
File #: 2022-2247

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Agenda Item No: 7.

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

SUBJECT:

**SODIUM HYDROXIDE (CAUSTIC SODA) 50%, SPECIFICATION NO. C-2018-915BD -
CONTINGENCY INCREASE**

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

Approve a unit price contingency increase of \$44.40 per dry ton (an additional 6% of the base cost) to the Liquid Caustic Soda (50%) contract with Brenntag Pacific for the term July 1, 2022 through June 30, 2023, for a new total contingency amount not to exceed \$112.80 per dry ton (16%) with a total estimated usage of \$481,153.

BACKGROUND

The Orange County Sanitation District (OC San) uses chemical treatment in its sewage collection system to reduce the odor and corrosion potential of the vapor space in its system. One of these treatments involve slug dosing caustic soda to temporarily kill the biological "slime layer" that naturally forms on pipes and structures. This biological "slime layer" generates sulfides in the wastewater which, in turn, forms hydrogen sulfide.

In May 2018, OC San awarded an agreement to Brenntag Pacific Inc. for Specification No. C-2018-915BD to supply, delivery, and dosing services of caustic soda 50% (NaOH solution). The agreement directly delivers and injects caustic soda into sewer manholes at strategic locations.

RELEVANT STANDARDS

- 12 or fewer odor complaints per year under normal operating conditions in the collections system
- Zero odor incidents/events under normal operating conditions for Plant Nos. 1 and 2
- Operate and maintain facilities to minimize impacts on surrounding communities, including odor, noise, and lighting

PROBLEM

When staff initiated the agreement renewal process with the caustic soda supplier, the supplier notified staff of an increase in the unit price of caustic soda, which exceeds the Board authorized contingency.

PROPOSED SOLUTION

Staff recommends the approval of the negotiated unit price increase for caustic soda and additional contingency for the remaining year of a multi-year contract and, re-bid for a new service period.

TIMING CONCERNS

Without action, dosing of caustic soda in the collection system will be impacted, resulting in high level of odors and high levels of hydrogen sulfide resulting in elevated corrosion levels and unsafe maintenance environment.

RAMIFICATIONS OF NOT TAKING ACTION

Without action, caustic soda addition in the collection system will cease. Normal biological action in the sewer system will produce hydrogen sulfide in an uncontrolled manner, which causes odor and corrosion problems in the collection system and public nuisances.

PRIOR COMMITTEE/BOARD ACTIONS

May 2018 - Awarded a Chemical Supplier Agreement to Brenntag Pacific, Inc. for the purchase of Sodium Hydroxide (Caustic Soda) 50% solution, Specification No. C-2018-915BD, for the period of July 1, 2018 through June 30, 2019, for a unit price of \$684/dry ton, delivered, plus sales tax, for an estimated annual amount of \$967,005 with four (4) one-year renewal options; and approved a unit price contingency of 10%.

ADDITIONAL INFORMATION

Staff was notified of the additional unit price increase for the caustic soda during the agreement renewal period. The primary reason cited for the increase in unit price is the tightening of the overall global caustic soda market as foreign suppliers are operating at lower than normal production rates based in large part on energy restrictions. This has tightened up supply in the market. In addition, US producers are still not able to build inventories during production disruptions due to the multiple weather issues that have hit the US Gulf in 2021. Staff was able to negotiate a reduction in the increase in price from 32% (\$875 per dry ton) to 20% (\$796.80).

Staff is continuously monitoring the hydrogen sulfide levels throughout the collections systems and adjusting dosing rates to limit the concentration of hydrogen sulfides in the vapor phase to the desired concentration. Staff is also looking at alternative chemicals and combinations of alternative chemicals for odor control and has initiated a Chemical Resiliency Study.

For Fiscal Year 2023-24, staff intends to bid out the caustic soda agreement. The estimated caustic soda usage in the Fiscal Year 2022-23 is 604 dry tons.

CEQA

N/A

FINANCIAL CONSIDERATIONS

This request complies with authority levels of OC San's Purchasing Ordinance. This item is budgeted in the FY 2021-22 Budget Update, Operating Expense, Operating Materials and Supplies, Paragraph 3, Page 29.

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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