LFUCG shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.
- (4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower-tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.
- 5. The contractor shall comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
- 6. The contractor shall report each violation to LFUCG and understands and agrees that LFUCG will, in turn, report each violation as required to assure notification to the Treasury Department and the appropriate Environmental Protection Agency Regional Office.
- 7. The contractor shall include these requirements in numerial paragraphs 5 and 6 in each subcontract exceeding \$100,000 financed in whole or in part with American Rescue Plan Act funding.
- 8. The contractor shall comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
- 9. The contractor shall report each violation to LFUCG and understands and agrees that LFUCG will, in turn, report each violation as required to assure notification to the Treasury Department and the appropriate Environmental Protection Agency Regional Office.
- 10. The contractor shall include these requirements in numerical paragraphs 8 and 9 in each subcontract exceeding \$100,000 financed in whole or in part with American Rescue Plan Act funds.
- 11. The contractor shall comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
- 12. The contractor shall report each violation to LFUCG and understands and agrees that LFUCG will, in turn, report each violation as required to assure notification to the Treasury Department and the appropriate Environmental Protection Agency regional office.
- 13. The contractor shall include these requirements in numerical paragraphs 11 and 12 in each subcontract exceeding \$100,000 financed in whole or in part with American Rescue Plan Act funds.
- 14. The contractor shall include this language in any subcontract it executes to fulfill the terms of this bid: "the subgrantee, contractor, subcontractor, successor, transferee, and assignee shall comply with Title VI of the Civil Rights Act of 1964, which prohibits recipients of federal financial assistance from excluding from a program or activity, denying benefits of, or otherwise discriminating against a person on the basis of race, color, or national origin (42 U.S.C. § 2000d et seq.), as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, which are herein incorporated by reference and made a part of this contract (or agreement). Title VI also includes protection to persons with 'Limited English Proficiency' in any program or activity receiving federal financial assistance, 42 U.S.C. § 2000d et seq., as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, and herein incorporated by reference and made a part of this contract or agreement."

- 15. Contractors who apply or bid for an award of \$100,000 or more shall file the required certification that it will not and has not used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency. Each tier certifies to the tier above that it will not and has not used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-federal funds that takes place in connection with obtaining any federal award. Such disclosures are forwarded from tier to tier, up to the recipient. The required certification is included here:
  - a. The undersigned certifies, to the best of his or her knowledge and belief, that:
    - (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
    - (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
    - (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.
  - b. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Signature

March 30, 2022

Date



# **SECTION II**

**BID PROPOSAL** 

Proposal S21-052

Date: March 30, 2022



# 1.1 SCOPE OF WORK BY INTEGRITY MUNICIPAL SYSTEMS, LLC ("SELLER")

The following services and supplies (collectively, "Services") are included in Seller's scope of supply:

# **ITEM #1** TOWN BRANCH SCRUBBER REHAB SERVICES

No.	<u>Description</u>	Price
1.	Site Survey, System Testing, and Work Recommendations  Pre-inspection of scrubber, testing, and site survey prior to rehab service. A list of recommendations for work will be provided for the City's review.	Included
2.	Town Branch Scrubber Repairs  The scope of work will include all the following:  a. Installation of ground-level 24" Flanged FRP Manway, 25 psi, with EPDM Gasket and 316SS Hardware, for entry into caustic tank  b. Replace leaking sight glass with new clear PVC pipe sight glass  c. Replace leaking FRP drain  d. Clean scrubber venturi and replace leaking gasket  e. Replace burst PVC piping from recirculation pump piping to scrubber venturi	Included
3.	Scrubber Hydrotest. New Caustic Refill, and Startup Test  a. The Scrubber will be filled with water for 24 hours to hydrotest repairs  b. Drain water to the plant drain after the hydrotest is complete  c. Refill with 5-10% Membrane Grade Caustic and DI water mix (5,000 gal.)  d. Perform start-up testing to observe pump and piping performance	Included
4.	Final Service Report  A Final Service Report will be provided detailing the status of the system, including service photos, and a list of recommendations for any further work	Included
	ITEM #1 TOTAL SERVICE PRICE [ITEMS 1-4]	\$59,350

# 1.2 ITEM #1 SCOPE OF WORK BY OTHERS (TOWN BRANCH)

- 1. Sealing of scrubber inlet air duct prior to service
- 2. Service equipment unloading and storage
- Removal of chemical from scrubber prior to service and cleaning and drying scrubber in preparation for tank FRP repair services (water rinse down followed by air-drying is OK), including disposal of old chemical
- 4. Removal of all piping from storage tank nozzles to be replaced
- 5. Any items not explicitly listed in IMS scope of work

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# ITEM #2 WEST HICKMAN SCRUBBER ACID WASH SERVICE

No. Description Price 1. Site Survey, System Testing, and Work Recommendations Included Pre-inspection of scrubber, testing, and site survey prior to rehab service. A list of recommendations for work will be provided for the City's review. 2. Acid Wash for One (1) Vapor Scrubber System Included The scope of work will include all the following: a. Safety Equipment and Supplies b. Seventeen (17) 31% hydrochloric acid, 55 gal. drums, based on 15" solids buildup, and empty drum removal (additional drums required beyond seventeen (17) drums total will be charged at a rate of \$300 per drum, plus \$100 freight) c. Transfer of existing caustic from scrubber to temporary tank (by City) d. Caustic solids breakdown/washing with hydrochloric acid e. Cleaning of spray nozzles and scrubber packing f. Transfer of acidic brine solution from scrubber to temporary tank (by City) g. Rinsing of scrubber internals with water h. Transfer of wastewater from scrubber to temporary tank (by City) i. Inspection of all components including the FRP, fan, pump, internal liquid distribution piping, and packing media j. Unit will be hydrotested for 24 hours (if any FRP repairs are made by IMS) k. Unit will be placed back into service and moving parts will be lubricated as needed I. Perform start-up testing to observe pump and piping performance **New Caustic Refill** 3. Included The Scrubber will be refilled with 20% Membrane Grade Caustic and DI water mix (2,100 gal.)

# 4. Final Service Report

Included

A Final Service Report will be provided detailing the status of the system, including service photos, and a list of recommendations for any further work

ITEM #2 TOTAL SERVICE PRICE [ITEMS 1-4] \$45,250

# 1.2 ITEM #2 SCOPE OF WORK BY OTHERS (WEST HICKMAN)

- Sealing of scrubber inlet air duct prior to service
- 2. Service equipment unloading and storage
- 3. Temporary storage tank for storage of old caustic and acid wash chemicals during acid wash service
- 4. Vacuum truck for pumping out all acid wash waste (caustic, wastewater, and acid brine) and disposal of all acid wash waste (caustic, wastewater, and acid brine)
- 5. Any items not explicitly listed in IMS scope of work



# ADDITIONAL UNIT PRICES FOR FUTURE SERVICES

# ITEM #3-5 ANNUAL MAINTENANCE CHECKS FOR THE SCRUBBERS LISTED BELOW

West Hickman SO2 Scrubber West Hickman Chlorine Scrubber Town Branch Chlorine & SO2 (Combo) Scrubber

The annual maintenance checks will be completed in the months and years listed below. Annual checks will be completed per Manufacturer's recommendations.

ITEM #3 ITEM #4 ITEM #5	April 2023 ANNUAL MAINTENANCE CHECKS FOR 3 SCRUBBERS April 2024 ANNUAL MAINTENANCE CHECKS FOR 3 SCRUBBERS April 2025 ANNUAL MAINTENANCE CHECKS FOR 3 SCRUBBERS	\$9,500 \$9,785 \$10,079
ITEM #6	FRP Flange Replacement  The scope of work will include all the following:  a. Prep and replace leaking FRP flange  b. Travel not included  c. Pricing assumes flange is accessible for replacement  d. Removal of chemical from scrubber prior to service and cleaning and drying scrubber in preparation for FRP repair services by Owner	\$8,750
ITEM #7	<ul> <li>FRP 12" x 12" Patch</li> <li>The scope of work will include all the following: <ul> <li>a. Prep and patch a FRP vessel leak with a 12" x 12" patch</li> <li>b. Travel not included</li> <li>c. Removal of chemical from scrubber prior to service and cleaning and drying scrubber in preparation for FRP repair services <ul> <li>by Owner</li> </ul> </li> </ul></li></ul>	\$7,412
ITEM #8	Unscheduled Service Call for Equipment Failure or Patching Removal of chemical from scrubber prior to service and cleaning and drying scrubber in preparation for any FRP repair services <u>by Owner</u>	\$200/hr.
ITEM #9	Travel (Estimated) – Per Trip	\$5,000
<u>ITEM #10</u>	Travel Daily Rate	\$1,250



# ITEMS #11-13 SCRUBBER ACID WASH SERVICE

No.	Description	Price						
1.	Acid Wash for One (1) Vapor Scrubber System	Included						
	The scope of work will include all the following:							
	a. Safety Equipment and Supplies							
	<ul> <li>b. Seventeen (17) 31% hydrochloric acid, 55 gal. drums, based on 15" solids buildup, and empty drum removal (additional drums required beyond seventeen (17) drums total will be charged at a rate of \$300 per drum, plus \$100 freight)</li> </ul>							
	c. Transfer of existing caustic from scrubber to temporary tank (by City)							
	d. Caustic solids breakdown/washing with hydrochloric acid							
	e. Cleaning of spray nozzles and scrubber packing							
	<ul> <li>f. Transfer of acidic brine solution from scrubber to temporary tank (by City)</li> </ul>							
	g. Rinsing of scrubber internals with water							
	h. Transfer of wastewater from scrubber to temporary tank (by City)							
	<ul> <li>Inspection of all components including the FRP, fan, pump, internal liquid distribution piping, and packing media</li> </ul>							
	<li>j. Unit will be placed back into service and moving parts will be lubricated as needed</li>							
	k. Perform start-up testing to observe pump and piping performance							
2.	New Caustic Refill	Included						
	The Scrubber will be refilled with Membrane Grade Caustic and DI water							
	mix							
	<ul><li>a. West Hickman US Filter RJ-2000's: 2,100 gal. of 20% caustic ea.</li><li>b. Town Branch Xerxesi: 5,000 gal. of 5-10% caustic for</li></ul>							
3.	Final Service Report  A Final Service Report will be provided detailing the status of the system, including service photos, and a list of recommendations for any further work	Included						
	ITEM #11 WEST HICKMAN SO2 RJ-2000 ACID WASH [ITEMS 1-3]	\$44,500						
	ITEM #12 WEST HICKMAN CHLORINE RJ-2000 ACID WASH [ITEMS 1-3]	\$44,500						

# 1.2 ITEMS #11-13 SCOPE OF WORK BY OTHERS

- 1. Sealing of scrubber inlet air duct prior to service
- 2. Service equipment unloading and storage
- 3. Temporary storage tank for storage of old caustic and acid wash chemicals during acid wash service

ITEM #13 TOWN BRANCH COMBO SCRUBBER ACID WASH [ITEMS 1-3]

- 4. Vacuum truck for pumping out all acid wash waste (caustic, wastewater, and acid brine) and disposal of all acid wash waste (caustic, wastewater, and acid brine)
- 5. Any items not explicitly listed in IMS scope of work



# 1.3 PROPOSAL VALIDITY

Seller's Cost Proposal is valid for 90 days.

# 1.4 TAXES

Seller's Proposal does <u>not</u> include any sales, use, federal, state, local, excise, or other similar taxes or duties unless expressly stated in this quotation. All applicable taxes shall be paid by Buyer.

# 1.5 PAYMENT TERMS

100% of the contract price upon service completion, Net 30 Days

# 1.6 SCHEDULE

Performance schedule is subject to the current service/production schedule, material availability, and purchase order requirements.

# 1.7 INDEMNIFICATION

Seller shall indemnify, defend and hold Buyer harmless from any claim, cause of action or liability incurred by Buyer as a result of third party claims for personal injury, death or damage to tangible property, to the extent caused by Seller's negligence.

# 1.8 LIMITATION OF LIABILITY

NOTWITHSTANDING ANYTHING ELSE TO THE CONTRARY, SELLER SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, PUNITIVE OR OTHER INDIRECT DAMAGES, AND SELLER'S TOTAL LIABILITY ARISING AT ANY TIME FROM THE SALE OR USE OF THE EQUIPMENT, PARTS, OR SERVICES PERFORMED SHALL NOT EXCEED THE PURCHASE PRICE PAID UNDER THIS AGREEMENT. THESE LIMITATIONS APPLY WHETHER THE LIABILITY IS BASED ON CONTRACT, TORT, STRICT LIABILITY OR ANY OTHER THEORY.

THE FOREGOING LIMITATIONS AND EXCLUSIONS SHALL NOT APPLY TO ANY CLAIMS FOR WHICH SELLER IS RESPONSIBLE PURSUANT TO SECTION 1.7-INDEMNIFICATION ABOVE.

# 1.9 WARRANTY

Warranty for FRP work is (1) year on workmanship and materials.



# **SECTION III**

**CASE STUDIES** 



# PROJECT PROFILE: City of Tulsa, OK

# Integrity Municipal Systems Restores Bulk Emergency Chlorine Vapor Scrubber System for City of Tulsa, Oklahoma

As part of a major modernization of the Mohawk Water Treatment Plant in the late 1990s, the City of Tulsa, Oklahoma, installed a bulk emergency chlorine vapor scrubber system. This standby equipment, which is critical to the overall safety plan of the plant's chlorine gas disinfection system, uses liquid caustic soda to neutralize chlorine gas in the event of an accidental release.

As the scrubber system approached the end of its anticipated 20-year useful life, the city engaged Integrity Municipal

"IMS provided an effective turnkey project...saving us hundreds of thousands of dollars in our capital budget."

Rachel Watts Water Supply Engineer City of Tulsa Systems, LLC (IMS) to inspect the equipment and propose a system refurbishment plan that would ensure proper system performance and safe storage of the 30,000 gallons of corrosive caustic soda contained within it. Utilizing their 20-plus years of scrubber experience, IMS personnel developed a practical and cost-effective solution for the city that resulted in more than a half million dollars in savings when compared

to disposal and replacement of the existing system.

Because the Mohawk WTP is one of only two plants operated by the city, a key consideration for the project was the ability to preserve plant operations during the retrofit. The plant is adjacent to the nation's third-largest municipal park and less than 500 feet from a residential neighborhood, so operating without an online emergency chlorine scrubber system was not an option. To provide protection against a chlorine leak and allow plant operations to continue during the system refurbishment, IMS mobilized and installed a temporary emergency chlorine vapor scrubber system. The temporary scrubber included integral secondary containment, enabling quick installation on any level surface without the need for expensive civil work.

IMS safely transferred all caustic solution to a temporary storage tank for later reuse in the refurbished scrubber, eliminating the costs and hazards associated with hazardous waste disposal and complete caustic replacement. A portion of the preserved caustic solution was used to charge the temporary scrubber system provided by IMS.

After removal of the caustic solution, the scrubber system was acid washed to remove caustic solids and inspected by an independent FRP inspector. The portion of the storage tank in direct contact with caustic was severely corroded and required significant rehabilitation. Based on the recommendations of the FRP inspector, IMS ground down and repaired all raised surfaces, blisters, and surface cracks in the storage tank, and relined almost the entire corrosion barrier.

In addition to relining the storage tank, IMS upgraded to FRP the recirculation pump discharge piping, installed a new access manway in the tank sidewall, upgraded the internal liquid distributor design, removed the tank drain to minimize susceptibility to leaks, and replaced wear parts such as gaskets, fan belts, and instrumentation. All FRP surfaces were then recoated with gelcoat and all pumps and the fan were painted.

Before transferring and filtering the stored caustic back into the rehabilitated scrubber system, the FRP inspector returned to evaluate the repairs. All work was found to be properly completed and in excellent condition. The inspector's final report concluded that the refurbishment of the system should increase the service life of the tank by another 15 to 20 years, far exceeding original expectations.

Rachel Watts, Water Supply Engineer at City of Tulsa, stated, "IMS provided an effective turnkey project that allowed for the continued protection of both plant staff and the public, in addition to saving us hundreds of thousands of dollars in our capital budget. Thank you."



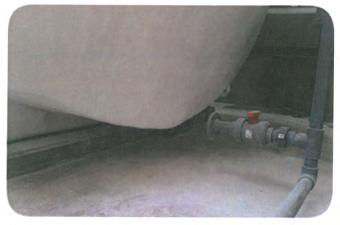
Temporary emergency chlorine scrubber provides protection during rehabilitation

# **BEFORE**



Leak at storage tank drain

# **AFTER**



Leak fixed and drain plugged to minimize future leaks



Severe corrosion to storage tank interior – sample close-ups of 3 locations



Storage tank interior after repairs and relining



# PROJECT PROFILE: EMWD, CA

# Integrity Municipal Systems Successfully Restores Four Bulk Emergency Chlorine Vapor Scrubber Systems for Eastern Municipal Water District in California

In October 2014, Eastern Municipal Water District (EMWD) selected Integrity Municipal Systems, LLC (IMS) to clean, inspect, and restore four Bulk Emergency Chlorine Vapor Scrubber Systems. These systems, installed in May 1998 (San Jacinto Valley Regional WRF), December 2000 (Temecula Valley Regional WRF), and July 2006 (Perris Valley Regional WRF and Moreno Valley Regional WRF), possess liquid caustic storage capacities ranging from 14,500 gallons to 38,800 gallons. Each of these systems is designed to protect plant workers and nearby population centers from potentially deadly releases of chlorine gas. Keeping these systems in safe and reliable operation is a paramount concern for EMWD.

EMWD selected IMS to perform this critical work based on the extensive experience of key IMS personnel with Bulk Emergency Chlorine Vapor Scrubber Systems – IMS CEO, Roop Jain, P.E., was the original designer and patent holder of the systems – and the innovative plan devised by IMS to clean

"Our Operations staff was very pleased by the dedication and professionalism of IMS personnel and the manner in which they conducted themselves."

Erik Jorgenson, P.E. Senior Civil Engineer Eastern Municipal Water District and acid wash the systems. IMS' plan removed caustic solids while at the same time preserving 115,000 gallons of caustic and minimizing residual waste liquid to less than 10 percent.

Each system was drained, acid washed, and wiped clean. Each of the fiberglass reinforced plastic (FRP) storage tanks and scrubbers was then thoroughly inspected by independent FRP engi-

neers and the FRP manufacturer. Following each inspection a status report with recommendations for repair was submitted to EMWD's engineers, Erik Jorgenson, P.E. and Gabriel Buenagua, P.E., for review and approval.

FRP repairs included grinding and relining areas showing signs of chemical attack to the corrosion liner or secondary laminates, and double-coating repaired areas with hot resin

and wax coating. Stress fractures were discovered in the north caustic storage tank at the Moreno Valley Regional WRF extending over the entire bottom of the tank. IMS removed the stress fractures and laminated a new structural bottom for the tank. IMS also installed a new 100 mil liner in the bottom of the Moreno Valley Regional WRF south tank.

Exterior PVC drain/overflow and sight-glass piping was replaced on all four systems. FRP recirculation discharge piping was replaced as needed. Miscel-



Perris Valley, EMWD

laneous items, such as scrubber and tank gaskets, pressure gauges, gauge guards, and fan v-belts, were replaced as necessary. The exterior of each caustic storage tank received a new gel coating, and all of the exhaust fans and recirculation pumps were painted. Non-essential fittings in the lower sections of the caustic storage tanks were either removed altogether or relocated to minimize any chance of a major leak.

All of the work was performed by IMS personnel in strict accordance with EMWD Safety Regulations. EMWD takes great pride in its safety record and is recognized by Cal/OSHA as a Cal/STAR site, consistently going above and beyond minimum safety standards.

The cleaning and restoration work completed by IMS extended the useful life of each of the systems and significantly reduced the opportunity for future system failures.

EMWD Senior Civil Engineer, Erik Jorgenson, P.E., expressed the views of the EMWD team following completion of the cleaning and restoration project: "Our Operations staff was very pleased by the dedication and professionalism of IMS personnel and the manner in which they conducted themselves."

# EMWD Bulk Emergency Chlorine Vapor Scrubber Systems After Restoration

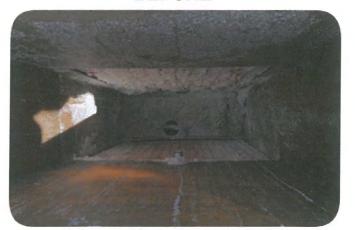


Moreno Valley

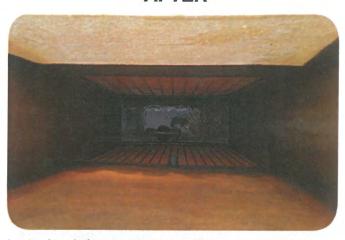


San Jacinto Valley

**BEFORE** 



**AFTER** 



Temecula Valley Scrubber Interior Before/After Acid Wash





Moreno Valley Scrubber - Before/After FRP Tank Interior Refurbishment

13135 DANIELSON STREET, SUITE 204 POWAY, CA 92064 PHONE: (858) 486-1620 FAX: (858) 486-1659 www.integrityms.net **Integrity**MUNICIPAL SYSTEMS



# PROJECT PROFILE: Maui, HI

# Integrity Municipal Systems Restores 18-Year Old Emergency Chlorine Vapor Scrubber Systems for County of Maui, HI

The County of Maui Department of Water supplies approximately 75% of Maui's clean drinking water. Emergency chlorine vapor scrubber systems are an integral part of the chlorination/disinfection systems for the water treatment plants. These systems are designed to contain and neutralize chlorine vapor in the event of a potentially hazardous chlorine gas leak. A scrubber mounted exhaust fan pulls chlorine-laden air from the chlorination build-

"I strongly recommend IMS and their skilled technicians for chlorine scrubber refurbishment."

Bruce Rollins, Plant operator

ing through a three-stage scrubbing system that includes recirculation of caustic over a packed media bed to neutralize the chlorine gas vapor. The proper functioning of these systems is critical to

the safe and compliant operation of the water treatment facilities. That's where the skilled technicians of Integrity Municipal Systems (IMS) come in.

In May 2012, the Department of Water contacted IMS seeking service and restoration of the emergency vapor phase chlorine scrubbers installed at the Lahaina, Mahinahina, and Piiholo Water Treatment Facilities. Due to its historical connection with RJ Environmental Inc. (RJE) – which, like IMS, was founded and operated by Roop Jain, P.E. – IMS was the natural choice to rehabilitate these essential systems. RJE designed, manufactured, and commissioned each of these systems while under the management of Mr. Jain from 1994 through 1996.

Working together with Tony Linder, W.T.P. Division Chief, Mr. Jain determined that the spent caustic could be used at the local wastewater treatment plant and the acid wash solution generated during the cleaning process could be neutralized on-site and disposed through the local wastewater treatment system. This creative solution avoided the expense of removing spent material from the island. In all, the IMS service approach saved the County of Maui over \$100,000 when compared against the next lowest bidder.

"We are very happy with the professionalism and limited down

time executed by Integrity Municipal Systems on this project," said Linder. "From the initial site vist by Mr. Jain himself, and all the way through completion of this project, IMS has proven itself in the eyes of County of Maui, D.W.S."

IMS personnel began cleaning and restoring the systems in November 2012. The cleaning process included loading existing caustic into totes, dissolving caustic solids in the scrubber sump and internal packing media with Muriatic acid solution, neutralization of acidic brine solution, cleaning spray nozzles and liquid distributor, cleaning packing media, removal of neutralized solution using totes, and rinsing all internals with water. Once cleaned, the systems were closely inspected prior to recharging with 2,100 gallons of fresh caustic per system. Restoration included painting the exterior of the inlet ducts, scrubbers, and exhaust stacks, and replacement of the sight glass, drain/ overflow assemblies, and pressure gauge piping assemblies. In addition, one scrubber recirculation pump was heavily corroded and one packing support grating was broken; so a new pump was installed and broken FRP grating replaced along with three new pressure gauges and guard assemblies.

Bruce Rollins, Department of Water Plant Operator and the manager of the refurbish-

ment project, stated:
"Three of our chlorine
scrubbers were in need
of maintenance, with
extensive build-up on the
media, spray nozzles,
and the floors of the

"IMS has proven itself in the eyes of County of Maui D.W.S."

Tony Linder, W.T.P. Division Chief

scrubbers. Two IMS technicians cleaned the interiors and rebuilt the insides, as needed. They had to replace a pump on one of the scrubbers and redid the outside piping on all three. When they were done, all three scrubbers were back to near-new condition. IMS exceeded our expectations in every respect. They finished their work ahead of schedule despite some unexpected issues. I strongly recommend IMS and their skilled technicians for chlorine scrubber refurbishment."

# **BEFORE**



# **AFTER**











Pictured are photos of the RJ-2000® Emergency Chlorine Scrubber System refurbished by IMS. RJ Environmental is a subsidiary of Evoqua Water Technologies LLC. RJ-2000® is a trademark of Evoqua Water Technologies LLC.

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