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**File #:** 2023-2811

**Agenda Date:** 3/1/2023

**Agenda Item No:** 7.

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

**SUBJECT:**

**PURCHASE OF LIQUID FERRIC CHLORIDE**

**GENERAL MANAGER'S RECOMMENDATION**

**RECOMMENDATION:** Recommend to the Board of Directors to:

- A. Approve a Chemical Supplier Agreement with Pencco, Inc. for the purchase of liquid ferric chloride, Specification No. C-2023-1381BD, for the period beginning May 1, 2023 through October 31, 2023, for a unit price of \$1,250 per dry ton delivered, plus applicable sales tax, for a total six-month estimate of \$2,500,000;
- B. Approve a Chemical Supplier Agreement with Kemira Water Solutions, Inc. for the purchase of liquid ferric chloride, Specification No. C-2023-1381BD, for the period beginning May 1, 2023 through October 31, 2023, for a unit price of \$1,153.97 per dry ton delivered, plus applicable sales tax, for a total six-month estimate of \$1,730,955;
- C. Approve the option to renew the Chemical Supplier Agreement with Pencco, Inc. over a five-year period beginning May 1, 2023 through April 30, 2028 with renewal terms not to exceed a 12-month term, and renewal adjustments of unit pricing not to exceed a unit price of \$1,562.50 per dry ton delivered (25%); and
- D. Approve the option to renew the Chemical Supplier Agreement with Kemira Water Solutions, Inc. over a five-year period beginning May 1, 2023 through April 30, 2028 with renewal terms not to exceed a 12-month term, and renewal adjustments of unit pricing not to exceed a unit price of \$1,442.46 per dry ton delivered (25%).

**BACKGROUND**

Ferric chloride is used at both Orange County Sanitation District (OC San) treatment plants to enhance primary solids coagulation and maintain hydrogen sulfide levels below Air Quality Management District (AQMD) permit levels. Ferric chloride also reduces plant odors and corrosion. Staff estimates 580 dry tons of ferric chloride usage per month (approximately 7,000 dry tons annually) at the treatment plants.

Ferric chloride has been subject to volatile pricing due to supply scarcity, escalating raw material pricing, shipping, and supply chain issues, and increases in transportation costs. Within the past FY

2022-23, both ferric chloride vendors have issued two unit price increases. In May 2022, the Board approved a unit price contingency increase to both suppliers due to a 39% unit price increase (Kemira) and a 26% unit price increase (Pencco) that started in July 2022. In December 2022, OC San was notified of another unit price increase of 32% (Kemira) and 27% (Pencco) pending Board approval to start on March 1, 2023.

Staff determined a new contract structure is needed to provide more flexible renewal periods to account for adjustments. Staff rebid the ferric chloride contract in January 2023.

## **RELEVANT STANDARDS**

- 24/7/365 treatment plant reliability
- Zero odor incidents/events under normal operating conditions for Plant Nos. 1 and 2
- Meet volume and water quality needs for the GWRS

## **PROBLEM**

Until the market stabilizes to relieve raw material and supply chain issues, ferric chloride unit prices may continue to be subject to volatile unit pricing. Without an updated renewal structure, unforeseen price adjustments may continue and can exceed Board approved contingencies within a 12-month period.

## **PROPOSED SOLUTION**

Staff recommends approving the new chemical supplier agreements with a revised renewal structure. A six-month term will allow for more flexible renewal periods to account for price adjustments. If suppliers propose a price adjustment under the not to exceed unit price, OC San may exercise the option to renew the Agreement for up to a 12-month period not to exceed a combined total agreement term of five years.

## **TIMING CONCERNS**

A bridge agreement is pending Board approval on February 22, 2023, with the price adjustment to be in place from March 1, 2023 to June 30, 2023 (subject to cancellation upon approval of recommended action). Establishing a new agreement to be in place will prevent disruption in ferric chloride supply.

## **RAMIFICATIONS OF NOT TAKING ACTION**

Without action, problems with primary treatment settleability, air and water permit compliance, and odor complaints in the treatment plant are possible at both Plant Nos. 1 and 2.

## **PRIOR COMMITTEE/BOARD ACTIONS**

N/A

**ADDITIONAL INFORMATION**

A Request for Proposal was issued on January 5, 2023 via PlanetBids and closed on February 1, 2023. OC San received two (2) responsive and responsible proposals and one (1) no Bid Letter from Univar Solutions USA Inc. Pricing by tonnage allocation is as follows:

<b>Pencco, Inc.</b>			
Quantity Dry Tons Per Year	Product Unit Price (\$/Dry Ton)	Freight Cost (\$/Dry Ton)	Total Cost (\$/Dry Ton)
1000	\$1,250.00	\$200.00	\$1,450.00
2000	\$1,250.00	\$200.00	\$1,450.00
3000	\$1,150.00	\$200.00	\$1,350.00
4000	\$1,050.00	\$200.00	\$1,250.00
5000	\$950.00	\$200.00	\$1,150.00
6000	\$950.00	\$200.00	\$1,150.00
7000	\$950.00	\$200.00	\$1,150.00

<b>Kemira Water Solutions, Inc.</b>			
Quantity Dry Tons Per Year	Product Unit Price (\$/Dry Ton)	Freight Cost (\$/Dry Ton)	Total Cost (\$/Dry Ton)
1000	\$1,069.00	\$130.00	\$1,199.00
2000	\$1,023.97	\$130.00	\$1,153.97
3000	\$1,023.97	\$130.00	\$1,153.97
4000	\$1,023.97	\$130.00	\$1,153.97
5000	No Bid	No Bid	No Bid
6000	No Bid	No Bid	No Bid
7000	No Bid	No Bid	No Bid

For resiliency, OC San utilizes two ferric chloride vendors. In the past, OC San staff has seen instances where a sole supplier was unable to meet the demand, and also instances where additional supply was needed, and vendors had limited product available.

As a sole supplier, Pencco has the lowest price of \$1,150 per dry ton for 7,000 estimated net dry tons. However, this would not provide resiliency for OC San. To ensure ferric chloride resiliency to both plants, OC San recommends selecting Kemira Water Solutions, Inc. (3,000 net dry tons) and Pencco Inc. (4,000 net dry tons).

**CEQA**

N/A

**FINANCIAL CONSIDERATIONS**

This request complies with authority levels of OC San's Purchasing Ordinance. This item has been budgeted in the FY 2022-2023 and 2023-2024 Operating Budget, Division 830, Supplies line item

(Section 6, Page 84) and Division 840, Supplies line item (Section 6, Page 88). The available funding is sufficient for this action.

**ATTACHMENT**

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

- Draft Chemical Supplier Agreement
- Scope of Work

JL:JS:cf