

**Metropolitan Domestic Water Improvement District
Board of Directors Meeting**

June 12, 2017

**Approval of Bids for Granular Activated Carbon (GAC)
Replacement at South Shannon**

Synopsis

The Board of Directors is requested to approve the bids submitted for the replacement of the Granular Activated Carbon (GAC) at the South Shannon facility.

Background

The District, in conjunction with Arizona Department of Environmental Quality (ADEQ), constructed a GAC treatment system at South Shannon to remove volatile organic compounds (VOCs) from the ground water. The GAC system is composed of two vessels set in series. Each vessel contains 20,000 pounds of burnt coconut shell GAC. The well pushes water through the carbon bed from the top down. As the water flows through the bed, the VOCs attach to the GAC. The GAC in the lead vessel adsorbs as much of the VOCs as it can before breakthrough occurs. Breakthrough is when the GAC can no longer adsorb the VOCs and they pass through the bed as if no treatment was in place. When breakthrough occurs between the lead and lag contactor a GAC replacement is scheduled. The system was designed in series to allow the lag vessel to continue treatment while the lead vessel is having the GAC replaced. Once the GAC is replaced, the vessel with the older GAC will become the lead and the vessel with the new GAC will become the lag.

The District does have an agreement with ADEQ for reimbursement of the GAC change outs.

Issues

Based on previous change out history it is anticipated that there will be three to four carbon change outs during Fiscal Year 2018; however, the number of change outs will vary depending on the gallons treated and the VOCs levels in the raw water. In order to expedite the process, without having the system shut down for extended periods of time, the District requested quotes that would be valid from July 1, 2017 thru June 30, 2018.

A request for sealed bids were sent to vendors who had expressed interest or submitted proposals in the past. A public notice was also placed in the Daily Territorial on April 24, 2017 and ran for four consecutive publications. Sealed bids were due on May 16, 2017.

Three vendors submitted bids: Calgon Carbon, Carbon Activated Corp., and Prominent Systems Inc. Carbon Activated Corp. was the low bidder with a price of \$.95 per pound or \$19,000 per change out. Prominent Systems Inc. provided a bid price of \$1.00 per pound or \$20,000.00 per change out. Calgon Carbon submitted a bid price of \$1.44 per pound and a total \$28,758.00 per change out, however, 20,000 pounds at \$1.44 per pound would actually equal \$28,880. All bidders included taxes, delivery, installation, and disposal in their bids.

The intent of this bid is to handle the carbon change outs similar to other annual quotes obtained by the Utility Division. No specific award was intended to be made other than approval of pricing. The District's Job Order Agreement will be used with the approved bids. Staff is requesting approval of the pricing submitted by Carbon Activated Corp., Prominent Systems, and Calgon Carbon. The purpose of no single award is to provide an alternate if the lowest bidder cannot perform the service. Since the GAC is manufactured overseas, events can occur that inhibit service; the District has experienced this issue in the past.

Recommendation

It is recommended that the Board of Directors approve the bids submitted and authorize staff to enter into the Job Order Agreement with Carbon Activated Corp., Prominent Systems, and Calgon Carbon. It is also recommended that the Board authorize the General Manager to approve each GAC change-out to the lowest available bidder, as needed.

Suggested Motion

I move to approve the bids submitted and authorize staff to enter into the Job Order Agreement with Carbon Activated Corp., Prominent Systems, and Calgon Carbon. It is also recommended that the Board authorize the General Manager to approve each GAC change-out to the lowest available bidder, as needed.

Respectfully submitted,

Steve D. Shepard
Utility Superintendent

I concur with the above recommendation.

Respectfully submitted,

Joseph Olsen, P.E.
General Manager