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DATE: November 14th, 2022

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 Andrew Waldron, Jacobs
 Justin Straub, Jacobs

This report describes our activities during the month of October 2022. 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

	October	Last Month	Last Year
Influent flow daily average, GPD	60,986	73,500	67,814
Monthly electrical usage, Kw Hrs	33,334	30,001	24,264

Increased electrical usage can be attributed to basin cleaning.

Replaced the control board on the treatment plants effluent sampler unit.

The results of the final effluent PFAS sampling and the biosolids PFAS resampling are summarized in the following table. The biosolids resample results were less than the initial results and were below the action threshold for land application. Another sampling event will be needed in 2023 to confirm the resample results. Because the biosolids result was not less than 20 ug/kg EGLE recommends facilities continue to investigate possible sources. Jacobs is working with the NLTUA to develop a source reduction plan.

Sample Date	Sample Location	PFOS Results	Limit
8-2-22	Biosolids	78 ug/kg	>20 ug/kg investigate source >50 ug/kg restrict land app rate and investigate sources
9-21-22	Biosolids (resample)	20 ug/kg	>20 ug/kg investigate source >50 ug/kg restrict land app rate and investigate sources
9-21-22	Final Effluent	4.0 ng/L	>12 ng/L

The treatment plant settling basin cleaning was completed the week of October 10th, 2022. This cleaning process is conducted annually to remove solids buildup that could eventually affect the facilities effluent quality. The cleaning process entails removing the settling basin from service, diverting influent flow to storage basin #2, then 3-4 days of flushing and pumping solids to the biosolids holding basin. Once the basin is cleaned the influent flow is returned to the plant and the settling basin is returned to service. A settling basin engineering study is identified in the NLTUA's CIP plan to address the solids build up issue.



Lift Stations / Collection System

On October 18th, 2022, we responded to a power failure issue at the Northport Point Rd. lift station. The portable generator was staged until power was restored the next day.

Main lift station pump #2 arrived and was installed, restoring the stations redundancy. The bypass pump was removed from the site the next day.

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
10-1-22	11225 Northshore Dr.	<ul style="list-style-type: none"> • High Level 	<ul style="list-style-type: none"> • Replaced the start and run capacitors • Replaced the grinder pump
10-17-22	785 Wagon Wheel Dr.	<ul style="list-style-type: none"> • High Level 	<ul style="list-style-type: none"> • Replaced the start and run capacitors
10-19-22	308 W. 3 rd St.	<ul style="list-style-type: none"> • High Level 	<ul style="list-style-type: none"> • Replaced grinder pump • Replaced control wiring
10-20-22	11401 Northshore Dr.	<ul style="list-style-type: none"> • High Level 	<ul style="list-style-type: none"> • Replaced motor starter •
10-20-22	13470 Northport Point Rd.	<ul style="list-style-type: none"> • High Level 	<ul style="list-style-type: none"> • Replaced the start float control switch
10-24-22	10966 Northshore Dr.	<ul style="list-style-type: none"> • High Level 	<ul style="list-style-type: none"> • Due to wet well riser height a CSE entry was needed to repair control float switch wiring issue.
10-27-22	117 S. Waukazoo St.	<ul style="list-style-type: none"> • High Level 	<ul style="list-style-type: none"> • Replaced stop control float switch • Replaced grinder pump
10-27-22	13701 N. Northport Point Rd.	<ul style="list-style-type: none"> • High Level 	<ul style="list-style-type: none"> • Removed grease buildup from the float control switches
10-29-22	327 Shabwasung St.	<ul style="list-style-type: none"> • High Level 	<ul style="list-style-type: none"> • Adjusted float control switch positions

On the Horizon

Task	Update	Estimated time of completion
Aeration blower #2 repair or replacement	NLTUA to issue PO to Air Components Inc.	Fall 2022
Decant pump conduit and alarm addition	Conduit wiring was completed. Alarm set up needed.	Fall 2022
Landia mixer #4	Scheduled for install	Fall 2022
Main lift station controller replacement	Provided NLTUA cost for approval.	Fall 2022
Hach SC 100 replacement	Install scheduled	Summer 2022
7th St. station controller replacement	No updates	2023
Main lift station re-lining	No updates	2023
Force main cleaning from main lift station to plant	Develop cleaning plan	2023
Settling basin engineering evaluation	No updates	2023
Ferric chloride room day tank relocation	No updates	2023

Financial Report

Current Reporting Month	Oct-22	Comments
Repairs Spending Treatment Plant Current Month	\$ 1,030.14	Effluent sampler control board replacement
Repairs Spending Treatment Plant Year to Date	\$ 11,192.64	
Repairs Spending Residential Grinder Pumps Current Month	\$ -	
Repairs Spending Residential Grinder Pumps Year to Date	\$ 10,902.96	
Repair Spending Collection System (lift stations/sewer) Current Month	\$ -	
Repair Spending Collection System (lift stations/sewer) Year to Date	\$ 5,979.19	
Repairs Hours Treatment Plant Current Month	3.00	
Repairs Hours Treatment Plant Year to Date	239.75	
Repairs Hours Residential Grinder Pumps Current Month	24.50	
Repairs Hours Residential Grinder Pumps Year to Date	171.25	
Repair Hours Collection System (lift stations/sewer) Current Month	22.00	
Repair Hours Collection System (lift stations/sewer) Year to Date	152.00	
Total Repair Hours Current Month	49.50	
Total Repair Spending Current Month	\$ 1,030.14	
Total Repair Hours Year to Date	563.00	
Repairs Hours Budget Remaining (Limit 300 Hrs)	(263.00)	Repair labor hours over 300 hour limit
Total Repair Spending Year to Date	\$ 28,074.79	
Repair Spending Budget Remaining (Limit \$8,000)	\$ (20,074.79)	Repairs over \$8,000.00 limit
Total Repair Hours 2021	826.45	
Total Repair Spending 2021	\$ 16,154.42	

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

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