

Follow Up Report – September 25th 2017 MEL-07 Fecal Coliforms Exceedance

Description of Exceedance:

On September 25th 2017, a sample of Sewage Treatment Plant (STP) effluent, MEL-07, was collected and submitted for water quality analysis as per the Water License 2BB-MEL1424. Upon receiving the water quality results, fecal coliforms were measured at 4200 CFU/100 mL, which exceeds the permitted discharge of 1000 CFU/100 mL. Due to the lag time between the sample collection and the receipt of the analytical results, it was not known that an exceedance had occurred until September 29th 2017, upon which a spill report was issued through the NT-NU Spill Report.

Spill Discharge Location:

The MEL-07 effluent discharges to land at a location situated approximately 65 m from the ordinary high water mark of Meliadine Lake (see Figure 1). Once the effluent reaches the end of the pipe, it travels along a rock channel intended to reduce the flow and prevent erosion. The effluent will then follow the rock channel to Meliadine Lake.



Figure 1: View from above - MEL-07 discharge configuration with rock channel and flow path to Meliadine Lake

Spill cause:

Upon investigation of the causes related to the fecal coliform exceedance, the spill cause could not be pin pointed. It appeared that a time length in the desludging of the biodisks may have been the cause. All the routine and maintenance procedures had been followed and are under review. Time span between cleaning of the STP loop may need to be increased, and reviewed to be sure all areas are being adequately completed.

Spill response:

No spill response was completed as the exceedance was not noticed until the analytical results were received several days later. A third party review of the system was completed and recommendations have been provided to Agnico Eagle for implementation in order to improve the performance of the STP. Agnico has ordered supplies to adapt 3rd party recommendations and will continue assessing the system for improvements.