

**VALLEY SANITARY DISTRICT  
OPERATIONS COMMITTEE  
REGULAR MEETING MINUTES**

February 7, 2023

A meeting of the Valley Sanitary District (VSD) Operations Committee was held at 45-500 Van Buren Street in Indio, California, on Tuesday, February 7, 2023.

**1. CALL TO ORDER**

Ron Buchwald, District Engineer called the meeting to order at 1:01 p.m.

**2. ROLL CALL**

Directors Present:

Committee Member Jacky Barnum

Committee Member William Teague

Staff Present:

Ron Buchwald, District Engineer, Dave Commons, Chief Operations Officer, and Holly Gould, Clerk of the Board

**3. PLEDGE OF ALLEGIANCE**

**4. PUBLIC COMMENT**

*This is the time set aside for public comment on any item not appearing on the agenda. Please notify the Secretary in advance of the meeting if you wish to speak on a non-hearing item.*

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None.

**5. DISCUSSION / ACTION ITEMS**

**5.1 Select Committee Chairperson**

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Committee Member William Teague nominated Director Jacky Barnum as the Operations Committee Chairperson for 2023

**5.2 Approve Minutes for the December 6, 2022, Operations Committee**

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Committee member Teague motioned to approve the minutes of the Operations Committee held on December 6, 2022. Chairperson Barnum seconded the motion.

5.3 Recycled Water Project – Phase 1 Energy Conservation Measure (ECM) #3 – Waste Activated Sludge Thickening Guaranteed Maximum Price (GMP)

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Recycled Water Project – Phase I consists of six scopes of work that include Waste Activated Sludge (WAS) Thickening. On February 8, 2022, the Board of Directors authorized to proceed with the design alternative for the WAS Thickening (ECM #3) and pursue Rotary Screw Thickening technology. Due to the change in design, the WAS Thickening scope of work was not included in Amendment #1 for \$71M. The Guaranteed Maximum Price (GMP) for ECM #3 is \$10.37M which includes the design, construction, and funding coordination. The GMP for ECM #3 was included in the FY 2022/23 Capital Improvement Program (CIP) budget. Ron Buchwald, District Engineer explained that in order to pay for this project, Staff is requesting to seek financing options to present to the Board for approval, which would require a sewer rate increase above what was previously adopted in order to meet the debt coverage requirements. With no guarantee that a proposed rate increase will be approved and adopted, and the need to include this ECM as part of the overall Recycled Water Project - Phase I, the backup plan proposed by staff would be to delay other CIP projects (specifically the Collection System Rehabilitation and Replacement Project) unless and until a rate increase is adopted. Valerie Houchin, Schneider Electric, gave an update to the Committee on the progress of the design of the rotary screw thickeners and the project timeline.

5.4 Discuss Possible Process Control Modifications to Remove Ammonia and Total Nitrogen if Required by a California State Water Resources Control Board NPDES Permit Revision

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Dave Commons, Chief Operation Officers, gave a presentation on the results of the Ammonia Technical Study that was required by the State of California Colorado River Basin Regional Water Quality Control Board in April, 2020, as part of the plant's NPDES permit Board Order R7-2020-007. The purpose of this technical study was to evaluate the ability of VSD's wastewater treatment facility to reduce ammonia discharges into the Coachella Valley Whitewater Storm Water Channel. The results of the 18-month technical study demonstrated that there was a reduction in the ammonia concentration in the plant effluent discharge to the receiving waters. The ammonia trends data averages from the study indicated that the plant's influent flow entering the treatment facility averaged 56 mg/L of ammonia. After primary and secondary treatment, the effluent ammonia concentration averaged 3.9 mg/L. In November 2021, staff evaluated additional treatment modifications that could be made with a minimum of cost that would provide consistent, reliable, nitrification/ denitrification with effluent ammonia concentrations averaging levels below 2.0 mg/L or less. Phase 1 of the pilot study required one of the plant's four aeration basins to be modified into different process control treatment processes. Basin No. 4 was chosen as the test basin for the pilot study. This allowed different process modifications to be made without impacting the entire activated sludge process. The first process modification to be evaluated was to use the Step Feed process control configuration. This was the simplest modification to be made which only required diverting the influent flow to different anoxic and aerobic zones in the aeration basin. Phase 1 did not significantly lower the effluent ammonia concentration limits to 2.0 mg/L or below and most likely failed because baffles were not installed between the various anoxic and aerobic zones in the aeration basins. Phase 2 changed the process control process to the Single Sludge,

Pre-Anoxic process configuration (Modified Ludzak-Ettinger configuration). This required constructing a temporary internal high nitrate pipeline from the backend of the aeration basin to the front of the anoxic selector of Basin No. 4. This was done by repurposing facility surplus equipment and using temporary plastic pipe to do this job. During this phase, Basin No. 3 was also set up to serve as the test control for the pilot study. Phase 2 was successful in developing consistent, reliable, nitrification/ denitrification with effluent ammonia levels averaging below 2.0 mg/L. The future design of Phase 3 will evaluate the Membrane Bioreactor (MBR) configuration. The MBR was not physically evaluated because of the considerable cost of the MBR modules. Evaluation of other facilities using MBRs proves that it would be an excellent option.

## **6. ADJOURNMENT**

There being no further business to discuss, the meeting adjourned at 2:08 p.m. The next regular committee meeting will be on April 4, 2023.

Respectfully submitted,  
Holly Gould, Clerk of the Board  
Valley Sanitary District