
File #: 2024-4006

Agenda Date: 12/18/2024

Agenda Item No: 11.

FROM: Robert Thompson, General Manager
Originator: Riaz Moinuddin, Director of Operations & Maintenance

SUBJECT:

INSTALLATION AND DISPOSAL OF ACTIVATED CARBON MEDIA FOR PLANT NO. 1 AND PLANT NO. 2 CENTRAL GENERATION FACILITIES, SPECIFICATION NO. S-2024-648BD

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

- A. Approve a General Services Contract to MP Environmental Services, Inc. to install and dispose of activated carbon media for Plant No. 1 Co-Gen and Plant No. 2 Central Generation (CenGen) facilities, Specification No. S-2024-648BD, for a total amount not to exceed \$713,880 for the period beginning January 1, 2025, through December 31, 2025, with four (4) one-year renewal options; and
- B. Approve an annual contingency of \$71,388 (10%).

BACKGROUND

The Orange County Sanitation District (OC San) Plant Nos. 1 and 2 CenGen facilities use granular activated carbon to remove siloxane, volatile organic carbon, and sulfur compounds from digester gas. Removing these compounds is necessary to meet air compliance standards, maintenance requirements, and protect emissions catalysts. Failure to remove these compounds will quickly damage both the reduction and oxidation catalysts required for controlling engine emissions.

At Plant No. 1, two vessels are used in series and three vessels are used at Plant No. 2. The first vessel serves 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. Each vessel has three layers of activated carbon media with different specifications recommended by the system manufacturer to target specific components in the biogas.

RELEVANT STANDARDS

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

PROBLEM

The carbon media used for combustion in the CenGen facilities have limited capacity to absorb pollutants. Once the carbon material is saturated, the medium is exhausted and must be replaced to comply with SCAQMD permits and operational requirements.

PROPOSED SOLUTION

Staff recommends approval of a General Services contract with MP Environmental Services, Inc. to remove and replace the carbon media utilized to clean digester gas at Plant Nos.1 and 2 CenGen facilities.

TIMING CONCERNS

When the carbon media in the biogas cleaning system becomes exhausted, contaminants break through, leading to emissions catalyst failure at the CenGen facilities. As a result, the engines will be unable to comply with air quality permit standards when operating on biogas.

RAMIFICATIONS OF NOT TAKING ACTION

Without carbon-cleaned digester gas, OC San will not be able to operate within SCAQMD Title V permit requirements at both Central Generation Plants.

PRIOR COMMITTEE/BOARD ACTIONS

N/A

ADDITIONAL INFORMATION

A Notice Inviting Bid was issued on September 19, 2024, and two bids were received on October 28, 2024. The bid results are listed below:

Company	Bid Amount (including tax)	Comments
Carbon Activated Corporation	\$329,880	Non-Responsive
MP Environmental Services, Inc.	\$713,880	Responsive

The lowest bidder was found non-responsive. The second bidder, MP Environmental Services, Inc. was found to be the lowest responsive and responsible bidder.

CEQA

N/A

FINANCIAL CONSIDERATIONS

This request complies with authority levels of OC San's Purchasing Ordinance. This item has been budgeted (Budget FY 2024-25 and 2025-26, Section 6, Page 108, Repair & Maintenance) and the budget is sufficient for the recommended action.

<u>Date of Approval</u>	<u>Contract Amount</u>	<u>Contingency</u>
12/18/2024	\$713,880	\$71,388 (10%)

ATTACHMENT

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

- General Services Contract