



OPERATIONS COMMITTEE

Agenda Report

Administration Building
10844 Ellis Avenue
Fountain Valley, CA 92708
(714) 593-7433

File #: 2024-3816

Agenda Date: 9/25/2024

Agenda Item No: 12.

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

SUBJECT:

THICKENING AND DEWATERING CENTRIFUGE GEAR UNIT REPLACEMENTS AND SERVICE

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

- A. Approve a General Services Contract to GEA Mechanical Equipment US, Inc. for the thickening and dewatering centrifuge gear unit replacements and service, for a total amount not to exceed \$2,912,178 including freight and taxes; and
- B. Approve a contingency of \$582,436 (20%).

BACKGROUND

The Orange County Sanitation District (OC San) operates three GEA-Westfalia Separator Thickening Centrifuges and three GEA-Westfalia Dewatering Centrifuges at Plant No. 1. Thickening centrifuges thicken the sludge feed for the digestion process. Dewatering centrifuges increase solid density to efficiently ship biosolids offsite. The sludge thickening and the biosolids dewatering centrifuges are critical assets used in OC San's biosolids recycling program and are needed to comply with OC San's operating permits.

RELEVANT STANDARDS

- 24/7/365 treatment plant reliability
- Maintain a proactive asset management program
- Operate and maintain facilities to minimize impacts on surrounding communities, including odor, noise, and lighting

PROBLEM

The original equipment manufacturer (OEM), GEA, has identified critical equipment that requires 5-year service. The Thickening Cyclo gear units need to be replaced. The OEM parts are sourced out of Germany with a lead time of about a year.

PROPOSED SOLUTION

Approve a General Services Contract with GEA Mechanical Equipment US, Inc. (the OEM's US based service company) to purchase four new Desch gear units for the Thickening centrifuges and to rebuild four existing Desch Dewatering gear units with associated technical services. Using the Desch gears sourced out of Texas will save 24 weeks in delivery time compared to the GEA parts sourced out of Germany.

TIMING CONCERNS

The centrifuge systems are subject to wear and tear and are at, or near, the recommended service interval. Replacement of the new gear units has a 36-week lead time, plus installation time. This results in significant potential downtime risk for the critical solids treatment process equipment centrifuges.

RAMIFICATIONS OF NOT TAKING ACTION

Failure to follow the OEM 5-year service schedule risks more costly failure scenarios and significantly reduced dewatering capacity, impacting the ability to process solids and maintain permit compliance.

PRIOR COMMITTEE/BOARD ACTIONS

N/A

ADDITIONAL INFORMATION

GEA Mechanical Equipment US, Inc. is the only authorized distributor for GEA within OC San's geographical region. GEA is a Board-approved sole source manufacturer for centrifuge parts and service.

The centrifuges thicken biosolids and sludge with considerable gritty material that causes a high rate of wear to parts, a 20% contingency is being requested to address potential unknown conditions that may be discovered requiring additional work found during tear-down and rebuild.

CEQA

Equipment maintenance is categorically exempt from CEQA under the Class 1 categorical exemptions set forth in California Code of Regulations Section 15301. Section 15301 (Class 1) exempts from CEQA "the operation, repair, maintenance permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use," including "(b) Existing facilities of both investor and publicly-owned utilities used to provide electric power, natural gas, sewerage, or other public utility services."

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>
09/25/2024	\$2,912,178	\$582,436 (20%)

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

RM:ls