

June 12, 2017

Mr. Darrin Gordon  
General Manager  
Lewes Board of Public Works  
107 Franklin Avenue  
Lewes, DE 19958

**Subject: Monthly Report, May 2017**

Mr. Gordon:

The ongoing task of cleaning and repairing the membranes in cassette #2, train #2 is complete. Repairs began on March 17<sup>th</sup> and were done on May 15<sup>th</sup>. It took the removal of 1,896 membrane strands and 3,792 repairs to complete just one of the twelve cassettes in the system. Although so many strands were removed, the production loss was only 1.65%.

Another notable event that took place in May, was a mixed liquor spill that happened Saturday afternoon on May 13<sup>th</sup>. The on-call operator responded to the high-level alarms from Bioreactor #1. Once on site the operator observed mixed liquor overflowing onto the ground and immediately turned off the influent pumps to stop further spillage. DNREC was immediately notified. Site cleanup was a team effort with BPW members and Whitemarsh personnel. Lime provided by BPW was spread over the affected area. A new float system along with improved alarm response mechanisms have been put in place to prevent future occurrences.

Attached is a summary of the Operations and Maintenance activities at the Board's lift stations and wastewater treatment plant for the month of May 2017. Please direct any questions to my attention. Thank you.

Sincerely,



Mike Evans  
District Manager  
Tidewater Utilities, Inc.

I. Effluent Quality and Compliance

- Discharge Monitoring Report submitted to DNREC with 100% compliance for the month.

May 2017 Effluent Testing

Sample Data	Total Nitrogen	Total Phosphorus	BOD	TSS	Enterococcus
Average:	3.46 mg/L	1.17 mg/L	<2.40 mg/L	<0.50 mg/L	<1.0 Col.
Maximum:	N/A	N/A	<2.40 mg/L	0.70 mg/L	<1.0 Col.
Permit Limit:	8 mg /L average	2 mg /L average	15 mg/L average 23 mg/L MAX	15 mg/L average 23 mg/L MAX	10 Col. average

Maximum daily flow 1.0405 MGD  
 Monthly average 0.7316 MGD

II. Activities

STATION MAINTENANCE PERFORMED

- Replaced defective low-level float at Station #7 Cape Henlopen Drive-Pilotpoint Road.

MAINTENANCE PERFORMED

- Train #2 repaired and placed back on line
- Replaced defective air sensor on process blower A.
- Cummins Generator technician serviced the plant generator.
- Cleaned up the mixed liquor spill at the biological aeration zone and spread lime (BPW & WMES).
- Installed new float system to replace the faulty one in the Flow Equalization tank to help prevent another spill.
- Lightening rod inspection; tightened all lightning arrestor connections throughout plant.
- Skid Steer returned from repair.
- Office A/C unit serviced and repaired.

**SAFETY INFORMATION**

No work place injuries.

Observation report stating low flow to chemical eyewash station. WMES to repair

**COMMENTS**

- Field Meeting with GMB on May 10<sup>th</sup> on Lift Station #4 improvements to accept Sussex County wastewater.
- BPW requested recommendation on how to proceed with Inflow and Infiltration issues. Tidewater obtained a copy of the GMB study completed in 1999.
- Tour with Ovivo reps to discuss current efficiency and service recommendations.
- Meeting with Kubota reps showing current digester membrane performance. While onsite they observed a flushing cycle issue and corrected.

Preliminary Board Document