Follow Up Report: #21-360
August 22, 2021 – A40 TSS Release

The following information refers to an incident reported by Agnico Eagle Mines Ltd. on August 22, 2021, and is being provided in accordance with:

- the Nunavut Water Board License 2AM-MEL1631 Water License, Part H, item 8c
- the Fisheries Act, subsection 38(7)

Description of Incident:

At approximately 8:00a.m. on August 22nd, the Environment Department was notified that an unapproved trench had been cut within an overburden excavation zone of the Tiri-01 open pit expansion area (Figure 1). The workers involved cut the trench in order to divert water, which had accumulated due to heavy rainfall, away from the excavation zone. Turbid water flowing in the trench was directed towards accumulated water along the access road, which lies in the footprint of the future Tiri-01 open pit (Figure 1). A plume of turbid water began flowing downstream into pond A40, before mitigation measures were able to be deployed.

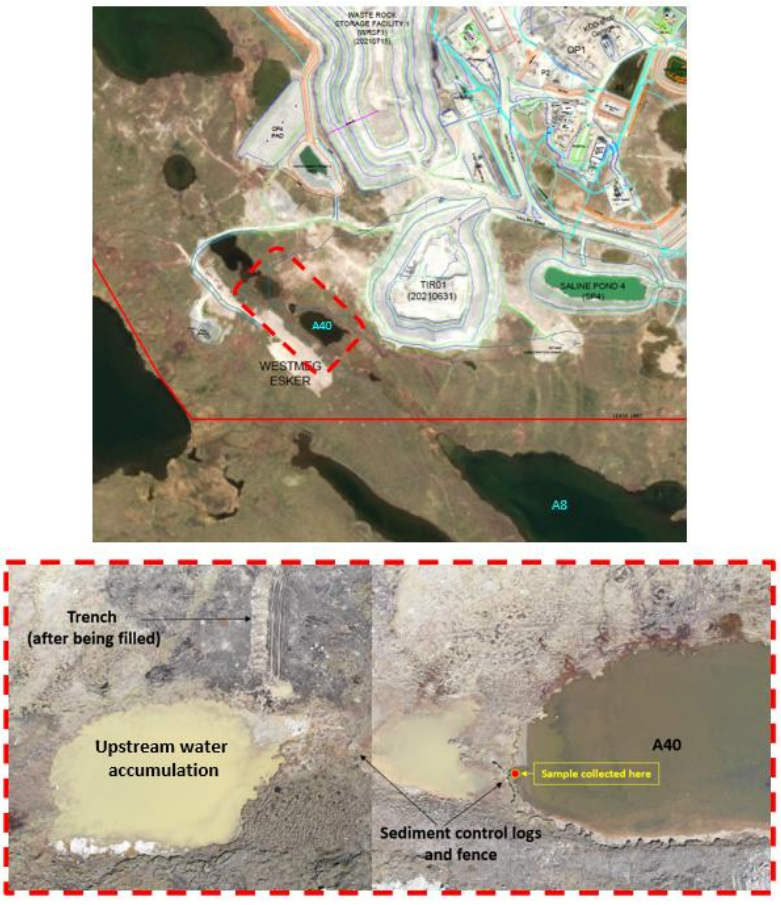

Figure 1: Upper panel shows the location of the general area relative to other site infrastructure. Lower panel shows a drone image of the impacted water bodies, and locations of the trench (after being backfilled) and sediment controls. Field turbidity readings were taken from A40, as well as a TSS samples downstream of the sediment control fence.

Immediate Corrective Actions:

Upon being notified of the situation, Environment personnel acted quickly to retrieve sediment control logs from storage and to investigate the area of concern. Upon arrival the trench was observed to have turbid water flowing through it and accumulating into an area of ponded water upstream of A40. Upon closer inspection, the Environment personnel realized that the accumulated water was very turbid and was making its way to a smaller pond (A40) approximately 90m downstream which then flowed into a larger lake (A8) approximately 700m downstream. Without delay, sediment control logs were deployed at the outlet of the accumulated water and at the inlet of A40 (Figure 1). At this time a plume of turbid water had reached the inlet of A40, and a sample was collected.

A sediment control fence and additional wood chip logs were installed at that location to prevent additional sediment from entering the pond and immediately lowered the turbidity of water entering A40 (Figure 2).

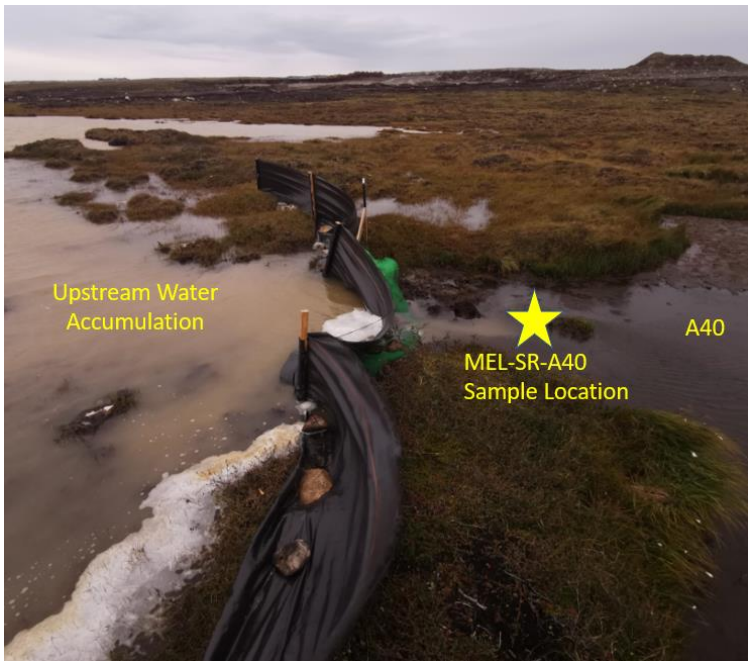

Figure 2: Installation of sediment control fence and logs. Sample location established immediately downstream of the sediment control fence.

Water samples were collected in the channel entering A40 (Figure 2) and sent to an accredited lab for analysis of Total Suspended Solids (TSS). One sample was collected prior to the sediment control measures having an appreciable impact, one was collected 4 hours later after the control measures were in place and working, and a third sample was collected the following morning. The results are shown in Table 3 below, and clearly demonstrate that the immediate mitigation measures reduced the TSS loading into A40 significantly. The event was reported prior to receiving lab results, as due diligence. Results were received on August 27 and exceeded the limit of 100 mg/L TSS, as outlined under the Nunavut Water Board License 2AM-MEL1631, Part D, item 18. The samples were identified as MEL-SR-A40 (surface runoff samples) according to the naming convention outlined in Table 2 of the Nunavut Water Board License 2AM-MEL1631.

RESULTS OF ANALYSES OF WATER

BV Labs ID		QML898		QML899	QML900		
Sampling Date		2021/08/22 09:02		2021/08/22 13:00	2021/08/23 07:00		
COC Number		na		na	na		
	UNITS	MEL-SR-A40	RDL	MEL-SR-A40	MEL-SR-A40	RDL	QC Batch
Inorganics							
Total Suspended Solids	mg/L	160	3	5	3	1	7545318
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

Table 3: TSS results before and after sediment control measures were installed. MEL-SR-A40 will continue to be a regularly sampled/monitored surface runoff compliance sampling location.

Cause of Incident and Corrective/Preventive Measures

Several factors contributed to the cause of this incident, including heavy and sustained rainfall, lack of knowledge, and lack of communication. Heavy sustained rainfall led to the accumulation of water in an area which was actively being stripped of overburden material. The operators who made the decision to cut a trench and divert water from ponding in their work area lacked knowledge of the potential downstream impacts. If proper communication was used, and the Environment, Water Management, or Geotechnical departments would have been consulted prior to digging this trench, other solutions could have been found to divert the water back into the site's existing water management infrastructure.

The immediate corrective action was to install the sediment controls logs and fence, which took effect right away. In order to ensure similar occurrences do not happen during future heavy rain periods, the accumulated water upstream of A40 will be captured and returned onsite to be managed by existing site water management infrastructure.

Furthermore, an education campaign is being developed with the purpose of providing an overview of the regulatory obligations of the water license, and Fisheries Act. Meetings will be held with managers and supervisors of various key departments so that all parties can improve their understanding and communications regarding water movements at Meliadine.

AGNICO EAGLE

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