



March 21st, 2023

Kyle Amsel
Water Resource Officer
Kivalliq Region, Field Operations Unit
Crown-Indigenous Relations and Northern Affairs Canada
Rankin Inlet, NU
X0C 0G0

Sent via email: kyle.amsel@rcaanc-cirnac.gc.ca

Re: Follow-up Report Spill #2023-073 – Release of 9 m³ of Sewage at the Meliadine Gold Mine

On March 1st, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 9 m³ of sewage at the Meliadine Gold Mine site (spill location coordinates: 63° 2' 23.60" N, 92° 13' 39.57"). 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 March 1st, 2023, at approximately 5:30 am, an estimated 9 m³ of sewage was spilled to the industrial pad due to an equipment failure at the main camp lift station causing it to overflow. The original report indicated that this spill occurred at 8:00 am, following the assessment it was identified that the spill began at approximately 5:30 am. The spilled sewage migrated south and collected in the multiple service building (MSB) parking lot where it was contained, and cleanup was initiated. No water bodies were impacted by this spill. The closest water body (G2) is approximately 280 meters north, as seen in Figure 1.



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

Spill Response and Remediation

The Energy and Infrastructure Maintenance supervisor was notified that the spill was occurring and switched the pumping system into manual mode to lower the lift station level and stop the release. The impacted area was scrapped using an excavator, and approximately 40 m³ of sewage-impacted snow and ice was recovered. Due to the large volume of material that was generated from the spill remediation, Agnico Eagle requested authorization from CIRNAC, in consultation with KivIA, to transfer the sewage-impacted snow and ice within the Tiriganiaq Pit 2. A one-time authorization was granted on February 17th, 2023.

Tiriganiaq Pit 2 is currently used for interim storage of saline contact water from the underground mine. This water will be treated at the Saline Effluent Treatment Plant (SETP) prior to discharge to sea at Melvin Bay to meet the MDMER discharge criteria.



Root Causes and Corrective Measures

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

- The float level detection system failed, resulting in the overflow.

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

- Installation of an ultrasonic level sensor to ensure reliable lift station levels. Completed March 15th, 2023.

Additional corrective actions for the Meliadine sewage system include the following:

- Installation of individual spill containment at wing lift stations – completed.
- Replacing pump blades at lift stations – completed.
- Development of reliability tracking tools to identify the cause of failure and improve response time – completed.
- Upgrades to lift station instrumentation to provide early warning of potential spills – in progress.
- Adding remote IO (input/output) panels to monitor each wing lift stations for faults – in progress.

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



Brett Fairbairn | Environment Coordinator

brett.fairbairn@agnicoeagle.com | Direct 819.759.3555 x4603996 |

Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada X0C 0G0

agnicoeagle.com     

Sent from Meliadine



Appendix – Photos



AGNICO EAGLE

MELIADINE



Photo 1: Sewage spill location.



Photo 2: Sewage spill post remediation.