



Agenda Report

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SUBJECT:

PURCHASE OF INVENTORY CENTRIFUGE REPLACEMENT PARTS

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Approve a Sole Source Purchase Order to GEA Mechanical Equipment US Inc. for the Purchase and Replenishment of Inventory Replacement Parts for Thickening and Dewatering Centrifuges, for the period beginning December 1, 2021 through November 30, 2022, to maintain equipment warranty, for a total amount not to exceed \$1,116,000; and
- B. Approve a contingency of \$111,600 (10%).

BACKGROUND

The Orange County Sanitation District (OC San) operates six centrifuge process trains at Plant No. 1, including three GEA-Westfalia Separator Co-Thickening Centrifuges and three GEA-Westfalia Dewatering Centrifuges. The Co-Thickening Centrifuges thicken the sludge feed to the digestion process by increasing solids density. As a result, greater amounts of solids are treated within each digester resulting in highly efficient use of digesters. Dewatering centrifuges remove water from biosolids to make the material suitable for truck transportation, resulting in fewer truckloads of biosolids being hauled offsite. The sludge co-thickening and biosolids dewatering processes are central to the energy recovery and biosolids recycling programs and for complying with OC San 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 six centrifuge machines require periodic overhaul to replace wear and tear parts. Staff has identified critical Original Equipment Manufacturer (OEM) spare parts that are necessary for these

periodic overhauls. The spare parts are fabricated on an as-needed basis and have long manufacturing lead times that could compromise availability of centrifuges.

PROPOSED SOLUTION

Approve a Sole Source Purchase Order to procure and place these spare inventory parts for six GEA centrifuges into inventory. Having these consumable parts on hand will speed up the overhauls and minimize process downtime.

TIMING CONCERNS

Significant process capacity disruptions are possible due to long lead times for procuring wear and tear parts for overhaul or repair services for the Plant No. 1 Co-Thickening or Dewatering Centrifuges.

RAMIFICATIONS OF NOT TAKING ACTION

Failure to maintain adequate spare parts in inventory could result in extended equipment downtime affecting operational permits.

PRIOR COMMITTEE/BOARD ACTIONS

N/A

ADDITIONAL INFORMATION

GEA Mechanical Equipment US Inc. is the OEM and is the only authorized distributor within OC San's geographical region. GEA Mechanical Equipment US Inc. is a Board approved OEM vendor. A 10% contingency is requested in the event of pricing changes due to tariffs, inflationary concerns, delays in placing the order, or other unforeseeable changes.

The following is a projection of expenditures for the year based on repairs conducted over the last two-years and upcoming scheduled maintenance.

| Projected Type of Work | Frequency | Estimated Cost for Parts per Occurrence | Total Cost |
|--------------------------------------|-----------|---|--------------------|
| Preventative Maintenance (Overhauls) | 3 | \$232,000 | \$696,000 |
| Corrective Maintenance | 3 | \$140,000 | \$420,000 |
| TOTAL COST | | | \$1,116,000 |

CEQA

N/A

FINANCIAL CONSIDERATIONS

This request complies with authority levels of the OC San’s Purchasing Ordinance. This recommendation will be funded under the Repair and Maintenance line item for Plant No. 1 Operations and Maintenance Department (Budget Update - Fiscal Year 2021-2022, Page 45). The available funding is sufficient for this action.

| <u>Date of Approval</u> | <u>Contract Amount</u> | <u>Contingency</u> |
|-------------------------|------------------------|--------------------|
| 11/17/2021 | \$1,116,000 | \$111,600 (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

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