

Environmental Protection Operations Directorate
Prairie & Northern Region
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ECCC File: 6100 000 012/015
NWB File: 2AM-MEL1631



August 14, 2025

via email at: richard.dwyer@nwb-oen.ca

Richard Dwyer
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Richard Dwyer:

RE: 2AM-MEL1631 – Agnico Eagle Mines Ltd. – Meliadine Gold Mine – Notice of Modification

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Water Board (NWB) by Agnico-Eagle Mines Ltd. ("the Proponent") regarding the above-mentioned Notice of Modification.

ECCC provides expert information and knowledge to project assessments on subjects within the department's mandate, including climate change, air quality, water quality, biodiversity, environmental emergencies preparedness and responses. This work includes reviewing proponent characterization of environmental effects and proposed mitigation measures. We provide advice to decision-makers regarding a proponent's characterization of environmental effects, the efficacy of their proposed mitigation activities, and may suggest additional mitigation measures. Any comments received from ECCC in this context does not relieve the proponent of its obligations to respect all applicable federal legislation

The following comments are provided:

1. Potential Impact of Saline Water Storage on Freshwater Waterbodies

Reference:

Water Licence 2AM-MEL1631 Modification – Shallow Pump Underground Development within Permafrost and Water Storage in Pits
○ Section 2 – Conditions Applying to Modifications



Comment:

The modification notice proposes for saline water to be stored in mined out pits (WES02, WES03, TIRI02, and PUMP02). The notice states that this approach remains within the scope of current water management practices as saline water is stored in TIRI02 and saline ponds. While it is noted that saline water is currently stored on site, the storage of saline water in the specific pits has not been previously assessed. Saline water storage, if not managed correctly, may represent a risk to nearby surface waters. The Proponent has not provided any confirmation that they have assessed the mined-out pits for connectivity to surface waters or any preferential pathways that may allow for movement of saline water and potential impacts to surface waters.

ECCC Recommendation:

ECCC recommends the Proponent provide a discussion on whether any connection or preferential pathways exist between the mined-out pits proposed to be used for saline water storage and the freshwater environment.

2. Monitoring Stations

Reference:

Water Licence 2AM-MEL1631 Modification – Shallow Pump Underground Development within Permafrost and Water Storage in Pits

- Section 2 – Conditions Applying to Modifications

Comment:

The modification notice states that Agnico Eagle does not anticipate the need for any additional monitoring beyond that already included in the Water Licence for the proposed activities and that they will continue to adhere to the monitoring requirements listed in Schedule I of the Licence. However, the notice also states that, “as mined-out pits are progressively used for the storage of saline or contact water, Agnico Eagle will review the verification monitoring stations and assess if additional stations, or adjustments, are warranted.” ECCC notes that verification monitoring is an important step that contributes to overall understanding of the site conditions as well as water balance and water quality monitoring. ECCC is supportive of inclusions of additional verification monitoring stations once water storage in the pits begins.

ECCC Recommendation:

ECCC recommends that additional verification monitoring stations are added once water storage begins in WES02, WES03, TIRI02, and PUMP02.

3. Updates to Water Management Plan

Reference:

Water Management Plan Version 16 (June 2025)

- Section 4.1.2: Underground Water Management
- Section 5: Water Balance

Water Management Plan Version 15B (March 2025)

- Section 4.1.2: Underground Water Management
- Section 5: Water Balance

Comment:

An updated Water Management Plan (Version 16) was provided alongside the modification request and includes several substantial changes from the previous version (Version 15B). The updated version has removed details from Section 4.1.2 (Underground Water Management) and includes numerous deletions from Section 5 (Water Balance). Deleted portions of Section 4.1.2 include details related to groundwater modelling and inflow rates in the Tiriganiaq Underground. It is assumed that these details are still relevant to overall water management, and this section may require additional details to include Pump Underground. Deletions from Section 5 include: model setup, water management and assumptions, water balance model methods, and waterbody inventory (Version 15B - page 47 - 60, Sections 5.2 – 5.5). These deletions include details on many topics which are expected to still be relevant to the modification request, so it is unclear why these sections were removed.

ECCC Recommendation:

ECCC recommends the Proponent update the Water Management Plan to include deleted details related to Underground Water Management and Water Balance. These sections should also be updated to reflect any relevant details associated with the modification request.

If you need more information, please contact Erik Allen at Erik.Allen@ec.gc.ca.

Sincerely,

Erik Allen
Senior Environmental Assessment Officer

cc: Eva Walker, Head, Environmental Assessment North (NT and NU)