

SEWER ADMINISTRATORS REPORT

LELAND TOWNSHIP SEWER SYSTEM

March 2021

Prepared by Steve Patmore, Sewer Administrator
For April 2021 Meetings

The influent flows for March 2021 continued the seasonal downward trend, about the same as last month, and 7% lower than the influent flows in March 2020. Flows are monitored weekly.

Effluent flows are being managed to be at our allowable discharge rate in order to lower the lagoon level for Spring 2021 sludge removal at the lagoon.

The lagoon level is now at 11.85 feet, which is 3.5 feet lower than it was at this time last year, and 13" lower than last month.

SEWER OPERATIONS (IAI report attached)

- The Penn Valley Pump Technician visited the WWTP in March to meet with IAI and inspect the Sludge Pump. A procedure was recommended to alleviate the nuisance alarms. There was no cost for this visit.
- An Air-Relief Valve at the Thompson Street Lift Station was found to be leaking – there was a small discharge of effluent through the manhole cover. The valve chamber was pumped and Kal Excavating was called to repair the leaking valve. The remainder of the air-relief valves need to be inspected.
- One of the pumps at the Thompson Street Lift Station was found to be not seated properly. IAI pulled the pump and found that a rubber seal needs to be replaced.
- IAI is looking at the aerators in the WWTP lagoon.
- There were three STEP system call-outs this month.

OTHER ON-GOING PROJECTS / MAINTENANCE / REPAIRS

- IAI is monitoring the Hydrogen Sulfide levels at the lift stations – treatment equipment has been ordered, EGLE is being contacted as a courtesy before the treatment is added to the sewer flows.
- Biotech has a signed contract for spring 2021 lagoon sludge pumping – looks like scheduled for June.
- WWTP Dosing Station repair work plan for period that WWTP lagoon is empty – IAI compiling costs.

SYSTEM ADMINISTRATION

- Questions on connections and the sewer system in general, including properties outside the district.
- Miss Dig staking requests picking up.
- Working on Rate Study and Capacity Study Update.
- Township Board Annual Meeting



**INFRASTRUCTURE
ALTERNATIVES, INC.**

Leland Township WWTP Operations Report

March 2021

Prepared by Lin Marolf, Operations Specialist

For March 2021 Sewer Commission Meeting

Operations Summary:

- Freeboard is within target range
- Biotech Agronomics Inc., has been awarded the bid for lagoon dredging. Specific date has not been given but they have indicated they would schedule in June.
- Aerators #2 was turned back on. Aerator #1 was turned off on 2/20/21 due to breaker tripping. Aerators #3 and 4 are still running.
- H2S pilot study is in process with weekly sampling.
 - Only Popp and Duck Lake lift stations are showing measurements. Popp lift shows an average of **119.5 ppm** with a high of 163 ppm and a low of 94 ppm. Duck Lake lift shows an average of **47.4 ppm** with a high of 69 ppm and a low of 30 ppm.
- H2S implementation proposal plan is on hold until recommendations can be made from Gosling Czubak as to procedures in notifying the EGLE and supplying quantity feed rates of Calcium Nitrate to the system.
- Implemented a procedure to add air to the sludge pump cylinders at least twice a week. This procedure needs to be done periodically to eliminate the sludge buildup in the cylinders. Once completed, the pump no longer starts hard and does not trip the breaker.
- Lin and Tom cleaned the Nova Filter on 3/11/21 and Lin again on 3/17/21.
- Air release valve replaced at Thompson St lift station by Kal Excavating. Failure of the valve resulted in an SSO and that part of our prevention plan with EGLE is to check the rest of them and repair or replace as necessary. Additional inspection of remaining air release chambers will be implemented.
- Five call outs for the month



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Totals:

	February 2021	March 2021	Year to Date	Units
Effluent	2.20	2.36	7.28	MG
Influent	1.45	1.48	4.54	MG
Freeboard	+1.3	+0.9	+ 4.3	FT
Propane	215	150	580	GAL
Ferric Chloride	117.41	178.25	418.66	GAL
Electric	7737	7524	26,093	KWH

***Estimate Only**

Call-outs:

3/9/2021	WWTP	Sludge pump alarm due to non-start. Applied pressurized air to the inlet and discharge cylinders.
3/15/2021	102 N Main St Leland	High level alarm. Cleaned floats, raised the high level alarm float, cycled all the floats.
3/16/2021	Thompson St Lift	Resident called about sewage leaking from a manhole cover. Sewage leaking from the air release chamber. Called Williams to pump it down and called Kal Excavating to repair.
3/16/2021	The Shanty In Leland	Resident called due to an alarm with the step chamber. Alarm was off but cleaned and cycled the floats. Pump works as it should.
3/19/2021	102 N Main St Leland	Hi level alarm again. Replaced the hi level alarm float. Appears to be working fine.