

**TO:** Chris Holton, NLTUA  
 Joni Scott, NLTUA

**FROM:** Mark Huggard, Jacobs

**DATE:** October 19<sup>th</sup>, 2020

**COPY:** Kevin Dahl, Jacobs  
 Elizabeth Hart, Jacobs

This report describes our activities during the month of September 2020. 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 State of Michigan electronically. Additionally, a copy of the submitted compliance data will be provided once all data is available.

**Treatment Plant**

	September	Last Month	Last Year
Influent flow daily average, GPD	65,976	76,844	65,152
Monthly electrical usage, Kw Hrs	14,385	25,348	19,495

The facility was in full compliance with discharge permit limits for the month of September.

The new Landia replacement mixer replacement was ordered upon NLTUA approval.

We replaced a failed USB modem for the alarm dialer at the treatment facility.

On Tuesday September 8<sup>th</sup>, while performing our weekly dissolved oxygen (D.O.) sensor inspections we noticed the sensor cap on probe #1 was worn causing an incorrect D.O. reading. The cap was replaced, the probe was calibrated, and a spare cap will be purchased in 2021.

On Wednesday September 9<sup>th</sup>, we met onsite with the Parkson sand filter field technician to discuss the low reject flow rate issue we are continuing to experience. Parkson’s suggestion was to increase the height of the effluent weir, which should in turn increase the reject flow rate. On Thursday 9-11-20 we raised the weir as far as we could and noted no significant increase in flow rate. This information was shared with Parkson and further discussion lead us to look closer at the sand washer portion of the filter, which if obstructed, damaged or out of alignment, could cause a reduction in the flow rate. We have scheduled to clean and replace the inner components of the sand washer and will report the affects this has on the performance of the filter in next month’s report.

On Thursday September 17<sup>th</sup>, R.A.M services inspected the plant backflow preventors. This work is contracted and managed by the NLTUA.

**Lift Stations / Collection System (Including Residential Grinder Pump Stations)**

In August’s operations report we identified the need to address the significant corrosion found during the recent lift station cleaning. In response to this finding we reached out to Advanced Rehabilitation Technologies (current contractor relining manholes) to provide a quote for the lining of this station. This quote is provided as an attachment to this month’s report. We would like to set up a virtual meeting with the NLTUA to discuss the quote and our recommendation to move forward with lining this station in 2021.

On Thursday September 22<sup>nd</sup>, we partnered with the NLTUA and the Leelanau Township Fire Department to flush both the north and south ends of the low-pressure force main. The flow rate downstream of the flushing was verified to confirm its effectiveness.

On Monday September 14<sup>th</sup>, we installed an odor block, changed the odor cannister carbon and placed a rubber mat over the lift station hatch. A few weeks later we contacted the Albers to see what effect these changes have made, in any and were not able to reach them. We’ll continue the weekly carbon changes and reach out to Albers on a monthly basis.

On Thursday September 17<sup>th</sup>, we responded to a low-level alarm at the 7<sup>th</sup> St. lift station. The cause was determined to be a failed level transducer. A temporary control unit was installed until the replacement sensor could be purchased and installed.

**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.

- ✓ 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 home owner of findings and what not to put in their sewer.

The following table details our grinder pump alarm responses:

Date	Location	Alarm/Issue	Resolution
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9/1/20	13500 E. Paradesia Rd.	<ul style="list-style-type: none"> <li>High level alarm</li> </ul>	<ul style="list-style-type: none"> <li>Replaced the start and stop capacitor.</li> </ul>
9/20/20	327 S. Shabwasung	<ul style="list-style-type: none"> <li>High level alarm</li> </ul>	<ul style="list-style-type: none"> <li>Supply voltage to the control panel was lost. The homeowner replaced the wiring from the home to the control panel. Once the work was complete, we verified the system was operational.</li> </ul>
9/30/20	11263 North Shore Dr.	<ul style="list-style-type: none"> <li>Leak in the discharge line</li> </ul>	<ul style="list-style-type: none"> <li>Kal Excavating replaced a failed discharge flex coupling.</li> </ul>

**On the Horizon**

- Repair/replace control panel support at 12263 Northshore Dr.
- 7<sup>th</sup> St. station level transmitter replacement
- Replace sand washer components
- Replacement of Aeration blowers per CIP
- Fine screen wet well upgrade per CIP
- Collection System manhole lining per CIP
- Annual settling basin cleaning

**Financial Report**

Current Reporting Month	Sep-20	Comments
Repairs Spending Treatment Plant Current Month	\$ 3,954.48	Purchased: Lightnin mixer rebuild kits,
Repairs Spending Treatment Plant Year to Date	\$ 13,002.33	
Repairs Spending Residential Grinder Pumps Current Month	\$ 1,052.47	Purchased: Grinder pump station capacitors and float switches, Williams pumping for grinder pump.
Repairs Spending Residential Grinder Pumps Year to Date	\$ 11,395.65	
Repair Spending Collection System (lift stations/sewer) Current Month	\$ 559.75	Purchased: ARV repair parts
Repair Spending Collection System (lift stations/sewer) Year to Date	\$ 3,744.96	
Repairs Hours Treatment Plant Current Month	-	
Repairs Hours Treatment Plant Year to Date	211.00	
Repairs Hours Residential Grinder Pumps Current Month	-	
Repairs Hours Residential Grinder Pumps Year to Date	217.50	
Repair Hours Collection System (lift stations/sewer) Current Month	-	
Repair Hours Collection System (lift stations/sewer) Year to Date	20.50	
Total Repair Hours Current Month	-	
Total Repair Spending Current Month	\$ 5,566.70	
Total Repair Hours Year to Date	449.00	Annual repair hours are over budget
Repairs Hours Budget Remaining (Limit 300 Hrs)	(149.00)	
Total Repair Spending Year to Date	\$ 28,142.94	Annual repair cost are over budget
Repair Spending Budget Remaining (Limit \$8,000)	\$ (20,142.94)	
Total Repair Hours 2019	321.25	
Total Repair Spending 2019	\$ 40,380.04	

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

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**Main Lift Station Re-Lining Quote**

September 18, 2020

Jacobs Engineering  
606 Hannah Ave  
Traverse City, Mi 49686  
Mark Huggard

Re: Northport, Mi Main Pump Station Rehab

- 1) This quote is good for 30 days
- 2) Pricing is for installation of the Obic 1000 Multi-Layer Liner System including surface preparation, average leak stoppage (up to 1 gallon of chemical grout), materials for minor concrete patching, installation and supervision.
- 3) Requires Application Truck access within 200' of the Structure.
- 4) DOT Traffic Control to be provided by others if required. Our crew will supply cones for the immediate work area.
- 5) Permits, Fees and Inspector Rates are not included in this quote.
- 6) Client is responsible for all applicable sales tax.

**OBIC Liner installed in the Main Pump Station  
Coating the walls, ceiling, and 6" onto the floor**

**Lining Total \$27,500.00**

**Mersino By Pass during installation process**

Mobilization/ Installation/ Removal/ Demobilization and 1 week rental

**\$8,300.00**

Does not include pump watch service, Mersino bills this at \$105/hr  
Will try to work out between ART and Northport staff a watch schedule to save this expense

**OBIC provides a 10 year warranty**

Proposal pricing is in effect for 30 days from the date of this correspondence. Rate does not include any local taxes or fees that may apply.

Upon agreeing to the terms we ask you acknowledge in the area below and fax to our office. Should you have any questions regarding this proposal, please feel free to call me.

Thank you,  
Kevin Appel  
Advanced Rehabilitation Technology  
Obic Liner Systems  
419-553-7047 Cell

Customer: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Name: \_\_\_\_\_  
P.O. #: \_\_\_\_\_  
Date: \_\_\_\_\_