



**Board Operations and Engineering Committee
November 26, 2019**

SUBJECT:

Approve and Authorize Additional Appropriation (\$405,000) to Agreement No. 107862 with Brenntag Pacific, Incorporated, for the Supply of Sodium Hydroxide for a Revised Not-To-Exceed Total of \$1,150,000

BACKGROUND:

On February 28, 2017, Eastern Municipal Water District (District) received proposals for the purchase and supply of Sodium Hydroxide under Request for Proposals (RFP) No. 2891. A total of two proposals were received, with Brenntag Pacific, Incorporated (Brenntag), of Santa Fe Springs, California, providing the lowest cost and highest scoring proposal. Subsequently, on September 6, 2017, the Board of Directors approved and authorized a one-year agreement, and up to four, one-year renewals with Brenntag in the not-to-exceed total of \$745,000.

Sodium hydroxide is used at the Perris and Hemet Water Filtration Plants, the Menifee and Perris Desalter, and at each of the District's four Regional Water Reclamation Facilities. The product is used for neutralizing spent citric acid, pH control, conducting live stream discharges, and membrane and scrubber system cleaning. Bulk quantities of sodium hydroxide are supplied in membrane grades of 25 and 50 percent, as well in tote-sized quantities of 20, 25 and 50 percent.

Anticipated expenditures for sodium hydroxide were based on reduced volumes purchased prior to the award of contract in 2017. Similar to recent Board approved adjustments for the purchase of citric acid, the reduced usage of sodium hydroxide in previous years was due to deteriorating membrane conditions at the Perris and Hemet Water Filtration Plants, as well as downtime associated with the subsequent membrane replacement project. These improvements were completed in 2018 and 2019 and have resulted in increased cleaning and chemical usage than was projected prior to the repairs. Zenon Environmental, the membrane equipment manufacturer, recommends regular cleaning to help reduce fouling, which can result in shortened membrane lifespan, reduced flows, and increased energy costs. Additionally, anticipated higher plant production by the new membranes will require additional pH adjustment to maintain the quality of water entering the distribution system.

With these operational improvements, use of sodium hydroxide over the remaining three years of the contract term is projected to increase from 70,000 gallons per year to approximately 116,000 gallons per year in years three and four, and with the addition of the Perris 2 Desalter, 143,000 gallons in year five.

FINANCIAL IMPACT:

Funding for this item is provided for in the Biennial Budget for Fiscal Years 2019-20 and 2020-21.

STRATEGIC PLANNING GOAL/OBJECTIVE:

Water Quality: Ensure EMWD's water distribution systems are in full compliance with all applicable Federal and State water quality standards.

ENVIRONMENTAL IMPACT:

None

RECOMMENDATION:

Approve and authorize additional appropriation of \$405,000 to agreement No. 107862 with Brenntag Pacific, Incorporated, for the supply of sodium hydroxide for a revised not-to-exceed total of \$1,150,000.

SUBMITTED BY:



Paul D. Jones II, P.E., General Manager

11/25/2019



Jeff D. Wall, P.E., Assistant General Manager

10/10/2019

12/11/19 Board Meeting

Staff Contact: Dan Howell, Jeff Wasserman