

SEWER ADMINISTRATORS REPORT LELAND TOWNSHIP SEWER SYSTEM AUGUST 2023

Prepared by Steve Patmore, Sewer Administrator – September 1, 2023
Updated for September Township Board Meeting

Influent and Effluent readings for August are normal.

The lagoon levels are slightly high, but stable. Current Freeboard = 3 feet (affected by high rainfall), but dropping.

Effluent flows are being maintained to keep lagoon levels within operational limits.

Update - Quarterly Phosphorous Results in monitoring wells averaged 0.89 mg/l in August. (target is 0.5)

	CURRENT YEAR 2023		LAST YEAR (2022)	
	August 2023	2023 YTD	August 2022	YTD 2022
Influent Flows	2.9 MG	16.14 MG	2.92 MG	NA
Effluent Flows	2.53 MG	16.47 MG	2.61 MG	NA

Flows in Millions of Gallons (MG)

ISSUES / PROJECT LIST

- Drain beds (investigation, flushing, televising, jetting)
Update – On September 5th, Bed 8 was jetted and a camera sent in one lateral. Working much better. Performance of all the beds is being measured and monitored. A maintenance plan and schedule will be developed)
- Influent Manhole – scheduled for replacement.
- Dosing Pump #1 – not functioning, was new in 2021-22
Update: Back in service – wiring issue.
- Influent Flowmeter – installed – needs to be connected.
- Update – Sludge Pump required a re-build last week.
- Update – Hydrogen sulfide gas test results have been lower. Working on expanding the H2S reduction efforts.

SEWER OPERATIONS & CALL-OUTS (IAI report)

- See IAI report for call-outs
- Significant work on the drain fields this month
- Aerators
- STEP pumps
- Early Bird septic tank

SYSTEM ADMINISTRATION

- Questions on connections and the sewer system in general, permits & building.
- Permits for home additions.
- Miss Dig staking requests.
- Houses under constructions being reviewed and measurements.
- Several requests for connection information – new construction/additions
- Working on delinquent sewer account list for the Treasurer.



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Monthly Operations & Maintenance Report

Sep 1, 2023

Report for Month: August 2023
Location: Leland Township
Facilities: Leland Township Wastewater Treatment Plant
Certified Operator: Mitchell Gawrysiak

Emergency Callouts/Customer Complaints

- 8/2/23 Callout 301 W. Reynolds Stop float needed to be adjusted. It was resting on the pump causing it to run continuously.
- 8/7/23 Callout 416 N. Grand the floats were out of position and needed to be repositioned and secured properly.
- 8/12/23 Callout Plant Dosing pump 1 failure. Took it out of rotation until repair can be made.
- 8/18/23 Callout aerator 1 not running. Motor was bad. Replaced the motor and put it back into rotation on 8/25/23.
- 8/19/23 Callout 332 W Main respliced bad connections in the junction box and replaced the hi-level relay tested. Called back out later the stop float and hi-level float tested bad replaced them and tested.
- 8/20/23 Callout ferric day tank hi-level. The valve didn't seal properly when closed. Opened and reclosed.
- 8/26/23 Callout plant filter alarm. Cleaned the filter and jets. Currently taking panels off and soaking them overnight to remove heavy sediment plugging them.

Significant Events:

- 8/8/23 Annual monitoring well samples for the testing around the drain fields.
- 8/11/23 Removed floating weed beds from the lagoon.
- 8/11/23 Met with Mark Hurley from Gosling and Czubeck. We concluded that there were multiple lines that were clogged. Further diagnosis and repair need to be done. Williams and Bay are scheduled to assist with this Sept. 5th.
- 8/17/23 Talked to Shawn from Eganix about the effectiveness of his product on Terrace Ln. We also discussed other H2s solutions. He recommended a product called persnickety. It's used to clean the air that vents at the lift stations. I am currently getting more info on it.
- 8/24/23 Windemuller came out. They adjusted the actuator on valve 6. It now operates without shutting the plant down. They also assisted with the aerator motor replacement, 332 W. Main, and diagnosis on dosing pump 1.



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- 8/11/23-8/30/23 Spent multiple days locating and digging out cleanouts. Repairing broken ones and extending them for future access. This is ongoing and is imperative to be able to maintain the operation and diagnosis of the drain field.

Preventive Maintenance:

- Calcium Nitrate delivery to the Marina where it can be introduced into the system. Planning for additional locations or other means to reduce high hydrogen sulfide levels.
- Air relief valve inspections and cleaning to assess condition for future work to promote adequate operation.
- Rebuilding bulkheads to keep call outs down and the system operating smoothly.
- Routine maintenance and inspections on the lagoon and aerators.
- Valve exercise program to ensure operation, and document condition to keep an ongoing log of ones that need replacing.
- Thorough inspections and evaluations of the drain field condition and planning for future repair.
- Dosing valve inspection and repair as needed.
- Nova filter cleaning and inspections.

H2s 8/15/23, 8/29/23
Popp Rd 26 ppm, 36 ppm
Narrows 0 ppm, 0 ppm
Duck Lake 43 ppm, 18 ppm
Thompson St. 0 ppm, 0 ppm
Terrace Ln 188 ppm, 45 ppm
Marina 27 ppm, 0 ppm
Mill St 24ppm, 3ppm

Facilities Data for the Month

	July 2023	Aug 2023	Year to Date	Units
Effluent	2.29	2.53	16.47	MG
Influent	3.45	2.9	16.14	MG
Ferric Chloride	278.68	262.16	2,574.79	GAL
Freeboard (ft)	3.9	2.9	-3.4	FT