

STAFF REPORT

To: David Dickson, General Manager

From: James Derbin

Agenda: October 9, 2018

Report

Date: October 3, 2018

Subject: PAX Water Technologies Tank Mixers

Recommendation: Authorize Staff to purchase 4 PAX Water Technologies tank mixers to reduce the level of regulated Trihalomethanes (THMs) in the water distribution system for a price of \$110,163.

Background: Historically the District has experienced elevated THM levels throughout the distribution system due to water age and stratification within the finished water tanks. In an effort to maintain distribution system THM levels well below the Maximum Contaminant Level (MCL) of 80 parts per billion, staff has previously installed PAX tank mixers in both El Granada tanks 1 and 2 with positive results in reducing THM levels well below the MCL.

In 2018, PAX completed a THM reduction study for the District based on past sample results and modeling water age throughout the distribution system. PAX recommended a three pronged approach with tank mixing, aeration and active venting of the tanks for the amount of \$388,709. Staff suggests the District take a more gradual measured approach to THM management and start with adequate tank mixing in Half Moon Bay tanks 1, 2, and 3 and Denniston. Staff is confident that tank mixing will reduce the formation of post treatment THMs right after the water is produced at the Denniston and Nunes water treatment plants by roughly 8-10%.

The requested mixers are as follows:

Tank	Volume in MG	Mixer	Price
HMB 1	0.4	PAX PWM 150	\$18,300/ea
HMB 2	0.6	PAX PWM 150	\$18,300/ea
HMB 3	1.5	PAX PWM 400	\$32,350/ea
Denniston	1.5	PAX PWM 400	\$32,350/ea
		Tax	\$8,863
		Total	\$110,163

Fiscal Impact: This project is included in the approved FY 18/19 CIP budget in the amount of \$120,000 entitled "Tanks - THM Control".