



**Board of Directors**  
**April 3, 2019**

**SUBJECT:**

Approve and Authorize an Amendment to the Agreement with Black & Veatch (\$23,000) for Engineering Services to Support the Brine Concentration Demonstration Project, and Additional Appropriation of \$23,000

**BACKGROUND:**

Eastern Municipal Water District (District) is advancing the Brine Concentration Demonstration Project in order to evaluate and confirm the potential merits of the Desalitech Closed Circuit Desalination (CCD) process technology as a brine concentrator for the District's desalination facilities.

On November 1, 2017, the Board approved and authorized an agreement with Black & Veatch Corporation, of San Marcos, California, to perform engineering support services during the Desalitech demonstration effort. On January 23, 2019, PAR 2017/132B authorized an additional \$62,900 to fund ongoing operations and support of the demonstration unit.

Challenges encountered during the demonstration testing thus far, including premature membrane fouling, have necessitated an increased level of onsite support by Black & Veatch beyond their original scope of work. Black & Veatch has worked with District staff during the project in order to optimize the use of their resources, however, additional budget is required in order to maintain an appropriate level of engineering support services.

Accordingly, staff negotiated a scope of work with Black & Veatch to perform this additional effort. This scope was separated into two amendment proposals. Amendment 1, in the amount of \$25,000, authorized on February 25, 2019, provides additional monitoring and support of ongoing operations of the demonstration unit. Amendment 2, as proposed (Exhibit A) will fund progress and coordination meetings through the completion of demonstration testing. The negotiated amendment in the amount of \$23,000 is commensurate with the required level of effort to complete the demonstration project.

Demonstration testing is scheduled to be complete in June 2019. As a result of negotiations by District staff, Desalitech will continue to provide their current level of project support through the extended completion of demonstration testing at no additional cost to the District. Staff recommends additional appropriation in the amount of \$23,000 to fund expenses through completion of the demonstration project, as detailed in Exhibit B.

**FINANCIAL IMPACT:**

This project will be financed from the General District Restricted Water System Expansion Fund, with potential reimbursement from the Proposition 1 GWGP Implementation Grant.

**STRATEGIC PLANNING GOAL/OBJECTIVE:**

Water Supply Diversity and Reliability: Develop and implement a portfolio of projects and management techniques to achieve a reliable and cost-effective balance of water supplies utilizing imported, local and recycled water sources; and

Salinity Management: Achieve salinity balance through cost effective supply management, source control, desalination and optimization of brine management to maximize recycled water use and improve the water quality of local resources.

**ENVIRONMENTAL IMPACT:**

This study is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15262, which provides exemption for planning studies.

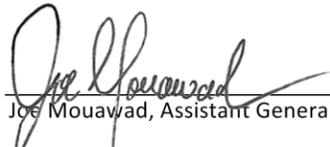
**RECOMMENDATION:**

Approve and authorize execution by the General Manager, or his designee, of an amendment to the Engineering Services Agreement in the amount of \$23,000 with Black & Veatch Corporation, for the Desalitech Brine Concentration Demonstration Project; and additional appropriation of \$23,000, which brings the total estimated project cost to \$715,200.

**SUBMITTED BY:**

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

3/25/2019

  
Joe Mouawad, Assistant General Manager

3/20/2019

**Attachment(s):**

*Exhibit A - Black & Veatch Proposal*  
*Exhibit B - Cost Estimate*

History:

03/28/19 Board Operations and Engineering Committee RECOMMENDED FOR APPROVAL

04/03/19 Board Meeting

Staff Contact: Greg Kowalski, Christopher Carey