



# OPERATIONS COMMITTEE

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

## Agenda Report

---

**File #:** 2023-2746

**Agenda Date:** 2/1/2023

**Agenda Item No:** 13.

---

**FROM:** James D. Herberg, General Manager  
Originator: Riaz Moinuddin, Director of Operations & Maintenance

**SUBJECT:**

**LIQUID FERRIC CHLORIDE SPECIFICATION NO. C-2019-1037BD CONTINGENCY INCREASE**

**GENERAL MANAGER'S RECOMMENDATION**

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Approve a unit price contingency of \$226 per dry ton (27%) to the Liquid Ferric Chloride Agreement with Pencco, Inc., Specification No.C-2019-1037BD, for the period beginning March 1, 2023 through June 30, 2023. New unit cost not to exceed \$1,075 per dry ton delivered; and
- B. Approve a unit price contingency of \$310 per dry ton (32%) to the liquid Ferric Chloride Agreement with Kemira, Inc., Specification No.C-2019-1037BD, for the period beginning March 1, 2023 through June 30, 2023. New unit cost not to exceed \$1,274.47 per dry ton delivered.

**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.

Pencco and Kemira notified staff in December of increases to current rates due to supply scarcity, escalating raw material pricing, shipping, and supply chain issues, and increases in transportation costs. Staff began negotiations and while rates could not be lowered, staff was able to maintain current rates through February instead of becoming effective January 1, 2023 as originally requested by both companies.

OC San is currently rebidding the Ferric Chloride contract which is anticipated to become effective May 1, 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**

Pencco and Kemira notified staff of increases to their ferric chloride rates, both of which exceed the previously Board authorized contingencies. Both suppliers have stated it is unsustainable to supply ferric chloride at our current rates. Staff believe supplies may cease without approved price increases.

## **PROPOSED SOLUTION**

Staff recommends the approval of the unit price increases until the new contracts are rebid.

## **TIMING CONCERNS**

Pencco and Kemira will potentially cease delivery of ferric chloride without the price adjustment starting March 1, 2023.

## **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**

May 2022 - Approved a unit price contingency of \$175 per dry ton (26%) to the liquid Ferric Chloride Agreement with Pencco, Inc., Specification No.C-2019-1037BD, for the period beginning July 1, 2022 through June 30, 2023. New unit cost not to exceed \$849 per dry ton, for a total estimated annual amount of \$3,947,024;

May 2022 - Approved a unit price contingency of \$277 per dry ton (40%) to the liquid Ferric Chloride Agreement with Kemira, Inc., Specification No.C-2019-1037BD, for the period beginning July 1, 2022 through June 30, 2023. New dry ton unit cost not to exceed \$965 per dry ton, for a total estimated annual amount of \$1,936,062; and

May 2022 - Approved a fuel surcharge of 2.5% on Ferric Chloride deliveries from Kemira, Inc. with quarterly Consumer Price Index (CPI) adjustments.

May 2021 - Approved a unit price contingency increase of \$78.70 per dry ton (13.18%) to the liquid Ferric Chloride Agreement with Pencco, Inc., Specification No. C-219-1037BD for the term July 1, 2021 through June 30, 2022. New dry ton unit cost not to exceed \$675.70 per dry ton. New contract estimated total is \$2,027,100 plus applicable sales tax.

May 2019 - Awarded a Purchase Order Agreement with Pencco, Inc. for the purchase of liquid ferric chloride, Specification No. C-2019-1037BD, for the period beginning July 1, 2019 through June 30, 2020, for a unit price of \$597 per dry ton delivered, for an estimated annual amount of \$1,791,000 (plus applicable sales tax) with four (4) one-year renewal options; and approved a unit price contingency of 10%.

May 2019 - Awarded a Purchase Order Agreement with Kemira, Inc. for the purchase of liquid ferric chloride, Specification No. C-2019-1037BD, for the period beginning July 1, 2019 through June 30, 2020, for a unit price of \$630 per dry ton delivered, for an estimated annual amount of \$3,150,000 (plus applicable sales tax) with four (4) one-year renewal options; and approved a unit price contingency of 10%.

### **ADDITIONAL INFORMATION**

Staff was notified in December of the additional unit price increases for Liquid Ferric Chloride. Staff was unable to negotiate a reduction in increases for ferric chloride from the two suppliers but was able to maintain current rates through February.

Some of the reasons cited for the unit price increase are supply limitations, escalating raw material pricing, shipping, and trucking supply constraints, increasing transportation costs, production and supply disruptions, production downtime impacted by climate events, and feedstock shortages.

Staff is continuously monitoring the use of ferric chloride in the treatment plant processes and adjusting dosing rates. Staff is evaluating effects of changing ferric chloride dosing rates at primary treatment, and within the digesters, for a net reduction in the use of ferric chloride. Staff is also looking at alternative chemicals and combinations of alternative chemicals for potential use for odor control and treatment as part of the Chemical Resiliency Study. Based on the study, staff will trial alternative process strategies to minimize chemical cost, usage, and maximize resilient operations.

Staff is currently in the bidding process for the establishment of new contracts. The estimated usage for the Fiscal Year 2023-24 is 7,000 dry tons of ferric chloride for the two treatment plants.

### **CEQA**

N/A

### **FINANCIAL CONSIDERATIONS**

This request complies with authority levels of OC San's Purchasing Ordinance. This item has been budgeted in the fiscal year 2022-2023 Operating Budget under Plant No. 1 Operations, Supplies line item (Section 6, Page 84), and Plant No. 2 Operations, 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:*

N/A