



# Orange County Sanitation District

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

## OPERATIONS COMMITTEE

### Agenda Report

---

**File #:** 2020-916

**Agenda Date:** 2/26/2020

**Agenda Item No:** 10.

---

**FROM:** James D. Herberg, General Manager  
Originator: Rob Thompson, Assistant General Manager

**SUBJECT:**

**PLANT NO. 1 PURCHASE OF PROGRESSIVE CAVITY PUMP REPLACEMENT PARTS**

**GENERAL MANAGER'S RECOMMENDATION**

RECOMMENDATION:

- A. Approve a Sole Source Purchase Order to Cortech Engineering for the purchase of eight Seepex pump rotors and one stator for the sludge thickening and dewatering facility, for a total amount not to exceed \$216,210, plus applicable sales tax and shipping; and
- B. Approve a contingency of \$21,620 (10%).

**BACKGROUND**

The Orange County Sanitation District (Sanitation District) sludge thickening and dewatering facility at Plant No. 1 uses thickening centrifuges that are critical to the sludge handling process. The thickening facilities handle all sludge from the primary and secondary clarifiers before being transferred to the digesters. Removing extra water from the sludge has the effect of increasing the capacity of the digester complex.

All primary and secondary sludge is collected and mixed in a common wet well. This mixed sludge slurry is sent through one of three thickening trains. Each train has feed pumps, a centrifuge, and two thickened sludge transfer pumps and associated ancillary equipment to move the solids to the digestion complex.

**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 gritty nature of primary sludge causes significant wear to the thickened sludge transfer pumps and ancillary equipment. The thickened sludge transfer pumps are experiencing reduced pumping capacity attributed to pump rotor wear.

## **PROPOSED SOLUTION**

Procure replacement Seepex pump rotors and stator parts to restore system capacity to the solids handling process.

## **TIMING CONCERNS**

The thickening centrifuge pumps are critical to the treatment process. Spare rotors for these progressive cavity pumps have up to a 12 week lead time from the manufacturer. Four units are required now to restore system capacity. Additionally, warehouse spare rotors are being ordered for future rebuilds to prevent this situation from reoccurring.

## **RAMIFICATIONS OF NOT TAKING ACTION**

Failure to procure replacement parts will result in the reduction of treatment capacity. Additional pump degradation will severely handicap the ability for the sludge thickening facility to process necessary sludge volume and could result in having to divert sludge to Plant No. 2.

## **PRIOR COMMITTEE/BOARD ACTIONS**

N/A

## **ADDITIONAL INFORMATION**

Cortech Engineering is a Board approved sole source vendor for Seepex process pumps. Seepex is the original equipment manufacturer and Cortech Engineering is the only authorized distributor within our geographical region for repair parts. A 10% contingency is requested in the event of pricing changes to due to tariffs, delays in placing the order beyond the quote validity, or other unforeseen changes.

## **CEQA**

N/A

## **FINANCIAL CONSIDERATIONS**

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. This recommendation will be funded under the Repair and Maintenance line item for Operations and Maintenance Department (Budget Update Fiscal Year 2019-20, Page 47). The available funding is sufficient for this action.

---

| <u>Date of Approval</u> | <u>Contract Amount</u>          | <u>Contingency</u> |
|-------------------------|---------------------------------|--------------------|
| 02/26/2020              | \$216,210 (Plus tax & shipping) | \$21,620           |

---

**ATTACHMENT**

*The following attachment(s) may be viewed on-line at the OCSD website ([www.ocsd.com](http://www.ocsd.com)) with the complete agenda package:*

N/A

RM:jg:ab