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**TO:** Chairperson Greg Dannecker and Members of the Utilities Committee

**FROM:** Utilities Deputy Director Chris Stempa

**CC:** Utilities Director Chris Shaw, Wastewater Plant Operations Supervisor Robert Kennedy, Enterprise Fund Accounting Manager Kelli Rindt

**DATE:** August 4, 2015

**RE:** *Sole Source Contract to TOMCO<sub>2</sub> Systems for AWTF Liquid Carbon Dioxide Storage System Repair Work for a total amount not to exceed \$27, 024*

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**BACKGROUND:**

The Appleton Water Treatment Facility (AWTF) utilizes a TOMCO<sub>2</sub> liquid carbon dioxide (CO<sub>2</sub>) system for pH adjustment and fire suppression of the Powdered Activated Carbon (PAC) system. The existing liquid CO<sub>2</sub> system was commissioned as part of the original AWTF construction in 2001. In early 2014, liquid CO<sub>2</sub> suppliers conducted a site survey of the AWTF CO<sub>2</sub> storage system as part of the AWTF chemical quotation process. This survey identified that the existing liquid CO<sub>2</sub> tank Pressure Release Devices (PRDs) did not adhere to Compressed Gas Association (CGA) standards which were created after the water plant was constructed.

The existing AWTF CO<sub>2</sub> system was constructed with a single PRD assembly on each tank. This design does not allow for removal, inspection, or replacement of PRDs without taking the CO<sub>2</sub> system out of service. In June 2014 the AWTF solicited the services of the original equipment manufacturer (OEM), TOMCO<sub>2</sub>, to assist with a complete CO<sub>2</sub> system conditions assessment given the concerns brought forth with the PRDs coupled with the CO<sub>2</sub> system age (15 years) and need to maintain uninterrupted treatment operations.

**SOLE SOURCE JUSTIFICATION:**

As the OEM, TOMCO<sub>2</sub> is intimately familiar with the AWTF CO<sub>2</sub> system and possess a positive industry track record of service. They also provide the AWTF with an experienced single-point of contact when needs or questions arise. The conditions assessment work completed by TOMCO<sub>2</sub> confirmed the need to replace the existing PRDs including refrigeration compressor filters, dryers, failing electronic pressure

switches, expansion valves, and other miscellaneous components which have worn over time. Based on the findings of that assessment the AWTF determined it was necessary to expeditiously move forward with the identified repairs.

As part of due diligence the Utility Department still sought quotes from two regional liquid CO<sub>2</sub> system service providers (also supply liquid CO<sub>2</sub>) capable of servicing the AWTF TOMCO<sub>2</sub> system. These firms confirmed their ability to provide the requested services but that markup charges would be applied if not under an existing liquid CO<sub>2</sub> supply contract (this is apparently a common practice). One of the liquid CO<sub>2</sub> suppliers provided a service quote while engaged in short-term supply contract. Their quote was under the premise that we were under a supply contract with them when the work occurred (which would not have occurred since their supply contract was terminated 30-days following execution) and thus was absent the mark-up or multiplier described previously. The quote focused on the pressure relief valves and fill pipes but did not address the overall needs of the compressed gas system. It also only accounted for one tank and did not include the various component identified by the TOMCO<sub>2</sub> which were due for replacement. In addition, it did not take into consideration the time it would take to transition work from one tank to the other or methods used to accomplish this while maintaining uninterrupted process operation. Where the components listed were the same, TOMCO<sub>2</sub> was the more cost competitive quote outside of travel expenses (travel from Illinois vs. Georgia).

One local service provider was also contacted for a quote based on a referral from another treatment facility. However, their service technician indicated that the work required was outside of the routine maintenance they perform on refrigeration and CO<sub>2</sub> vaporizer units.

The overall lack of detail contained within the regional firms quotes and the inability of smaller local service provider to complete all required tasks highlighted the concerns associated with the level of expertise being brought by someone other than the OEM. Utilities and Finance Department staff reviewed the presented alternatives. Their recommendation was to engage in a service contract with the OEM, TOMCO<sub>2</sub> to complete the work.

TOMCO<sub>2</sub> Systems has since completed repairs and equipment component replacements to the AWTF liquid carbon dioxide storage system. The cost of repairs was \$27,024. This project was identified in the 2015 operations budget at \$30,000.

If you have any questions, regarding the project please contact Chris Stempa at 832-2353.