

February 7, 2020

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

Subject: Monthly Report, December 2019

Dear Mr. Gordon:

Attached is a summary of the Operations and Maintenance activities at the Board's lift stations and wastewater treatment plant for the month of December, 2019. Please direct any questions to my attention. Thank you.

Sincerely,



Paul S. Peris
Director of Production and Maintenance
White Marsh Environmental Systems, Inc.

December 2019 Effluent Testing

Sample Data	Total Nitrogen	Total Phosphorus	BOD	TSS	Enterococcus
Average:	1.94 mg/L	.20 mg/l	<2.40mg/L	<1.63mg/L	< 14 Col /100 mL
Permit Limit Monthly Average	8 mg /L	2 mg /L	15 mg/L	15 mg/L	10 Col. /100mL
Maximum:	N/A	N/A	< 2.40 mg/L	3.2 mg/L	1607 Col/100 mL
Permit Limit Daily Maximum	N/A	N/A	23 mg/L MAX	23 mg/l MAX	104 Col / 100mL

Maximum daily flow 0.8772 MGD
 Monthly average flow 0.5024 MGD

I. Activities – December 2019

LIFT STATIONS

- Daily comprehensive checks on pump PS #4 and #8
- Review all lift stations daily via Pointwatch system
- 12/4/19 BPW team serviced PS #11
- 12/4/19 PS #4 called out on low alarm, contractors working on bridge. No issues found.
- 12/20/19 inspected pump stations #7 and #9

PLANT ACTIVITIES

- 12/2/19 - cleaned cassette "C" on train #4
- 12/4/19 - Keystone onsite troubleshooting HMI in Zenon room with Suez
- 12/4/19 – Dave Weed on Conference call with Suez on HMI issue
- 12/6, 12/7, 12/8 - High levels in old EQ tank due to outfall 001 restoration project.
- 12/10/19 - GMB on site for tour of plant.
- 12/11/19 - Decanting old EQ tank from outfall project.
- 12/11/19 - Received Yeoman's pump and new Muffin Monster for PS #19
- 12/11/19 – Train #3 placed back online after membrane repairs.
- 12/12/19 – Continued to decant old EQ, worked on gate for grit chamber
- 12/13/19 - Calibrated effluent sampler
- 12/16/19 - Train #3 and #4 shut down for high TMP. Performed maintenance clean on all 4 trains.

- 12/17/19 - Contractors completed work on 001 discharge pipe
- 12/18/19 - Repaired leak on CL2 header pipe. Installed gate at grit chamber.
- 12/19/19 - Multiple alarms resulting in membrane shutdown/failure.
- 12/19/19 – Bypass pump was needed due to membrane failure. DNREC, BPW, Sussex County notified.
- 12/20/19 to 12/26/19 – WMES staff and contractor onsite cleaning membranes.
- 12/27/19 to 12/28/19 – WMES staff and contractor onsite installing new membranes.
- 12/28/19 – Train #2 put online with new membranes. WMES staff and contractor continued cleaning membranes. WMES providing 24 hour onsite operations.

NOTE: A more detailed chronology of events for the period 12-19-19 through 01-07-20 was previously submitted to Darrin Gordon from Bruce Patrick via email on 1/27/20.

SAFETY INFORMATION

- 12/3/19 – A piece of grating moved under a WMES employee causing them to fall into the wastewater in train #3. Worker was not injured. Incident is under investigation.
- 12/21/19 – During membrane cleaning a WMES employee fell into train #2 when a grate slipped off the support beam. Incident is under investigation.
- PPE inspected
- Eyewash and fire extinguisher inspections conducted
- Work orders created to improve and address lighting conditions throughout facility