



Memorandum

Memorandum No: 24-082

Date: May 20, 2024

To: Honorable Mayor, Vice Mayor and Commissioners

From: Susan Grant, Acting City Manager *Susan Grant*

Re: George T. Lohmeyer Wastewater Treatment Plant - New Oxygen Production Facility

The purpose of this memorandum is to advise the City Commission of an ongoing situation with the new oxygen production facility, Vacuum Pressure Swing Absorption (VPSA), at the George T Lohmeyer Wastewater Treatment Plant (GTLWWTP). This has the potential to escalate into a legal dispute for a warranty claim under the warranty provisions of the contract.

- July 2020 – The Commission awarded PCL Construction, Inc., a contract for \$17,395,000 to Design/Build the VPSA within a new building at the GTLWWTP.
- July to August 2023 – The VPSA successfully completed 30-day performance testing.
- December 2023 – The VPSA project was issued final completion certificate.
- April 2024 – The VPSA shutdown and was not able to be restarted with PCL Construction and the manufacturer's assistance.

High purity oxygen is critical to the treatment of wastewater. The new VPSA plant, which replaced an older system, utilizes the latest VPSA technology and is intended to supply the City's need of oxygen. For back-up, the City also contracted with an independent oxygen vendor to supply high purity oxygen during scheduled plant shutdowns and maintenance. The new VPSA system has been experiencing a series of malfunctions and alarms that affected its performance and the production of a reliable supply of oxygen. This continued from initial startup and commission till the final shut down in April 2024.

Since April 2024, the City has been acquiring oxygen from its contracted vendor at the average rate of \$6,200 per day, or a total of \$186,000 per month. Staff have also investigated the option of renting oxygen production equipment, but the unit cost is even more expensive. A budget amendment is being drafted to replenish the operating budget for the expense of liquid oxygen deliveries.

The manufacturer of the VPSA (AirSep Corporation) alleged in an official letter that the plant's malfunctions and ultimate failure is not a warranty event, but rather the result of City staff's failure to properly operate and maintain the system. The City's operational staff does not concur with said assessment. To that end, PCL submitted a cost proposal to the City to replace a key component (sieve material inside the vessels) at a cost of \$1.2 million, and 6.5 months to manufacture, install, and test.

The City's position has been that the contractor has not provided a reliable plant, and the new plant has been experiencing frequent breakdowns and malfunctions during the first six (6) months of service. This puts in question the long-term reliability and sustained performance of this critical system. In addition, it is the staff's position that the contractor, PCL and subcontractor (AirSep Corporation) should honor their contractual obligations and correct the performance of the new plant pursuant to the warranty provisions of the contract.

Meanwhile, Utility Operational staff have been discussing the matter within the Public Works Department, as well as coordinating with the Procurement Division, and the City Attorney's Office. City staff are also continuing to work with PCL Construction to reach a cooperative resolution of the matter.

c: Anthony Fajardo, Assistant City Manager
Laura Reece, Acting Assistant City Manager
Ben Rogers, Acting Assistant City Manager
Thomas Ansbro, City Attorney
David R. Soloman, City Clerk
Patrick Reilly, City Auditor
Department Directors
CMO Managers