



Environmental Protection Operations Directorate
Prairie & Northern Region
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Yellowknife, NT X1A 2P7

ECCC File: 6100 000 012/015
NWB File: 2AM-MEL1631

June 25, 2018

Via email at: licensing@nwb-oen.ca

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

Dear Mr. Dwyer:

**RE: 2AM-MEL1631 – Agnico Eagle Mines Ltd. – Meliadine Gold Project –
Groundwater Management Plan Version 2**

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Water Board (NWB) regarding the above-mentioned management plan and is submitting comments via email as requested by NWB. ECCC's specialist advice is provided based on our mandate, in the context of the *Canadian Environmental Protection Act*, the pollution prevention provisions of the *Fisheries Act*.

The following comments are provided:

Errata

1. Section 2.4 (Mine Development Plan) indicates that Phase 2 will be "8 years for Mine Operations, beginning in 2017 and ending in 2027". Phase 2 should be shown as beginning in 2019 or 2020.

ECCC recommends that Agnico Eagle Mines Ltd. (the Proponent) correct the year in which Phase 2 begins.

Marine Discharges

2. Section 3.4.3 (Potential Future Long-Term Management Strategy - Treated Groundwater Discharge to Melvin Bay at Itivia Harbour) notes that discharge to the ocean would have to meet criteria under the *Metal Mining Effluent Regulations* or the amended version. ECCC confirms that the *Metal and*

Diamond Mining Effluent Regulations (MDMER) came into force on June 1st, 2018 and will be applicable to discharges to Melvin Bay. The consolidated MDMER is available at: <http://laws-lois.justice.gc.ca/eng/regulations/SOR-2002-222/index.html> (note that many of the relevant changes are found in the text following the legislation under “Related Provisions”, including the revised discharge criteria for Schedule 4 Table 2).

Sampling of Minewater

3. Section 4.3 (Water Quality) states that “Water samples will be analyzed for the following parameters: conductivity, TDS, pH, temperature, major anions, radium 226, dissolved and total metals and toxicity testing. Water quality results are compared to MMR and SSWQO guidelines and will be compliant prior to discharging to Meliadine Lake.” Given that there is no direct discharge to Meliadine Lake without treatment, this section should include the qualifier “compliant after treatment”. In addition, it is not clear whether “major anions” includes ammonia.

ECCC recommends that the Proponent:

- a) include “compliant after treatment” in Section 4.3 as noted above; and
- b) clarify whether major anions is intended to include ammonia.

Should you require further information, please do not hesitate to contact me at (867) 669-4733 or Melissa.Pinto@canada.ca.

Sincerely,

[original signed by]

Melissa Pinto
Senior Environmental Assessment Coordinator

cc: Georgina Williston, Head, Environmental Assessment North (NT and NU)
ECCC Review Team
Alex Chernoloz, Environmental Compliance Counselor, Agnico Eagle Mines Ltd.