

RESOLUTION NO. _____

A RESOLUTION APPROVING AN AGREEMENT WITH SOURCE TECHNOLOGIES, LLC AND AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT AND ALL OTHER DOCUMENTS NECESSARY AND PROPER TO EFFECUATE THE PURPOSE OF THE AGREEMENT

WHEREAS, hydrogen sulfide (H₂S) is the primary cause of sewer odors and pipe corrosion; and

WHEREAS, hydrogen sulfide is formed from naturally occurring sulfates in sewer; and

WHEREAS, if not controlled, H₂S can cause objectionable sewer odors and corrode pipes leading to premature replacement or catastrophic failures; and

WHEREAS, on August 19, 2015, by Resolution No.: 2016-037, the board approved as a sole source purchase, an agreement with Source Technologies, LLC to install and maintain an order and corrosion treatment process at sewer lift stations; and

WHEREAS, the current agreement is set to expire in February, 2024 and it is recommended to enter into a new agreement to continue the service for a two year term which will automatically renew for an additional two years; and

WHEREAS, the cost for the treatment and the monitoring will not exceed \$71,000.00 per year; and

WHEREAS, funding is identified in the sewer operating budget.

Now therefore,

BE IT RESOLVED BY THE BOARD OF MAYOR AND ALDERMEN AS FOLLOWS:

SECTION I. That the agreement with Source Technologies, LLC to continue the treatment and monitoring of sewer lift stations is approved.

SECTION II. That the mayor, or in his absence, incapacity, or failure to act, the vice-mayor, is authorized and directed to execute, in a form approved by the city attorney and subject to the requirements of Article X, Section 10 of the Charter of the City of Kingsport, an agreement with Source Technologies, LLC, to deliver the agreement and take any and all action as may be required on the part of the city to carry out, give effect to, and consummate the transactions contemplated by the agreement and this resolution; said agreement being generally as follows:

Contract for the Elimination of Odor and Corrosion for the City of Kingsport at the Old Mill Pump Station.

**Submitted by Drew Kirby Source Technologies, LLC
August 2, 2023**

**Old Mill Pump Station
Site Background**

The City of Kingsport's Old Mill Pump Station and Force main consists of 22,938 linear feet of 14 inch pipe. There is an estimated daily flow of 230,000 GPD and a detention time of approximately 19.1 hours.

Product Background

Source Technologies, LLC (Source) proposes the ETX Process for the primary treatment of hydrogen sulfides in the Old Mill force main. The ETX Process, developed by Source Technologies is an efficient, cost-effective, advanced oxidation process for treatment of sulfonated organics in wastewater and bio-solids where detention times range from 4-36 hours.

The ETX Process can be employed in a variety of ways and is easily adaptable to existing treatment systems. Application of the ETX Process is very straightforward, requiring metering of the ETX catalyst with an Oxidant, in this case Hydrogen Peroxide (H₂O₂) into the targeted wastewater with adequate mixing. The reaction occurs quickly thereafter.

Experience has demonstrated that the ETX Process is particularly efficient for treatment of sulfides in this detention time range for municipal and industrial applications. The cost of sulfide treatment using the ETX Process for this detention time range is the ***lowest in the industry*** as compared to all currently available technology.

Chemical Cost

Daily Cost

Old Mill Pump Station #203

\$169.99/day

Feed rate ETX 17.8 GPD est. (\$6.30 per gal.)

Feed rate H₂O₂ 8.90 GPD est. (\$6.50 per gal.)

The feed rates will fluctuate up and down throughout the year based on sulfide levels but should average out at approximately what is stated above. Source will inform the City of Kingsport if they see that feed rates need to be increased more than projected and will get approval first before increasing them. Maximum yearly expense not to exceed \$65,000 for Old Mill.

Service Agreement

Source will provide all service and maintenance on all the equipment they provide. This will include all chemical fills which are estimated to occur every 3-4 months. A pre-approved monthly report on performance will also be submitted.

Contract Agreement

Source proposes a two year contract that renews automatically for two additional years as long as performance remains at the agreed upon specification. The City of Kingsport has the right to terminate this agreement with just cause of lack of performance by Source Technologies.

ETX and H₂O₂ are blended using some commodity ingredients. As such, the price for each chemical can fluctuate somewhat depending on fluctuations in commodity prices and the cost of fuel. Source reserves the right to pass major cost increases to its customers. While we do not anticipate major fluctuations from the prices from the original quote, Source will notify the City of Kingsport in writing if a change in price is forthcoming. With any price increase the City of Kingsport maintains the right to end their contract with Source Technologies.

Monthly Monitoring

As a part of Kingsport's odor control and H₂S program, the city has requested monthly odor control monitoring. This monitoring will include hanging an oda log at two locations for 5-7 days per month and taking a water sample to test for sulfides in solution at both locations once per month. The oda log graphs, water sample results and any odor complaints will be included in the monthly report that is currently being submitted. Sites will be selected based on odor complaints, sewer detention time, and manhole inspections.

Monthly Cost

Two sites designated by the city staff \$250 / site/ month

Total \$500 / month

*If the City of Kingsport decides to start treating monitored sites, the monitoring will be included at no additional charge.

Please feel free to contact me should you have any questions. We look forward to working with you on this project.

[Acknowledgements Deleted for Inclusion in this Resolution]

SECTION III. That the mayor is further authorized to make such changes approved by the mayor and the city attorney to the agreement that do not substantially alter the material provisions of the agreement, and the execution thereof by the mayor and the city attorney is conclusive evidence of the approval of such changes.

SECTION IV. That the board finds that the actions authorized by this resolution are for a public purpose and will promote the health, comfort, and prosperity of the citizens of the city.

SECTION V. That this resolution shall take effect from and after its adoption, the public welfare requiring it.

ADOPTED this the 19th day of September, 2023.

PATRICK W. SHULL, MAYOR

ATTEST:

ANGELA MARSHALL, DEPUTY CITY RECORDER

APPROVED AS TO FORM:

RODNEY B. ROWLETT, III, CITY ATTORNEY