



Meeting Date: March 11, 2019

Report No. SUA-19-08

Agenda Item No. 2c

Purpose: To request that SUA Trustees declare an immediate emergency and authorize staff to award and execute a construction quote package for the emergency repairs of the Water Treatment Plant (WTP) Chlorine Gas Scrubber to Integrity Municipal Systems (Integrity).

Budget Impact: No new appropriations are necessary as previously authorized funds are available in the WTP Improvements Project for this work.

Prior Council Action or Part of an Approved Project: Yes

- [SUA-17-01](#) PSA for WTP Lime System Replacement and Misc. Improvements
- [SUA-17-22](#) Contract Amendment No. 1 for WTP Improvements
- [SUA-18-34](#) Contract Amendments No. 3, 4 for WTP Improvements

Alternatives: The following alternatives are available to the Trustees:

1. Award quote and authorize expenditures and staff to execute Integrity's quote, which is the lowest most responsive quote.
2. Direct staff to go through the normal complete bidding process. This alternative extends the emergency period and increases safety and health risks, including the risk of loss of life to the WTP staff.

Recommendation: Staff recommends that Trustees:

1. Declare that the non-effective WTP scrubber poses a loss of life risk to WTP staff and the public thus constituting an immediate emergency;
2. Award the quote package and approve City Manager's execution of the work to Integrity for \$72,400.
3. Authorize total project expenditures not to exceed \$88,500, which includes the previously completed scrubber inspection and testing for \$1,543, the rehabilitation quote package for \$72,400, and a 20% contingency.

Prepared by: Candy Staring, Water Utilities Engineering Capital Program Manager

Reviewed by: William Millis, Water Utilities Engineering Director

Submitted by: Norman McNickle, City Manager

Background Information:

Chlorine Gas Scrubber History. The Water Treatment Plant (WTP) Chlorine Gas Scrubber (scrubber) is the emergency treatment system that protects employees and the public in the event of a chlorine leak or spill at the WTP. The WTP's scrubber is a packed bed system using a caustic solution sized to treat two overfilled one-ton containers in less than 30 minutes. The scrubber was placed into operation at the WTP in September 2000.

The scrubber was included in the scope of work for the WTP Improvements Project, which has been in various stages of condition assessments, studies, alternatives evaluation, pilot and bench testing, grant acquisition and design since early 2017. Through this WTP Improvements Project, the scrubber system was evaluated by our consultant, Black and Veatch (B&V), who determined that replacement costs exceeded rehabilitation costs. To support a rehabilitation effort, Water Utilities Engineering (WUE) staff acquired testing and inspections for the scrubber to determine the scope of work required for full rehabilitation.

During the testing and inspections effort, staff discovered that the caustic solution was at 3.5% (20% is design level) and not at an adequate level to provide full treatment. Results of the inspection effort provided the needed information required for a quote package to be developed and advertised. Further, a plumbing line inside the scrubber recently broke due to inclement weather. The scrubber is no longer able to provide protection to WTP staff. The lack of a functioning scrubber at the WTP is an emergency situation due to the safety and health risks, including the risk for loss of life to WTP staff working on or around the chlorine system and to the public in the area.

Emergency Procurement: Quotes for the scrubber rehabilitation were solicited on a competitive quote basis without the formal competitive bid process. State law (60 O.S. S176: H.) provides that the Trustees may authorize expenditures in excess of \$50,000 without public notice or competitive bids if the Trustees find that an immediate emergency exists. To declare an emergency, the Trustees must find that the immediate outlay of Trust funds in excess of \$50,000 is necessary in order to avoid loss of life, substantial damage to property, or damage to the public peace or safety.

In staff's opinion, the nonfunctioning scrubber poses a health and safety risk to WTP staff and public. Should a chlorine spill occur, the plume could potentially cause loss of life to unprotected staff and the public.

Quote Package Results. On February 12, 2019, the WUE issued the emergency Request for Quotes (RFQ). The RFQ was forwarded to contractors and plan rooms to ensure a wide range of distribution so that numerous contractors had the opportunity to consider the RFQ. Quotes were received on March 4, 2019. The quotes are summarized below.

<i>Company</i>	<i>Quote</i>
Evoqua Water Technologies	\$ 92,432.00
Integrity Municipal Systems	\$ 54,900.00

The lowest and most responsive quote was submitted by Integrity Municipal Systems (Integrity). Integrity's proposed work sequencing, familiarity with the scrubber and overall experience with this type of work were determined to best address the emergency aspects of the project. Integrity recommended the replacement of the system pump (an additional \$17,500.00) based on the age of the pump and their review of the inspection report. Staff agrees with Integrity's recommendation based on the pump's condition and the lack of replacement parts if a pump failure occurs.

Staff is requesting a total authorization of \$88,500, which includes previously completed work, the rehabilitation quote package (including the replacement of the pump) and 20% in contingent funds for unforeseen issues and costs. A higher than typical contingency is being requested due to the emergency nature of this work.

The WTP Improvements Project Account includes sufficient funds to complete this work as the FY15, FY16, and FY17 budgets allocated a total of \$3.8 Million in funds for the WTP Improvements program.

WUE staff anticipate that work will be completed by the end of May 2019.