

January 20, 2024

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Sent via email: Kyle.Amsel@rcaanc-cirnac.gc.ca

Re: Follow-up Report Spill #2023-536 — Release of 150 L of Sewage at the Meliadine Gold Mine

On January 2nd, 2024, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 150 L of sewage at the Meliadine Gold Mine site (spill location coordinates: 63° 2' 5.21" N, 92° 13' 27.56" W). This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with:

• Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c.

Description of Incident

On January 2nd, 2024, at approximately 08:30, an estimated 150 L of sewage was spilled onto the ground by the crusher water transfer outlets. A Kivalliq Contractors Group (KCG) employee filled the crusher lavatory's freshwater tank using a water truck. While the KCG employee was refilling the water tank using the water tank inlet, sewage started to come out of the sewage tank outlet and spilled onto the industrial pad.

No natural water bodies were impacted, since the closest water body (Lake B7) is approximately 720 m southeast, as seen in Figure 1.





Figure 1: Location of the sewage spill and proximity to water bodies.

Response and Remediation

In response, the employee immediately stopped the water truck pump to prevent further spillage. The employee reported the event to their supervisor, who then reported to the spill to the Environment department. The Environment department responded to the spill to advise on spill response and remediation. Subsequently, the Energy & Infrastructure (E&I) personnel excavated the area to recover the sewage impacted material and transported the material to Landfarm A as per the Spill Contingency Plan.



Root Cause and Corrective Measures

An incident assessment was conducted soon after the incident occurred to determine the root cause and contributing factors. The assessment concluded with the following:

- Inadequate design and engineering of the crusher water transfer piping and water transfer outlets:
 - When the volume of water exceeds the capacity of the fresh water tank, water overflows on the vent of the sewage tank, eventually leading to a leak from the sewage tank outlet.
 - There is no high-level alarm for either holding tank.
 - There is no secondary containment for these water transfer outlets.
- The truck used for this task was under maintenance, and a truck with a more powerful water pump filled the tank quicker than usual.

The following corrective and preventative actions have been implemented to address the root cause and to reduce the likelihood of reoccurrence:

- The piping configuration will be modified to prevent excess water from falling into the sewage tank vent.
- Secondary containment and PVC piping elbows will be installed on each outlet to prevent spills and increase holding capacity.

A high-level alert system will be installed on this system.

Should you have any questions or require further information, please do not hesitate to contact the undersigned.



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Appendix – Photos





Photos 1: Sewage spill location.



Photo 2: Spill location post remediation.