

MARCH 2020 MONTHLY REPORT
City of Thompson
Wastewater Treatment Plant Upgrades & Associated Works
MWSB 1265
Startup & Commissioning Phase
Licence No. 3118R

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1 Milestones Achieved this Month

The following presents a summary of the milestones achieved for this reporting period:

- The Contractor achieved Interim Substantial Completion as of February 10, 2020. The City is now responsible for operating the facility with input from the Contractor until completion of Acceptance Testing and award of Substantial Completion.

2 Status of Facility

The City has developed protocols for operating the plant in response to the Covid19 pandemic. In addition, the City is in the process of setting up remote monitoring capabilities in an effort to limit the number of Operators in the facility at any given time. In the meantime, the Operators are separating themselves and following social distancing while carrying out their daily activities. The City is working on contingency plans in the event that one, or multiple, Operators fall ill.

The City of Thompson's WWTP Operators have taken over operation of the facility with input from the Contractor and will continue to do so until completion of Acceptance Testing and award of Substantial Completion. The Operators are conducting daily testing of effluent to monitor process development. Composite samples of the treated effluent are gathered each day for testing.

As of the end of March the process is showing signs of stabilizing:

- Effluent TSS have remained below 25 mg/L during March.
- Phosphate has increased and is generally between 1-2 mg/L with the exception of a couple of spikes. The 30-day rolling average remains above 1.0 mg/L.
- UVT has been above 55 for the month of March.
- Effluent pH has tested between 6.3 to 7.6 throughout March. The low pH readings were caused by the sodium hydroxide injection line freezing at the beginning of the month. The heater banks in the main HVAC faulted causing a low building temperature condition which led to the injection line freezing. A temporary injection line was installed while the Contractor sorted out the heater issue and frozen injection line.
- Effluent temperatures have varied slightly through March but were generally in the range of 7-8°C. SBR Basin temperatures have remained steady around 9.5°C. Raw wastewater influent temperatures have ranged from 3-9°C over this reporting period.
- Ammonia has varied from 6 mg/L up to 14.7 mg/L and have generally been between 8 - 10 mg/L. The nitrification process does not appear to have improved significantly during March. The combination of frozen sodium hydroxide injection

line and cold influent temperatures are contributing factors to the lack of significant improvement over the past month.

3 Anticipated Milestones to be Achieved Next Month

The biological process has generally stabilized with the exception of Ammonia removal through nitrification. The addition of nitrifying bacteria appeared to have restarted the nitrification process however, the improvement was short lived, and ammonia has returned to the levels before the addition of bacteria cultures occurred. Acceptance testing of the SBR process and Aerobic Digesters are contingent on the process demonstrating that all effluent quality parameters of the licence are being met. At this time this is not expected to occur until spring of 2020.

The Contractor is working towards completion of deficiencies to close out of the Building Permit and obtain the Building Occupancy Permit.

4 Operator Training

Operator training for the new WWTP facility has been ongoing since fall of 2019 and the Operators have received the required training through the project to take on operation of the facility. To date, the Operators have received training on the SBR Process Operation and equipment, grit system, multirake bar screen, UV disinfection equipment, sludge dewatering equipment, lab testing, WWTP SCADA system, building HVAC and building ancillary systems. Follow up/refresher training on the SBR Process and WWTP SCADA system will be provided in an ongoing fashion throughout 2020. Training sessions have been video recorded for Operator reference, along with printed training manuals for key equipment.

No Operator training occurred in March 2020.