Follow Up Report: #2022172
May 8th, 2022 – MEL-SR16
Surface Water Runoff

The following information refers to a potential incident reported by Agnico Eagle Mines Ltd. on May 8th, 2022, 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:

While conducting a routine inspection on May 8th, 2022, surface runoff water was observed at sampling station MEL-SR16 located on the south side of the Exploration Camp Road. Straw logs and wood chip logs were deployed to mitigate the transport of sediment further downstream.

A sample was collected for laboratory analysis to assess water quality as per Part D Item 18 of the 2AM-MEL1631 Amended Licence. Turbidity field readings were also taken. Upon visual inspection of the area and after completing sampling, Agnico Eagle decided not to wait for external results and report the event immediately as due diligence as a possible TSS exceedance of criteria listed under Part D Item 18 of the 2AM-MEL1631 Amended Licence. Laboratory results were received on May 25th and a concentration of 110 mg/L TSS was measured, confirming an exceedance of the allowable monthly mean concentration and maximum concentration of a grab sample for TSS as listed under Part D Item 18 of the 2AM-MEL1631 Amended Licence.

The coordinate of MEL-SR16 is "63 01'22.3'' 92 11'21.5". The closest water body (J5) is approximately 180m southeast.

Figure 1: Sample location MEL-SR16

Root Cause and Response

Sampling station MEL-SR16 is located downstream the Exploration Camp Road. The flow path of surface water runoff is from the north side of the road, running south over the road. Runoff across the road and the associated entrainment of sediment is the expected cause of the TSS exceedance.

The Hydrogeology specialist who carried out the sampling on May 8th, 2022, made the following observations:

- The water flowing at MEL-SR16 appeared turbid
- The flow was of low volume

In response to these observations, the following actions were taken:

- Turbidity measurements were taken to confirm visual observations
- A MEL-SR sample was taken as per the 2AM-MEL1631 Water Licence
- Straw logs and wood chip logs were installed on both sides of the road to filter out entrained sediment and to minimize flow velocity to encourage decantation of sediment from the flowing water
- The potential exceedance of Part D Item 18 of the 2AM-MEL1631 Amended Licence was reported as due diligence within 24 hours of the observation

Figure 2-3: During the event and after the event

Corrective Measures

To mitigate the risk of a reoccurrence, all surface runoff in the area is being closely monitored during routine inspections and following heavy rainfall events to ensure that appropriate sediment controls (e.g., straw logs, wood chip logs) are in place to minimize TSS transport.

Furthermore, water from the upstream area ponded area on site (Figure 2) is being collected via water truck as feasible and moved to the Containment Pond 2 (CP2) or Containment Pond 5 (CP5). The purpose of this activity is to minimize the likelihood of water running across the road during heavy rainfall events.

Agnico Eagle will be exploring longer term solutions if a risk of runoff to the environment persists in this area.