***Monthly Operations & Maintenance Report***

***March 10, 2022***

***Report for Month:*** February 2022

***Location:*** Lake Leelanau

***Facilities:*** Popp Road Waste Water Treatment Plant

***Operator in Charge:***  Lin Marolf

***Emergency Callouts/Customer Complaints***

* 2/13/22 – Terrace Lift Station. Shane on-call for Lin received a power alarm. The pump control boxes had power however, the main panels did not. Called Advantage Electric to come out and repair. Also called IAI electrician and diagnosed it as a bad controller. A temporary fix was applied by using a jumper wire to bypass the controller. A new controller was ordered and has been installed by Lin.

***Significant Events:***

* 2/9/22 – WWTP noticed PLC would not alternate valves. The program was stuck using one valve. Called Windemuller technician to come out the following day and reprogram. Valves are all operating as normal.
* 2/21/22 - Annual generator maintenance performed by Graham Generator services revealed a bad water pump in the Popp lift station. Zach Foley of IAI Mechanical Services drove the replacement water pump up from Grand Rapids that evening to be installed.
* 2/28/22 – Lagoon freeboard is 10.1 feet

***Preventive Maintenance:***

* 2/10/22 – IAI Mechanical services completed overhaul of the dosing chamber adding new pumps, discharge lines, rails and floats.
* 2/16/22 – Quarterly monitoring well sampling completed by Lin and Tom.
* 2/16/22 - Additional programming added to the PLC. Windemuller tech added ability to record 7 days of history to effluent reading, ability to record total ferric use for 7 days, enabled plant not to exceed max flow of 90,700 gpd.

***Facilities Data for the Month***

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| --- | --- | --- | --- | --- |
|  | January 2022 | February 2022 | Year to Date | Units |
| Effluent | 2.46 | 1.60 | 4.06 | MG |
| Influent | 1.30 | 1.20 | 2.50 | MG |
| Freeboard | +2.2 | +.4 | +2.6 | FT |
| Propane | 250 | 245 | 495 | GAL |
| Ferric Chloride | 253 | 319 | 572 | GAL |
| Electric | 4480 | 4261 | 8741 | KWH |