

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



October 2, 2020

via email at: [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)

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

Dear Richard Dwyer,

**RE: 2AM-MEL1631 Agnico Eagle Mines Ltd. – Meliadine Water Licence Amendment Application**

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Water Board (NWB) regarding the amendment application for water licence 2AM-MEL1631 by Agnico Eagle Mines Ltd (the Proponent). As requested by the NWB, ECCC has reviewed the Proponent's responses to Information Requests (IRs) submitted by ECCC.

ECCC's specialist advice is based on our mandate pursuant to the *Canadian Environmental Protection Act* and the pollution prevention provisions of the *Fisheries Act*.

The following comments are provided:

**ECCC-WL-IR-1**

ECCC has requested information on alternative treatment plant sludge disposal methods (as CP1 will ultimately be reconnected to surface waters), along with sludge characterization results.

AEM has responded that a more complete characterization of the sludge (than just the conductivity measured to date) and additional detail on alternative options would be provided prior to the technical meeting.

For clarity, ECCC requests a list of the parameters that AEM intends to analyze in the sludge, noting that the concern will be with parameters which may render sediment quality and/or overlying water quality harmful.

**ECCC-WL-IR-2**

ECCC sought clarification of the fate of the additional volumes of water being applied for in the amendment request, and AEM responded that the increase in freshwater consumption would not result in additional surface contact water to manage as the reclaim water from the tailings is



recovered by the filter press. ECCC notes that the freshwater consumption is to be increased from 318,000 m<sup>3</sup>/year to 741,706 m<sup>3</sup>/year due to increased mill water use, and if the tailings water in the mill is to be fully reclaimed it is unclear why the additional 423,706 m<sup>3</sup>/year of water is needed. It would be helpful for AEM to clarify if the additional water ends up in other places.

#### **ECCC-WL-IR-6**

ECCC requested that inconsistencies between the Water Quality and Flow Monitoring Plan (WQFMP) and current operational plans and practices be clarified.

AEM responded that once the P-area ponds are decommissioned they will update the WQFMP. However, this does not confirm or clarify whether the Reverse Osmosis plant will be used at CP5 for discharges to CP1, as is stated in the WQFMP but contrary to what was stated in the Water Management Plan and in the site water balance report. Based on the response to NWB-WL-IR-1 it appears the RO will be fully decommissioned and the WQFMP should also reflect this.

#### **ECCC-WL-IR-7**

ECCC commented that the validation monitoring for the increased TDS limit was not completed, and furthermore, had not monitored effluent discharges with TDS at levels as high as those proposed.

AEM responded that the results of the 2020 monitoring and evaluation will be presented in Version 4 of the Water Quality Management and Optimization Plan (WQ-MOP), which is to be submitted prior to the technical meeting.

ECCC anticipates that the next version of the WQMOP will provide the completed monitoring results and evaluation of the 2020 discharge, and can provide information for reviewing the edge-of-mixing zone targets and proposed TDS limits.

ECCC agrees that the application may proceed to the technical review stage. Follow-up responses to the issues identified in this letter may be provided then. If you need more information, please contact Victoria Shore at [Victoria.Shore@canada.ca](mailto:Victoria.Shore@canada.ca).

Sincerely,



Margaret Fairbairn, Acting Regional Director  
Environmental Protection Operations Directorate, Prairie Northern Region

cc: Brian Asher, Acting Head, Environmental Assessment North (NT and NU)