

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: JANUARY 11, 2021

SUBJECT: PROFESSIONAL CONSULTANT SERVICES AGREEMENTS WITH CALGON CARBON CORPORATION AND CARBON ACTIVATED CORPORATION IN RESPONSE TO REQUEST FOR PROPOSAL NO. 2018 FOR GRANULAR ACTIVATED CARBON TESTING FOR A TERM THROUGH DECEMBER 31, 2021 IN THE COMBINED AMOUNT NOT TO EXCEED \$227,200

ISSUES:

Consider approval of two Professional Consultant Services Agreements with Calgon Carbon Corporation and Carbon Activated Corporation in response to Request for Proposal No. 2018 for Granular Activated Carbon Testing for one-year term in the combined amount not to exceed \$227,200.

RECOMMENDATIONS:

That the Board of Public Utilities:

1. Approve a Professional Consultant Services Agreement with Calgon Carbon Corporation for Granular Activated Carbon Testing for a term through December 31, 2021 in an amount not to exceed \$106,000;
2. Approve a Professional Consultant Services Agreement with Carbon Activated Corporation for Granular Activated Carbon Testing for a term through December 31, 2021 in an amount not to exceed \$121,200; and
3. Authorize the City Manager, or his designee, to execute the Professional Consultant Services Agreements with Calgon Carbon Corporation and Carbon Activated Corporation, including making minor and non-substantive changes and to sign all documents and instruments necessary to complete the transactions.

BACKGROUND:

On October 28, 2019, Riverside's Board of Public Utilities approved Work Order No. 2008392 in the total amount of \$850,000, in which part of this amount was dedicated to testing Bituminous Coal Based Granular Activated Carbon (GAC) to treat and reduce the amount of Per- and polyfluoroalkyl substances, known as PFAS, and co-contaminants in its potable water.

The City is currently using coconut shell based GAC to remove certain semi-volatile contaminants. It so happens that some of this same water also contains PFAS. By testing the water prior to and after treatment, staff has observed that coconut shell based GAC has only a limited effectiveness in removing GAC from the City's water supply.

A review of the literature suggested that Bituminous Coal based GAC (Coal GAC) was more effective at removing PFAS than coconut based GAC – in some cases, it is twice as effective. However, this increased effectiveness varies by the chemistry of the local water supply. As such, a large-scale trial needs to be conducted.

Through RFP 2018, staff solicited vendors to provide Coal GAC. The concept is to fill empty vessels or replace "exhausted" coconut shell based GAC with Coal GAC. Furthermore, we will test two variations of Coal GAC: virgin and regenerated. Each company will load one vessel of virgin GAC and one vessel of reactivated GAC at each treatment facility. RPU will collect samples to be analyzed by a third-party laboratory for testing. Results will be compared to see how each product performs. Factors that will be considered are price and the estimated number of vessel change outs in a given period. This information will be used to determine the overall best life-cycle cost for treating PFAS.

DISCUSSION:

RFP No. 2018 was posted on the City's Online Bid System on April 14, 2020 and closed on May 18, 2020. Two vendors submitted proposals that met the RFP scope of services and Purchasing requirements. Proposals were received from Calgon Carbon Corporation and Carbon Activated Corporation. Proposals were evaluated through a detailed selection process by a panel from Water Resources and Planning Engineering, Water Quality and Regulatory Compliance, and Operations staff. After review of the proposals according to the Proposal Evaluation Rules of Conduct, the committee selected Calgon Carbon and Carbon Activated of Riverside, California as the highest-ranking proposals for performing the work.

The proposals ranking is summarized in the table below:

Consultants	City Location	Rank
Calgon Carbon Corporation	Moon Township, PA	1
Carbon Activated Corporation	Compton, CA	2

The project/fiscal breakdown is as follows:

Project and Fiscal Breakdown

Price Per Vessel (approximately 20,000 lbs.)	Calgon Carbon Corp.	Carbon Activated Corp.
Phase 2 Virgin Bituminous Coal Based GAC	\$32,800.00	\$36,000.00
Phase 2 Custom Reactivated Bituminous Coal Based GAC	\$20,200.00	\$24,600.00
Phase 3 Virgin Bituminous Coal Based GAC	\$32,800.00	\$44,200.00
Phase 3 Custom Reactivated Bituminous Coal Based GAC	\$20,200.00	\$24,600.00

The Purchasing Manager concurs that the recommended actions are in compliance with Purchasing Resolution No. 23256.

The analysis completed under this proposal will compare GAC to treat and reduce the amount of PFAS at RPU's point-of-compliance at 7th and Chicago.

Assuming that the Board authorizes these agreements, staff will monitor the effectiveness of these Coal GACs over the period of approximately one year. Based upon the results, staff will return to the Board with its recommendation for a long-term solution. If the Coal GAC is indeed the most effective at removing PFAS (while performing well at removing the aforementioned semi-volatile contaminants), staff will recommend that the Board continue to receive Coal GAC from either Calgon or Carbon Activated depending on the best life cycle cost. Otherwise, staff will continue using Coconut Coal by releasing a separate RFP.

FISCAL IMPACT:

The fiscal impact for this action is anticipated to not exceed \$227,200. Sufficient funds are available in the Public Utilities Water Engineering Professional Services Account No. 6230000-470803 for Fiscal Year 2020/21.

If Calgon or Carbon Activated are selected as the City's GAC vendor, the Fiscal impact will be approximately \$972,400 annually for phase three. Sufficient funds are available in the Public Utilities' Chemical Supplies Account No. 6200000-426600; however, this will be the subject of a future authorization by the Board of Public Utilities.

Prepared by:	Todd L. Jorgenson, Utilities Assistant General Manager/Water
Approved by:	Todd M. Corbin, Utilities General Manager
Approved by:	Al Zelinka, FAICP, City Manager
Approved as to form:	Kristi J. Smith, Interim City Attorney

Certifies availability of funds:	Edward Enriquez, Chief Financial Officer/City Treasurer
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Attachments:

1. RFP Award Recommendation
2. Professional Services Agreement with Calgon Carbon Corporation
3. Professional Consultant Services Agreement Carbon Activated Corporation
4. Presentation