

Date: December 9, 2024

Subject: Engineering Committee Meeting
Minutes Thursday December 5, 2024

To: Board of Directors

From: Engineering Committee and
Arthur G. Simonian, Executive Director

AGS

**Engineering Committee
Thursday, December 5, 2024
Meeting Minutes**

The Engineering Committee met Thursday, December 5, 2024, at the District Offices, 245 Main Street, Cromwell, Connecticut.

Chairman, Mr. John Dunham called the meeting to order at 6:00 p.m. Present were, Committee Members –Liam Mitchell, Don Naples and Phil Pessina. There was a quorum. Also, present from the Mattabasset District were Executive Director – Arthur Simonian and District Engineer – Michelle Ryan. Dan Murphy and Dori Pinchbeck were present from CDM Smith. Mr. Al Waters (resident) was also present. Board member Bonnie Anderson was absent.

December 5, 2024 Engineering Committee Meeting was held to discuss:

- 1) Mr. Pessina made motion to amend agenda and move Item #3 to Item #1, Mr. Mitchell seconded and the Committee approved unanimously.**

CDM Smith presented on their odor control assessment and improvements.

Some key findings included elevated H2S levels at the sludge storage building and near the bio trickling filter, suggesting minor issues with the existing H2S emissions more specifically leak near the bio trickling filter and an undersized carbon unit at the pump station were also noted.

Off-site sampling showed no significant centrate odors.

Recommendations included, maintaining existing equipment, repairing leaks, replacing the carbon in some units, continuing of, and optimizing calcium nitrate application. Additional sampling and testing of HVAC systems are planned.

Some recommendations:

- Replace the carbon unit at the centrate pump station with a larger unit.
- Optimize the calcium nitrate application upstream in Middletown inlet chamber.

- Conduct additional testing; and adjusting and balancing of the odor control systems.
- Investigate the sanitary sewer on South Street
- Conduct additional sampling

The discussion continued with information provided on sampling and analysis of odor strength at various locations around the wastewater facility. They further discussed that samples were sent to labs for analytical and sensory testing; revealing high levels of total reduced sulfur compounds and volatile organic compounds. They discussed how inlet levels of these compounds were significantly higher than outlet levels, indicating efficient odor removal. They indicated that hydrogen sulfide (H₂S) removal efficiency ranged from 98% to 100%. The detection threshold (DT) for odors varied with sludge storage tanks showing the highest readings. Recommendations included increasing ventilation rates, performing TAB procedures, and regular maintenance on odor control units. Additional sampling and olfactory measurements are planned.

CDM discussed conducting additional sampling and monitoring at the site, and would provide calibration data for the existing H₂S monitoring devices and recommend installing a meteorological station to help correlate odors with weather conditions. They discussed testing and balancing procedures to optimize the airflow in the odor control units. They would evaluate the need for additional odor control measures at the plant and the septage receiving area based on the upcoming sampling results.

2) Item #2 Clarifier No. 2 Center Column – Bid Waiver and Approval in the amount of \$237,187.19

The discussion focused on the repair and replacement of critical water treatment components. Clarifier No. 2 Center columns needs replacement, with a budget of \$237,000.00 for the first phase.

Rake arms, which cost \$300,000.00 to \$400,000.00, will be addressed in a future project.

MOTION: Approve a bid waiver to utilize G.M.H. Associates of America, Inc. of Trenton, New Jersey, to furnish and install the final clarifier no. 2 center column in the amount of \$237,187.19 (including contingency), if necessary, and refers this recommendation to the Board of Directors for their review and approval.

Mr. Mitchell moved, Mr. Naples seconded and the Committee approved unanimously.

- 3) **Item #3 Primary Heat Exchanger Lower Plenum-** Bid Waiver and Approval in the amount of \$132,000.00

The discussion focused on the heat exchanger lower plenum requiring a \$132,000.00 replacement.

MOTION: Approve a bid waiver to utilize Schmidtsche Schack of Westford, PA., for the furnishing of the incinerator primary heat exchanger lower plenum, in the amount of \$132,000.00, (including contingency), if necessary, and refers this recommendation to the Board of Directors for their review and approval.

Mr. Pessina moved, Mr. Naples seconded and the Committee approved unanimously.

- 4) **CDM Smith Greenhouse Gas Inventory & Benchmarking Fee Proposal in the amount not to exceed \$31,400.00.**

The committee agreed to proceed with the above project under the on-call contract with CDM.

Adjournment:

Mr. Mitchell moved, no second necessary, and the committee approved unanimously to adjourn at 6:55 PM.

C: Board Members not on the Engineering Committee