

# Follow Up Report: #21-299

## July 11<sup>th</sup>, 2021 – Saline Effluent Treatment Plant (SETP) Treated Water Spill

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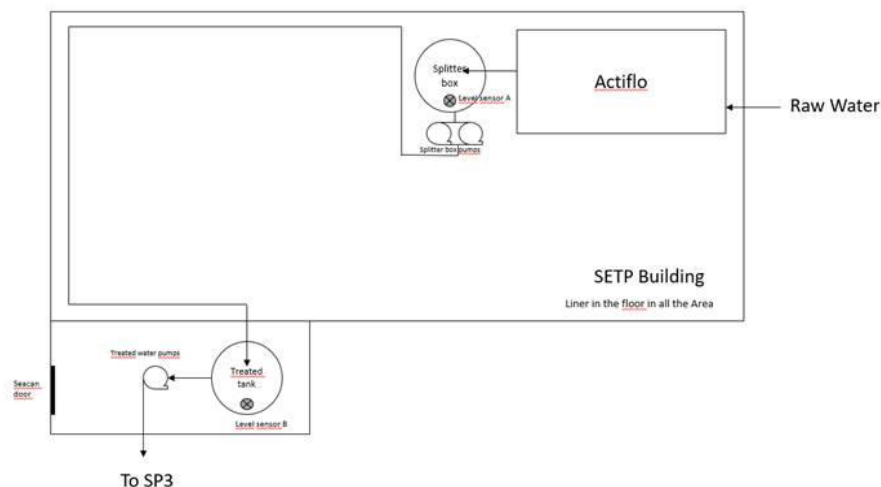
The following information relates to spill 21-299 reported by Agnico Eagle Mines Ltd. July 12<sup>th</sup>, 2021, and is being provided in accordance with:

- the Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c
- the Government of Nunavut's, Environmental Protection Act subsection 5.1(a)

### Description of Incident

During seasonal commissioning of the SETP it was identified that the treated water pump was running full speed because level sensor "B" indicated High-High, however the tank was empty. To protect the pump, it was decided to manually shut down the pump. The sensor "B" high-high level alarm in treated water tank, caused the splitter box pump to automatically shut down. The Actiflo continued to transfer water to the splitter box as level sensor "A" was reading Low-Low level. This rapidly increase the level in the splitter box and resulted in an overflow in the SETP building.

The Actiflo was stopped however water continued to flow into the splitter box as there is a lead time between the Actiflo stop time and the time that the water stops flowing. Splitter box level sensor "A" indicated Low-Low as the splitter box continued to overflow. To avoid continuing overflowing in the building, the splitter box pumps were restarted directing flow to the treated water tank. The treated water tank level sensor "B" was now reading 1/3 full. The sensor continued to read 1/3. When inspecting the tank, it was found to be overflowing and approximately 1 cubic meter had spilled out the door while the sensor continued to read 1/3 full. The system was immediately shut down for further investigation.



**Figure 1:** SETP configuration.

No natural water bodies were impacted with the closest being approximately 830m south. The spill occurred at 63° 1'32"N, 92°12'37"W, within the Meliadine water management area.



**Figure 2:** Location of SETP treated water spill within Meliadine's water management area.



**Figure 3:** Treated water flow outside SETP.

## Spill Response & Cleanup

The plant was shut down to stop the release to the ground outside the sea-can. The SETP was being commissioned with water from SP1, thus no chemicals were added. The water spilled to the ground will be captured within the site water management system and directed to CP5.

## Cause of Incident and Corrective Measures

The immediate cause was a result of a faulty reading from both sensors, it is assumed that the faulty readings were a result of foam within the system causing in accurate reading on the ultrasonic sensors. Agnico Eagle Mines Ltd. instrument technicians calibrated the sensors and confirmed accurate reading. Agnico Eagle Mines Ltd. will increase the frequency of SETP tank level inspections.



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Sent from Meliadine