

# Follow Up Report: #21-175

## May 13, 2021 – 80 m<sup>3</sup> Sewage Water



The following information refers to an incident reported by Agnico Eagle Mines Ltd. on May 13, 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

At approximately 05:15 am on May 13, 2021, the operator of the sewage treatment plant (STP) arrived to low level alarms in the EQ tank. The supervisor was then notified of a discrepancy with the amount of water consumed not matching the raw water received for the past 12 hours, suggesting that there may have been a breakage in the line somewhere. The lift station of the main camp was then inspected and upon arrival the access door was found open. With night temperatures dropping below zero, this likely led to freezing within the pipe/Y joint and eventually failure of the joint.

The initial spill report stated that the volume released was to be determined. Upon further assessments and reviews, it was determined that 80 m<sup>3</sup> of raw water was unaccounted for.

The coordinates of this spill source (lift station) are 63° 2'24"N, 92°13'40"W. No water bodies were impacted by this spill. All water released was contained within the industrial pad.



**Figure 1:** Location of the lift station and affected area in relation to the main camp.



**Figure 2:** Cracked and leaking pipe joint inside the lift station.



**Figure 3:** Entrance door of the lift station and water pooling directly outside.



**Figure 4:** Water pooling on south side of the main camp.

### **Spill Response & Cleanup**

As soon as the issue was discovered, all water throughout the camp and the Multi Service Building (MSB) was shut off. Crews began using the sucker truck to pump water out of the lift station, as well as any product that was pooling outside the lift station. A temporary containment berm was built downstream of the flow to contain the spill and prevent further migration. Peat material was placed on top of the pooling water on the south side of the camp to absorb it and prevent further downstream flow. All pooled water that was recovered from the ground was discharged back into the water treatment system. The sand and soil used to contain the water was later removed, placed in the WRSF and encapsulated in waste rock.





**Figure 5:** The sucker truck was utilized to empty the lift station holding tank and to collect pooling water outside of the lift station.



**Figure 6:** Clean peat/soil was used to absorb pooling water, and a temporary berm construction to mitigate downstream flow.

### **Cause of Incident and Corrective Measures**

The incident occurred as a result of the access door of the lift station being left open overnight. It is unknown whether it was left open accidentally, or if it was blown open by the wind, but the locking mechanism and door did not appear to operate properly. This led to the freezing and cracking of a pipe due to overnight temperatures below zero. The cracked pipe was replaced the same day and the systems were restored. Repairs are scheduled for the door and locking mechanism to allow it to close fully and lock more securely from the outside. A low temperature alarm is planned to be installed inside the lift station, and other sensors and alarms are being considered (pressure sensors, moisture alarm on the floor, etc.). A full inspection of all exterior drainage systems throughout the MSB and camp is planned to be completed this summer.