



September 19th, 2022

Emily Koide
Technical Advisor I
Nunavut Impact Review Board
P.O. Box 1360 Cambridge Bay
Nunavut NU X0B 0C0

**RE: Opportunity to Address Comments Received for Agnico Eagle Mines Limited's
Meliadine Gold Mine Project 2021 Annual Report**

Dear Mrs. Koide,

Agnico Eagle Mines Limited thanks the Nunavut Impact Review Board (NIRB) for the opportunity to address comments received for Agnico Eagle Mines Limited's Meliadine Gold Mine Project 2021 Annual Report.

The following information and comments are intended to address comments outlined in the below referenced letters.

220620-11MN034-DFO Comments on 2021 Annual Report-IT7E

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

With my best regards,

A handwritten signature in blue ink, appearing to read "Sara J.", with a stylized flourish at the end.



Sara Savoie | Environment General Supervisor

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Sent from Meliadine



Fisheries and Oceans Canada (DFO)

DFO-2 Compliance Monitoring

DFO-2.2

Comment

In 2021, Agnico Eagle expressed concern for safety during operations due to steep slopes at the Tiriganiaq 01 pit and the close location to existing natural ponds. As a result of those concerns, Agnico Eagle proposed to dewater the ponds and modify the slopes in Tiriganiaq 01 pit for safer working conditions. The safety concerns are not identified in the 2021 Annual Report.

Recommendation

DFO recommends that the monitoring that identified the safety concerns and the subsequent plan to address the concerns be added to the Annual Report.

Agnico Eagle Answer

Analysis of historical wall performance at Tiriganiaq 02 pit, and subsequent benchmarking against expected wall performance at Tiriganiaq 01 pit has prompted re-design considerations for the Tiriganiaq 01 pit.

Open pit benches are designed to minimize to a reasonable extent (i.e., industry best practice guidelines) the probability of instabilities that would be encountered as the benches are excavated. It's not practical nor economical to completely eliminate all instabilities, so a balance must be maintained.

Tiriganiaq 02 pit, which was designed according to industry best practice guidelines, experienced a bench-scale rock fall in May of 2021 operations. The particular bench in question was designed at a face angle of 65° dipping north. Back-analysis of the rock fall revealed that the rock fabric (i.e., foliation) of that bench had a dip of 57° to the north. This combination of foliation which dips shallower than the bench face angle formed what is referred to as a daylighting wedge (or daylighting plane). This daylighting plane was determined to be the most likely cause of the rock fall.

Following this event, the expected wall performance at Tiriganiaq 01 pit was re-evaluated. Ultimately, considering that Tiriganiaq 01 pit would be excavated in approximately the same rock mass as the Tiriganiaq 02 pit, it was concluded that the same shallow foliation would likely be encountered in the Tiriganiaq 01 pit benches, therefore resulting in similar rock falls. Note that at this time, the Tiriganiaq 01 pit benches in question were also designed at a face angle of 65° dipping north.



Given the risk posed to worker health and safety, it was concluded that if those particular benches of Tiriganiaq 01 pit were shallowed slightly to 62°, the probability of instabilities would be reduced considerably, and therefore the change was implemented.

This change in bench geometry did result in a change to the pit footprint which lead to required dewatering of ponds A9, A40, B33 and B33A. The 2022 Annual Report will further discuss the dewatering process that took place during summer 2022 and associated monitoring.