

October 5, 2021

Tara Arko  
Director, Technical Services  
Nunavut Impact Review Board  
PO Box 1360  
Cambridge Bay, NU  
X0B 0C0

**Project Activity Courtesy Notice – Intent to Proceed with Pond Dewatering, Meliadine Mine**

Dear Ms. Arko,

Agnico Eagle Mines Limited (Agnico Eagle) is writing to provide the Nunavut Impact Review Board (NIRB) with notification that it intends to dewater certain ponds located within its mine infrastructure footprint (namely, A40, B33, B33A, A9, A38, J6, J5, and J4) as further described in Appendix 1 for preventative purposes. Agnico Eagle intends to proceed with this activity as early as June 2022.

Pond A40, B33, B33A, A9, A38, J6, J5, and J4 and their main characteristics (depth and area) are listed in the appended table and located on the appended map. All of the ponds being considered for dewatering are within the footprint of the Meliadine Gold Mine and are not used by community members. Furthermore, these ponds have generally been assessed to be impacted within the 2014 Final Environmental Impact Statement (FEIS) for the Meliadine Gold Project. Pond A40 was not explicitly referenced in the FEIS, but this pond has a minimal footprint (0.8 ha and depth of 1.0 m) and any potential environmental effects arising from this activity would be fully captured in the existing monitoring programs established under the Meliadine Project Certificate.

It should also be noted these activities (pond dewatering) are not associated with nor trigger any changes to current saline water management and this activity does not change or have any impact on the pending Waterline application.

As set out in in the scope of Type A Water Licence 2AM-MEL1631, dewatering ponds is included within the scope of permitted mining and associated activities at the Meliadine Gold Project. The activity is also consistent with the previous positive conformity determinations that have been issued by the Nunavut Planning Commission, as well as previous environmental assessments carried out by the NIRB in relation to the Meliadine Mine.

Agnico Eagle confirms this activity will proceed in accordance with all terms and conditions of Project Certificate No. 006, and will not contravene the Type A Water Licence 2AM-MEL1631 or the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*. All dewatering will take place in accordance with the existing terms and conditions of Type A Water Licence 2AM-MEL1631, Part D, Item 12 and 13 as follows:

12. All Waters from dewatering activities at Monitoring Program Stations MEL-D-1 through MEL-D-TBD shall be directed to Meliadine Lake and shall not exceed the following Effluent quality limits:

Parameter	Maximum Monthly Mean Concentration	Maximum Concentration in a Grab Sample
Total Suspended Solids (TSS) (mg/L)	15.0	30.0
pH	6.0 to 9.5	6.0 to 9.5

13. All Waters, exceeding the Effluent quality limits under Part D, Item 12, shall be released to CP1.

Consistent with the FEIS, Agnico Eagle has not identified any potential impacts to the receiving environment arising from this activity. Dewatering of the ponds located near the Pit Tiriganiaq 02 (B33, B33A, A40) is motivated by a change in the pit footprint due to structural and safety issues as summarized by the Meliadine Engineering Team in Appendix 2.

Dewatering of the remaining waterbodies (A9, A38, J6, J5, and J4) is being considered as due diligence, due to their close proximity to mining infrastructure.

Should you have any questions or comments, please don't hesitate to contact us.

Kind regards,



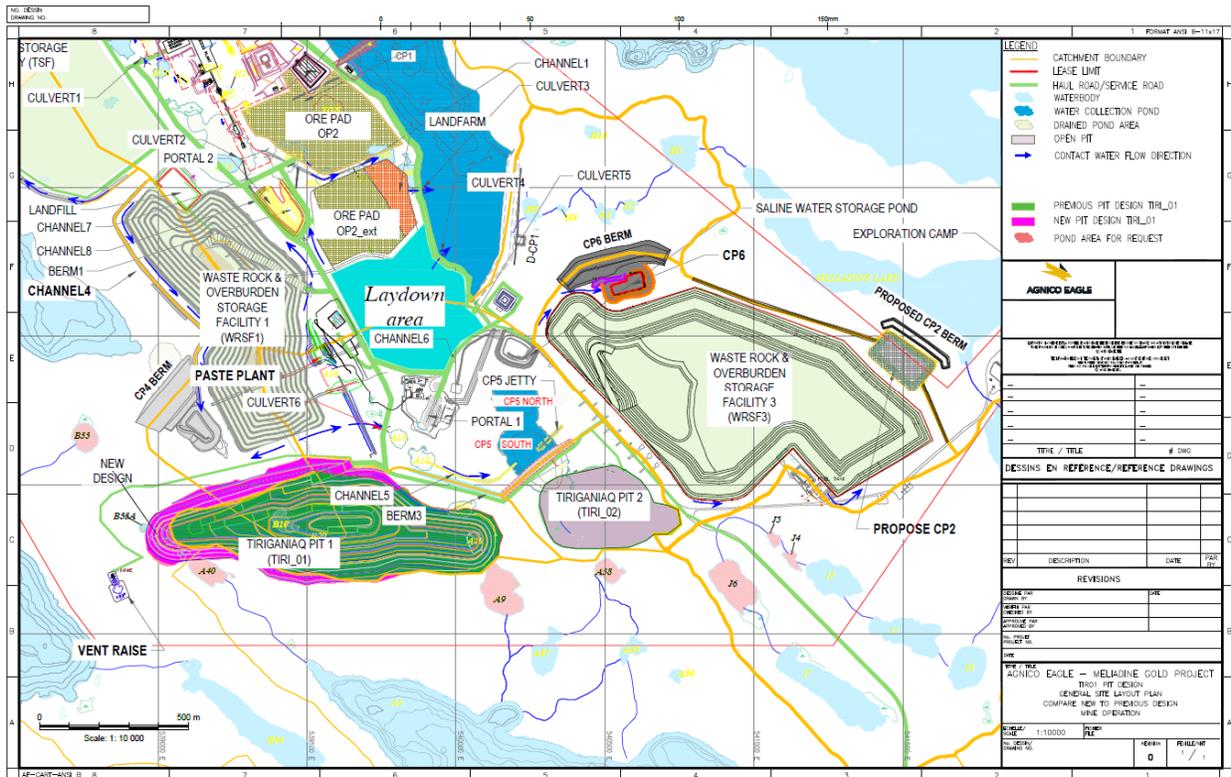
Jamie Quesnel  
Director, Permitting and Regulatory Affairs  
Agnico Eagle Mines Limited

## APPENDIX 1

Table 1. Characteristics of Ponds Being Considered for Dewatering

Pond	B33	B33A	A40	A9	A38	J6	J5	J4
2014 FEIS	Planned to be Impacted	Planned to be Impacted	Not planned to be Impacted	Planned to be Impacted				
Area (Ha)	0.7	0.4	0.8	1.8	0.5	1.8	0.2	0.2
Maximum Depth (m)	1.2	1.0	1.0	0.5	0.7	0.7	0.4	0.5

Figure 1. Location of Ponds Being Considered for Dewatering



## **APPENDIX 2**

The south wall performance of Pit Tiriganiaq 02 is prompting re design considerations for Pit Tiriganiaq 01.

Tiriganiaq 02's south wall experienced significant rock fall (approximately 470 T) during winter 2021, as a result of the relationship between the final wall geometry and the natural fabric of the rock.

The inter bench face angle had been designed at 65 degrees with 60% reliability (40% potential of failure based on pre-production structural understanding), in accordance with best practices. Post failure structural analysis revealed that the rock fabric in that area has a combination of flat joints that are more developed than originally understood and a foliation that is at an angle of about 57 degrees.

The foliation is generally understood to be at 60 degrees at Meliadine. These geometries, in conjunction to the 65 degrees inter bench face angle are most likely responsible for the failure.

The extent and size of the failure revealed the pervasiveness of these natural geometries and the potential impact on face stability of the unfavorable interaction between them and the inter bench face angle.

In light of this enhanced understanding and the Tiriganiaq 02 rock fall, good practice dictates assessing adjustments that could be made to future excavations presenting the same behavior.

Tiriganiaq 01 pre-production structural analysis reveals the same rock mass fabric and properties as in Tiriganiaq 02. The Tiriganiaq 01 original pit geometry has the potential of having the same unfavorable interaction with the rock mass in its south wall as Tiriganiaq 02, most likely resulting in the same unsatisfactory behavior as in Tiriganiaq 02, with potentially an even bigger impact considering the size of the pit.

A statistical analysis shows that reducing the bench face angle to 62 degrees brings down the probability of failure to 25% as it is much closer to the foliation's 57 degrees. Also, moving permanent haulage routes to the north side away from any potential failures on the south side is part of the design change considerations.