

NLTUA Operations Report – March 2023

TO: Chris Holton, NLTUA
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DATE: April 17th, 2023

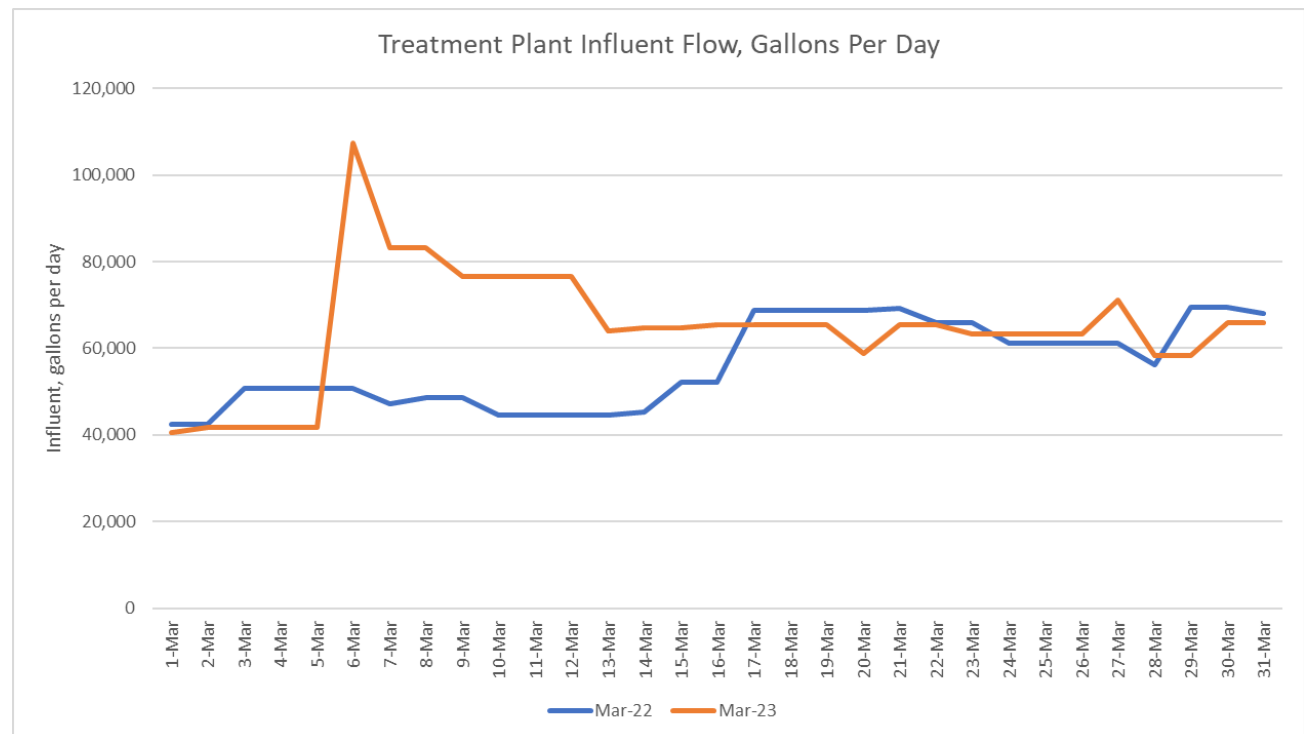
COPY: Nick Lenzi, Jacobs
Andrew Waldron, Jacobs
Justin Straub, Jacobs

This report describes our activities during the month of March 2023. If you require additional information that would make these monthly reports more useful to you, please let us know. Permit compliance report data is submitted to the Department of Environment Great Lakes and Energy (EGLE) electronically.

Treatment Plant

	March	Last Month	Last Year
Influent flow daily average, GPD	64,692	42,474	56,271
Monthly electrical usage, Kw Hrs*	33,276	32,939	33,249

* Note: Wind turbine is permanently out of service.



The above graph compares plant influent flows from March of last year to that of March 2023. The drastic increase in influent flow seen on March 6th was the result of flushing and jetting the gravity main on Northshore. The flows decreased following the jetting but sustained higher than normal due to increased infiltration of groundwater as was expected to occur to some degree. The NTLUA is currently working with Contractors to

perform the repairs that will restore the pipes integrity and eliminate the infiltration. The increase in flow seen in mid-March 2022 was associated with wet weather events. Over 4 inches of rain was observed through March 2022. .

We responded to an anoxic basin high level alarm on March 3rd. The sieves screens in MBBR cell #2 were restricting flow due to solids buildup. We air blasted the screens to free up the solids and restore plant flow to normal. The basin levels were monitored until they returned to normal operating levels.

Lift Stations / Collection System

Responded to a high-level alarm at the main lift station on March 6th. Alarm was due to the volume of flush water introduced to the system while the Contractor was performing the Northshore Dr. sewer jetting. We monitored the station and treatment plant until the jetting was complete and flows decreased.

Received the calcium chloride order for the Northport Point Rd. lift station on March 14th.

Windemuller began installation of the new controls at the Main Lift Station on March 31st, we assisted with identifying and verifying wet well level control setpoints and manual float switch elevations. We also identified the phone line was not functioning therefore not able to provide alarm notification. We installed a temporary cellular modem to restore alarm notification functions until the phone line issue is resolved.

Residential Grinder pumps

As part of our due diligence to reduce repeat call outs to residential grinders we perform the following checks before leaving the site. Table 1 below summarizes our grinder pump responses. More details can be provided upon request.

- ✓ Tighten all control connections within control cabinet.
- ✓ Remove grease and debris from grinder tank.
- ✓ Remove all grease buildup from float switches.
- ✓ Verify all float switches operate properly and are positioned properly.
- ✓ Confirm proper pump operation.
- ✓ Verify alarm light is operational and audible alarm, if applicable.
- ✓ Inspect wet well components.
- ✓ Replace both the start and run capacitor.
- ✓ Inform homeowner of findings and what not to put in their sewer.

Table 1: Grinder Pump Responses

Date	Location	Alarm/Issue	Resolution
2-26-23	571 S. Shore Dr.	<ul style="list-style-type: none"> • Motor overload 	<ul style="list-style-type: none"> • Replaced grinder pump and verified proper operation.
3-26-23	551 Southshore Dr.	<ul style="list-style-type: none"> • Motor overload • High level 	<ul style="list-style-type: none"> • Pump clogged with wet wipes. Removed wipes and verified proper function. Note: This residence has a 2 ft riser making it difficult to service.

On the Horizon

Task	Update	Estimated time of completion
Aeration blower #2 repair or replacement	PO issued to Contractor. Reached out to Air Components (blower supplier/installer) for blower replacement schedule and have not received a response as of 3-16-23.	2023
Main lift station controller replacement	In Process.	2023
7th St. station controller replacement	Obtaining updated proposal	2023
Force main cleaning from main lift station to plant	Jacobs developing proposal	2023
Settling basin engineering evaluation	NLTUA to consult their engineer	2023
Ferric chloride room day tank relocation	NLTUA to consult their engineer	2023

Financial Report

Current Reporting Month	Mar-23	Comments
Repairs Spending Treatment Plant Current Month	\$ -	
Repairs Spending Treatment Plant Year to Date	\$ 1,289.07	
Repairs Spending Residential Grinder Pumps Current Month	\$ 9,739.70	\$9,739.70 - Purchased 4 grinder pumps to replenish inventory.
Repairs Spending Residential Grinder Pumps Year to Date	\$ 9,739.70	
Repair Spending Collection System (lift stations/sewer) Current Month	\$ -	
Repair Spending Collection System (lift stations/sewer) Year to Date	\$ -	
Repairs Hours Treatment Plant Current Month	-	
Repairs Hours Treatment Plant Year to Date	-	
Repairs Hours Residential Grinder Pumps Current Month	8.00	
Repairs Hours Residential Grinder Pumps Year to Date	38.50	
Repair Hours Collection System (lift stations/sewer) Current Month	35.50	
Repair Hours Collection System (lift stations/sewer) Year to Date	41.00	
Total Repair Hours Current Month	43.50	
Total Repair Spending Current Month	\$ 9,739.70	
Total Repair Hours Year to Date	79.50	
Repairs Hours Budget Remaining (Limit 300 Hrs)	220.50	
Total Repair Spending Year to Date	\$ 11,028.77	
Repair Spending Budget Remaining (Limit \$8,000)	\$ (3,028.77)	
Total Repair Hours 2022	679.50	
Total Repair Spending 2022	\$ 45,783.13	

If you have any questions or concerns, please feel free to contact us.

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