



# RIVERSIDE PUBLIC UTILITIES

## Board Memorandum

**BOARD OF PUBLIC UTILITIES**

**DATE: NOVEMBER 14, 2022**

**SUBJECT: SECOND AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT FOR GRANULAR ACTIVATED CARBON TESTING WITH CARBON ACTIVATED CORPORATION OF COMPTON, CALIFORNIA, FOR A THREE-YEAR TERM THROUGH DECEMBER 31, 2025, IN AN AMOUNT NOT TO EXCEED \$2,652,000**

**ISSUE:**

Consider approving the expenditure of \$2,652,000 for granular activated carbon testing for a three-year term, and recommending that the City Council approve a Second Amendment to Professional Services Agreement for Granular Activated Carbon Testing with Carbon Activated Corporation of Compton, California, for a three-year term through December 31, 2025, in an amount not to exceed \$2,652,000.

**RECOMMENDATIONS:**

That the Board of Public Utilities:

1. Approve the expenditure not to exceed \$2,652,000 for granular activated carbon testing for a three-year term; and

That the Board of Public Utilities recommend that the City Council:

2. Approve a Second Amendment to the Professional Services Agreement for Granular Activated Carbon Testing with Carbon Activated Corporation of Compton, California, for a three-year term through December 31, 2025, in an amount not to exceed \$2,652,000; and
3. Authorize the City Manager, or designee, to execute the Second Amendment to the Professional Services Agreement, including making minor and non-substantive changes and to sign all documents and instruments necessary to complete the transactions.

**BACKGROUND:**

On January 11, 2021, the Board of Public Utilities approved two separate professional services agreements with Calgon Carbon Corporation and Carbon Activated Corporation to test the organic contaminant removal performance of two different virgin and regenerated granular-activated bituminous coal-based carbon media products (GAC). Each carbon product was evaluated for its removal efficiency for dibromochloropropane (DBCP), 1,2,3-Trichloropropane

(1,2,3-TCP) and per- and polyfluoroalkyl substances (PFAS) for the water entering the Palmyrita Water Treatment Plant (PWTP).

Per the terms of the agreements, two vessels (2) of virgin GAC were loaded at the PWTP by each carbon supplier, and water quality samples were collected. On April 11, 2022, contract extensions were approved to allow testing to continue due to the longer-than-expected life of the carbon media. The contract extensions also allowed for each carbon supplier to test their reactivated GAC media.

**DISCUSSION:**

The PWTP is permitted by the State Water Resources Control Board Division of Drinking water to treat water using GAC from several Riverside North groundwater basin wells to remove DBCP. In addition to removing DBCP, GAC has been identified as one of the leading technologies to remove PFAS and 1,2,3-TCP from drinking water. The table below shows the results of the two different coal based carbon media to the current coconut shell carbon media in use. Table 1 identifies the GAC product, contaminant, days to breakthrough, and the amount of water treated in acre-feet (AF).

Table 1

GAC	DBCP		1,2,3-TCP		PFOS		PFOA		PFBS		PFHxS		PFHxA		PFHpA	
	Days	AF														
Filtrisorb 400 (F400)	292	23	240	20	269	22	253	20	253	20	253	20	234	19	293	20
COL-L 60 (12x40)	<b>393</b>	<b>31</b>	<b>280</b>	<b>24</b>	<b>351</b>	<b>28</b>	<b>280</b>	<b>24</b>	<b>280</b>	<b>24</b>	<b>280</b>	<b>24</b>	280	<b>24</b>	<b>329</b>	<b>24</b>
PSC1240 (Coconut)	256	22	238	20	194	18	194	18	194	18	194	18	<b>295</b>	18	204	18

Carbon Activated supplied the COL-L 60 (12x40), which performed the longest compared to Calgon’s F400 and the current coconut shell based carbon in use. As a result, we recommend utilizing Carbon Activated’s COL-L 60 product at Palmyrita WTP.

The Purchasing Manager concurs that the recommended actions are in compliance with Purchasing Resolution No. 23914 Section 1104 Change Orders, Modification to a Purchase Order shall be only by Change order. Subject to the availability of funds, Change Orders may be utilized for purposes of adding/or deleting quantity of items being procured, (2) modifying unit prices and (5) modifying contract completion time or term of a contract.

**STRATEGIC PLAN ALIGNMENT:**

This item aligns with **Strategic Priority 2 - Community Well-Being** and **Goal 2.3** - Strengthen neighborhood identities and improve community health and the physical environment through amenities and programs that foster an increased sense of community and enhanced feelings of pride and belonging citywide; and **Strategic Priority 4 - Environmental Stewardship** and **Goal 4.2** - Sustainably manage local water resources to maximize reliability and advance water reuse to ensure safe, reliable and affordable water to our community.

The actions align with the five Cross-Cutting Threads as described below:

1. **Community Trust** – Riverside Public Utilities tests the GAC before fully implementing a switch.

2. **Equity** – RPU customers benefit equally by maintaining the water quality.
3. **Fiscal Responsibility** – RPU is analyzing which GAC will remove contaminants for a longer period of time.
4. **Innovation** – RPU is utilizing approved technologies for water treatment.
5. **Sustainability & Resiliency** – production of potable water with minimal water loss form processes.

**FISCAL IMPACT:**

The total fiscal impact of this agreement is \$2,652,000 over three (3) years. The annual estimated cost is \$884,000, and only actual expenditures for services rendered will be incurred. Sufficient funds are available in Water Fund, Water-Production & Operation, Chemical Supplies Account No. 6200000-426600.

Future years' costs will be included as a part of the biennial budget process.

Prepared by: David A. Garcia, Utilities Assistant General Manager/Water  
Approved by: Todd M. Corbin, Utilities General Manager  
Approved by: Kris Martinez, Assistant City Manager  
Approved as to form: Phaedra A. Norton, City Attorney

Certifies availability  
of funds: Edward Enriquez, Interim Assistant City Manager/Chief Financial Officer/City Treasurer

**Attachments:**

1. Second Amendment to Professional Services Agreement with Carbon Activated Corporation
2. First Amendment to Professional Services Agreement with Carbon Activated Corporation
3. Professional Services Agreement with Carbon Activated Corporation
4. Presentation