
File #: 2022-2567

Agenda Date: 10/26/2022

Agenda Item No: 7.

FROM: James D. Herberg, General Manager
Originator: Riaz Moinuddin, Director of Operations & Maintenance

SUBJECT:

PURCHASE AND DELIVERY OF EMERGENCY LOX BACKUP SYSTEM AT PLANT NO. 2

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

- A. Approve a Purchase Order Contract to Cryo-Lease for the purchase and delivery of Emergency LOX Backup System, Specification No. E-2022-1348BD, for a total amount not to exceed \$358,000, plus applicable sales tax; and
- B. Approve a contingency of \$35,800 (10%).

BACKGROUND

Orange County Sanitation District (OC San) operates a Liquid Oxygen (LOX) facility at Plant No. 2. This LOX system supports the secondary treatment process and consists of two LOX tanks, six vaporizers, and piping distribution to the aeration basins. During a condition assessment performed by Diversified Project Services International, one of the LOX tanks was found to be compromised by cracking. Several repair attempts have been made to repair this cracking. A rental unit is on-site to provide a short-term back-up unit for the failed tank until a longer-term solution is in place.

RELEVANT STANDARDS

- Maintain a proactive asset management program
- Maintain a culture of improving efficiency to reduce the cost to provide the current service level or standard

PROBLEM

During a more comprehensive second assessment performed by Chart International, Inc., additional significant internal damage was discovered, and a tank replacement is needed. The second LOX tank was installed at the same time as the failed tank in 1983. In the event that this second tank were to fail, OC San's ability to run its Oxygen Activated Sludge secondary treatment process would be compromised.

PROPOSED SOLUTION

Procure one mobile tank and vaporizing unit, with a 9,000-gallon LOX tank and 25,000 Standard Cubic Foot per hour vaporizer unit from Cryo-Lease. Cryo-Lease was the only responsive bidder. This unit will serve as the primary backup to the remaining operational tank. In addition, this mobile tank and vaporizing unit will also serve as the backup to the new tank when the currently operating tank is refurbished.

TIMING CONCERNS

A separate contract, S-2022-1345BD, for the permanent replacement of the failed LOX tank is in the procurement process. It is anticipated that the cryogenic tank replacement will have a lengthy construction and installation schedule. Failure of the remaining tank will potentially result in not meeting regulatory compliance requirements.

RAMIFICATIONS OF NOT TAKING ACTION

The LOX system will not have the redundancy to reliably support the activated sludge process at Plant No. 2 which may impact OC San's ability to provide secondary treatment and support the GWRS Final Expansion.

PRIOR COMMITTEE/BOARD ACTIONS

N/A

ADDITIONAL INFORMATION

A Notice Inviting Bids was issued on July 27, 2022 via PlanetBids. Bids were due on September 7, 2022. OC San received one bid valid for 180 calendar days from the bid opening date.

The following was the only responsive bidder.

Company Name	Bid	Determination
Cryo-Lease	\$358,000, Plus Applicable Sales Tax	Responsive

Based on these results, staff recommends approving the Purchase Order Contract to Cryo-Lease.

CEQA

N/A

FINANCIAL CONSIDERATIONS

This request complies with authority levels of OC San's Purchasing Ordinance. This recommendation would be funded under the Repairs and Maintenance line item for Division 880, Plant No. 2 Maintenance (Fiscal Years 2022-2023 and 2023-2024 Budget, Section 6, Page 96), and the available funding is sufficient for this action.

<u>Date of Approval</u>	<u>Contract Amount</u>	<u>Contingency</u>
10/26/2022	\$358,000 + sales tax	\$35,800 (10%)

ATTACHMENT

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

N/A