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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No: **2AM-MEL1631/
Amendment Application**

September 23, 2020

Jamie Quesnel
Regional Manager – Permitting and Regulatory Affairs
Agnico Eagle Mines Limited
Nunavut Office 11600 rue Louis-Bisson, Suite 540
Mirabel, Quebec, Canada J7N 1G9

Email: jamie.quesnel@agnicoeagle.com

**RE: Water Licence No: 2AM-MEL1631; Amendment Application by Agnico Eagle
Mines Limited; Meliadine Project**

Dear Mr. Quesnel:

This correspondence is to inform you that the amendment application for Water Licence No: 2AM-MEL1631 (the Application) submitted on August 27, 2020 by Agnico Eagle Mines Limited (Agnico Eagle) for the Meliadine Project, has been reviewed by the interested parties for completeness and initial technical assessment, as requested in the Nunavut Water Board's (NWB or Board) letter, dated August 28, 2020¹.

On September 22, 2020, comments were received from the Kivalliq Inuit Association (KivIA), Crown-Indigenous Relations and Northern Affairs (CIRNA) and the Environment and Climate Change Canada (ECCC). These comments are provided in the attached files and can also be accessed through the following NWB FTP link:

<ftp://ftp.nwb-oen.ca/registry/2%20MINING%20MILLING/2A/2AM%20-%20Mining/2AM-MEL1631%20Agnico/2%20ADMIN/3%20SUBMISSIONS/>

Additionally, the NWB's comments are summarized in the table below.

¹ R. Dwyer (NWB) to J. Quesnel (Agnico Eagle); RE: Water Licence No: 2AM-MEL1631; Amendment Application by Agnico Eagle Mines Limited; Meliadine Project; August 28, 2020.

No.	Concerns/ Recommendations
Nunavut Water Board (NWB)	
1.	<i>Operational State of all Treatment Plants on Site</i>
	<ul style="list-style-type: none"> • Please provide a short summary discussing the operational state of all treatment plants on site: EWTP, SWTP, SETP, RO, STP. This summary can be presented in a form of a table and should specify whether the treatment plant is operational (and if not, when it is anticipated to be in operation), as well as include the information on the designed treatment capacity (Volumes, TDS/ TSS) vs. actual treatment capacity, along with a discussion on how any deficiencies identified to date are planned to be improved. <p>** <i>EWTP – Effluent Water Treatment Plant</i> <i>SWTP – Saline Water Treatment Plant</i> <i>SETP – Saline Effluent Treatment Plant</i> <i>RO – Reverse Osmosis system</i> <i>STP – Sewage Treatment Plant</i></p>
2.	<i>Water Balance on Site</i>
	<p><u>Summary:</u> The water balance information provided in the document entitled <i>Meliadine Site Water Balance and Water Quality Model</i>, dated August 21, 2020, indicated that there will be some outflow from the EWTP to Saline Pond 3 (SP3) over the months of June – September. It is unclear whether this is the effluent that will exceed the Licence discharge criteria or that, which is planned to be further directed to the Melvin Bay via the proposed waterline.</p> <p>Additionally, the Water Balance Model does not seem to account for any Collection Pond 1 (CP1) water to be reused in the process plant, as stated in Section 4 of the <i>Water Management Plan (WMP)</i>, Version 10, dated August 2020.</p> <p>Also, it is unclear whether the volumes coming from the STP include the sewage coming from the exploration camp or just the main camp sewage.</p> <p><u>Recommendations:</u></p> <ul style="list-style-type: none"> • Provide some clarification on the EWTP to SP3 outflows; • Provide clarification on the CP1 water to be reused in the process plant; • Provide clarification whether the exploration camp sewage was accounted for in the model.
3.	<i>Saline Water Management</i>
	<p><u>Summary:</u> Section 3.1 of the <i>Groundwater Management Plan (GWMP)</i> states that “over 2019, inflow mitigation included both grouting (pre-production and in response to inflows) and avoiding mining in areas expected to produce high groundwater inflow rates” and</p>

	<p>further clarifies that the discharge to Melvin Bay via a waterline, as a <i>“long-term groundwater management strategy, will aim to provide capacity to manage non-mitigated inflows over the life of mine”</i>. Section 3.4.2.2 of the GWMP states that <i>“saline water storage capacity will be at capacity by mid-May 2021”</i>.</p> <p>The NWB notes that Agnico Eagle has had several interruptions in saline water discharges this season, most recently due to the TSS exceedances reported on August 28, 2020 and September 16, 2020. It is unclear whether these discharge interruptions have affected the anticipated at-capacity predictions.</p> <p>The Board also notes that as per the correspondence issued by the Nunavut Impact Review Board (NIRB)², dated September 22, 2020, the option of diverting a portion of CP1 effluent to the waterline going to the Melvin Bay was just added to the application that is currently before the NIRB, which means that this alternative will still have to undergo the NIRB’s assessment and parties technical review, potentially delaying the process of building the waterline.</p> <p>It is unclear whether any other strategies (other than avoiding stopping within the cryopeg) have been considered in case the discharge via a waterline does not get approved on time or ever. Also, it is not clear how any potential delays in the waterline approval will affect the integrity of the existing infrastructure, considering that the Saline Ponds might be at capacity sooner than expected.</p> <p>Section 3.4.1.1 of the GWMP talks about a possibility to stop mining at the Tiriganiaq Pit 2 in order to accommodate the excess saline water. The Board understands that this change might have significant implications on production and would like to see a more detailed description of this option.</p> <p><u>Recommendations:</u></p> <ul style="list-style-type: none"> • List all long-term strategies that were considered in response to the increased groundwater inflow rates; • Comment on the integrity of the infrastructure due to delays in the waterline approval; • Provide more information regarding the possibility to stop mining at the Tiriganiaq Pit 2 in order to accommodate the excess saline water.
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The NWB requests Agnico Eagle to respond to all aforementioned comments from the parties in addition to the NWB’s comments by **Wednesday, September 30, 2020**.

² NIRB Letter; RE: Finalized scope of Agnico Eagle’s “Saline Effluent Discharge to Marine Environment” Project Proposal related to the Meliadine Gold Mine Project; September 22, 2020.

Should you have any questions, please feel free to contact the undersigned at (867) 360-6338 (extension 29) or sergey.kuflevskiy@nwb-oen.ca, at your earliest convenience.

Sincerely,



Sergey Kuflevskiy
Technical Advisor
NUNAVUT WATER BOARD

Enclosure: Comments – KivIA, CIRNA, ECCC

Cc: Distribution List – Meliadine