



Agenda Report

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SUBJECT:

SERVICE CONTRACT FOR PLANT NOS. 1 AND 2 CENTRAL GENERATION FACILITIES' CARBON MEDIA CHANGE-OUT

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

Approve a Sole Source Purchase Order Contract to Carbon Activated Corporation to change out granular activated carbon media for Biogas Cleaning Systems at Plant Nos. 1 and 2 Central Generation (Cen-Gen) Facility, for a total amount not to exceed \$236,500 through June 30, 2022.

BACKGROUND

Orange County Sanitation District (OC San) Plant Nos. 1 and 2 Cen-Gen facilities use granular activated carbon to remove siloxane, volatile organic carbon (VOC), and sulfur compounds from digester gas. Removal of these constituents is necessary to meet air compliance standards and maintenance requirements. Specifically, failure to remove these compounds will result in damage to both the reductive and oxidation catalysts necessary to control engine emissions.

Two vessels are used in series at Plant No. 1 and three vessels are used at Plant No. 2. The first vessel is used as the primary tank for roughing and the second vessel is used for polishing the residual compounds from the biogas. The third vessel at Plant No. 2 is used as a standby vessel. Each vessel has three layers of activated carbon media with different specifications to remove targeted components from biogas. OC San has many years of experience with the different kinds of granular activated carbon specifications and has determined the recommended mix provides the necessary contaminant removal for the longest period. Other mixes or specifications have been found to become exhausted or ineffective much more quickly.

The Board of Directors approved a contract to EnviroSupply & Service Inc. in May of 2020 to supply the specified granulated activated carbon change outs. EnviroSupply & Services Inc. has been unable to provide the specified granulated activated carbon media for the Cen-Gen facility carbon vessels due to supply chain problems. A \$70,000 Sole Source Contract was issued to an alternate vendor, Carbon Activated Corporation, in February 2022 to change out two vessels in order to buy time to resolve this problem. EnviroSupply & Services Inc. is still unable to supply the specified product, so staff is in the process of rebidding the service. A bridge contract to change out five expended vessels is required to allow time to complete the bid and award process.

RELEVANT STANDARDS

- Maintain a proactive asset management program
- 24/7/365 treatment plant reliability
- Protect OC San assets

PROBLEM

The activated carbon media have a limited capacity to absorb targeted contaminants. When the carbon absorption material is fully consumed, the medium is exhausted and must be replaced. The contracted supplier is not able to supply the necessary material due to supply chain problems.

A \$70,000 Sole Source Purchase Order was issued to Carbon Activated Corporation in February 2022 to change media for two carbon media vessels. Staff expected this procurement to provide enough time for the current vendor to supply the required media; however, the vendor under contract continued to be unable to provide the specified carbon media and fulfill the contract requirements.

PROPOSED SOLUTION

Staff recommends amending the service contract with Carbon Activated Corporation to change out an additional five carbon media vessels to bridge the service while a new bid and award process is completed. This recommendation includes the original \$70,000 for the first two vessels and \$166,500 for an additional five vessel change-outs for a total of \$236,500.

TIMING CONCERNS

With the exhaustion of the carbon media in the biogas cleaning system, siloxane and hydrogen sulfide break-through will occur and the Cen-Gen facilities will not be able to meet air quality permit requirements.

RAMIFICATIONS OF NOT TAKING ACTION

The inability to clean digester gas will result in the inability to meet AQMD air permit requirements using digester gas at both Central Generation Plants. Digester gas will be flared at both plants.

PRIOR COMMITTEE/BOARD ACTIONS

May 2020 - Awarded a service contract to EnviroSupply & Service Inc. for Plant Nos. 1 and 2 Central Generation Facility Fuel Gas Cleaning System, Carbon Change-Out (replacement); Specification No. S-2020-1130BD, for a total amount not to exceed \$240,702 for the period July 1, 2020 through June 30, 2021, with four (4) one-year renewal options; and approved a contingency of \$24,071 (10%).

ADDITIONAL INFORMATION

In February 2022, staff contacted two additional vendors and requested a price quote for carbon change-out based on specified granulated activated carbon. Two quotes were received for carbon

vessel media change-out as listed below, for an additional five vessel change-outs.

Price Quotes

Company	Bid Amount	Comments
Carbon Activated Corporation	\$33,300 (including labor costs) per vessel	Responsive Recommended
Unison Solutions	\$40,630 (not including labor costs) per vessel	Responsive
EnviroSupply & Service Inc.	Non-responsive	Current vendor

In April 2022, staff confirmed the above quotes and the ability to deliver the carbon media with two vendors. The current vendor could not provide the material.

FINANCIAL CONSIDERATIONS

This request complies with OC San's Purchasing Ordinance authority levels. This item has been budgeted in the FY 2021-22 Budget, Divisions 830 and 840, line item 65 Operating Budget.

Date of Approval	Contract Amount	Contingency
February 2022	\$ 70,000 (GM approved)	
04/27/2022	\$ 166,500	
	\$ 236,500 (Total NTE)	

ATTACHMENT

The following attachment(s) may be viewed online at the OC San website (www.ocsan.gov) with the complete agenda package:

N/A