



OPERATIONS COMMITTEE

Agenda Report

Headquarters
18480 Bandilier Circle
Fountain Valley, CA 92708
(714) 593-7433

File #: 2024-3789

Agenda Date: 11/6/2024

Agenda Item No: 3.

FROM: Robert Thompson, General Manager
Originator: Mike Dorman, Director of Engineering

SUBJECT:

DIGESTER K DOME REPAIR AT PLANT NO. 2, PROJECT NO. FR2-0032, SPECIFICATION NO. S-2024-630BD

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Approve a Services Contract to Structural Preservation Systems for Digester K Dome Repair at Plant No. 2, Project No. FR2-0032, Specification No. S-2024-630BD, for a total amount not to exceed \$876,707; and
- B. Approve a contingency of \$131,506 (15%).

BACKGROUND

Orange County Sanitation District (OC San) Digesters I, J, and K at Plant No. 2 are used as holding tanks for digested sludge prior to sludge dewatering by the downstream dewatering centrifuges.

Digester K, built in 1971, has been out of operation and empty since 2021 due to required structural repairs under this project.

RELEVANT STANDARDS

- Comply with California Public Contract Code Section 20103.8, award a contract to lowest responsive, responsible bidder text here
- Protect OC San assets
- 24/7/365 treatment plant reliability
- Commitment to safety & reducing risk in all operations

PROBLEM

The Digester K Dome cannot hold gas pressure due to multiple full penetration cracks on the dome surface. The concrete dome also lacks adequate rebar cover and concrete thickness in some locations, which was identified during the structural condition assessment. Multiple efforts to spot-repair the cracks have been attempted in the past but did not produce successful results. Repairs are required to bring Digester K back into service.

PROPOSED SOLUTION

Approve a Services Contract for Digester K Dome Repair at Plant No. 2, Project No. FR2-0032, Specification No. S-2024-630BD. The project will repair full penetration cracks and address previously repaired cracks that failed for the entire digester dome. Cracks will be repaired by injecting a crack resin designed to fill the full depth of each void. The project will also repair concrete spalling and address exposed reinforcement (rebar). Subsequently, a 2-inch-thick polymer concrete/mortar will be applied over the entire existing dome of Digester K.

A higher-than-usual contingency is requested due to a higher level of risk associated with concrete and concrete crack repairs. If an unknown condition is encountered and there is insufficient contingency, contract completion could be significantly delayed and expose OC San to extended overhead costs by the contractor.

TIMING CONCERNS

The Digester K Dome repair needs to be completed as soon as possible to avoid interruption of the solids handling process. OC San's Operations require two holding digesters for the dewatering centrifuge and truck loading facilities operation. Completing the Digester K repairs are critical as there is currently no backup holding digester.

RAMIFICATIONS OF NOT TAKING ACTION

There is an increased risk of solids handling interruptions if normal solids dewatering, truck loading, and haul out operations are interrupted and there is insufficient holding digester capacity.

PRIOR COMMITTEE/BOARD ACTIONS

N/A

ADDITIONAL INFORMATION

OC San solicited bids for S-2024-630BD, Digester K Dome Repair at Plant No. 2 (FR2-0032) in Planet Bids on August 15, 2024, and two (2) sealed bids were received on September 17, 2024. A summary of the bid opening follows:

Engineer's Estimate	\$1,268,500
<u>Bidder</u>	<u>Amount of Bid</u>
Structural Preservation Systems	\$876,707
NMN Construction	\$1,394,000

The bids were evaluated in accordance with the OC San's policies and procedures, and both were found to be responsive and responsible. Therefore, staff recommends awarding a Services Contract to Structural Preservation Systems, for a total amount not to exceed \$876,707.

CEQA

The project is exempt from CEQA under the Class 1 categorical exemptions set forth in California Code of Regulations section 15301. A Notice of Exemption will be filed with the OC Clerk-Recorder and State Clearing House after the OC San Board of Directors approval of the Contract.

FINANCIAL CONSIDERATIONS

This request complies with the authority levels of OC San's Purchasing Ordinance. This item has been budgeted (Budget FY 2024-25 and 2025-26, Section 5, Page 3, Operations Summary, Repairs & Maintenance) and the budget is sufficient for the recommended action.

ATTACHMENT

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

- Draft Services Contract

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