Water Resources Nunavut Regional Office P.O. Box 100 Iqaluit, NU, X0A 0H0

June 10, 2016

Karén Kharatyan Manager of Licencing Nunavut Water Board Gjoa Haven, NU, X0E 1J0 INAC reference CIDM# 1071891

NWB reference #2BB-MEL1424

Re: Indigenous and Northern Affairs Canada's (INAC's) Review of Agnico Eagle Mines Ltd.'s Freshet Action Plan for Water Licence #2BB-MEL1424

Dear Nunavut Water Board:

Thank you for your email on May 26, 2016, concerning the above mentioned application. A memorandum is provided for the Board's consideration. Comments and recommendations have been provided pursuant to Indigenous and Northern Affairs Canada's mandated responsibilities under the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Department of Indian Affairs and Northern Development Act.

Please do not hesitate to contact me by telephone at 867-975-4282 or email at ian.parsons@aandc-aadnc.gc.ca for further information.

Sincerely,

lan Parsons Regional Coordinator, B.Sc. Aboriginal Affairs and Northern Development Canada P.O. Box 100 Iqaluit, NU, X0A 0H0

c.c.: Karen Costello, Director Resource Management, Nunavut Regional Office (NRO), INAC
Erik Allain, Manager of Field Operations, NRO, INAC

# **Memorandum**

#### **Comments:**

### A. Background

On May 26, 2016, the Nunavut Water Board (NWB) provided notification of Agnico Eagle Mines Ltd.'s (the "Licensee") freshet action plan for Water Licence #2BB-MEL0914 in support of their Meliadine Gold Project.

Interested parties were asked to review this application and provide comments by June 10, 2016.

#### **B.** Results of review

On behalf of INAC, the following comments and recommendations are provided:

1. General Issue: Water Treatment

#### References

- 2.1.5 P1 Area Capacity Management, page 8
- 2.6.1 Dome 1-2-3-4 Pads and Surroundings, page 13
- 2.6.2 Camp Pad and Surroundings, page 14

#### Comment

In section 2.1.5 the proponent states that, "If the water doesn't meet permissible limits, treatment or evaporation of the contained water with evaporators, will be applied and additional water samples will be collected to confirm water quality."

In section 2.6.1 the proponent states that, "If water infiltration is getting in contact with the "presume" contaminated soil in domes, a "water treatment" system will be implemented to mitigate the situation."

In section 2.6.2, the proponent states that, "If water infiltration is getting in contact with the "presumed" contaminated soil in the domes, a "water treatment" system will be implemented to mitigate the situation."

INAC is concerned that how treatment of water will be done and what arrangement are in place to treat contaminated water if the water doesn't meet the permissible limits.

## **Recommendations**

INAC recommends proponent to provide details on the treatment arrangements (equipment and technology) if the water doesn't meet the permissible limits, as well as explaining how the use of evaporation as a treatment technology would work (wouldn't any evaporation lead to a less diluted situation therefore water quality samples would lead to higher concentration of contaminants.) Also INAC would like the proponent to describe how any residual water would be treated or disposed of.

### 2. General Issue: Snow Management

#### References

- · 2.4 Landfarm , page 10
- 2.5.1 All Weather Access Road (AWAR) Risk Management, Page 11
- 1.1.2 (1) Major Crossing, page 15
- · 3.1.2 (1) Ditches Area, page 18
- 3.2.1 (1) Dome contaminated soil, page 18

#### Comment

In section 2.4, the proponent states that, "Snow and ice accumulation within the land farm must be adequately managed to prevent overflow to the environment and/or damage to the liner."

In section 2.5.1, the proponent states that, "All water crossings will have snow removed from ice surface on the up and downstream side of the crossing to allow free flow of water."

In section 3.1.1.2 (Major Crossings) (1), the proponent states that, "Clean all ice and snow impeding free water flow at all major water crossings, before May 15"

In section 3.3.1.2 (Ditched Areas) (1), the proponent states that, "Snow and/or ice must be removed with an excavator to allow water flow and prevent ponding."

In section 3.3.2.1 (Dome Contaminated Soil) (1), the proponent states that, "Remove the top layer of snow before snow melt."

The Freshet Action Plan describes how snow removal will be used as a management method to mitigate impacts on the environment. INAC is concerned that the plan does not identify the location for snow disposal if this snow has been in contact with contaminants.

#### **Recommendations**

INAC recommends that the proponent identifies snow disposal locations that are compatible with the goal of mitigating impacts on surface water, groundwater and land if the snow removed has been in contact with contaminants.

3. General Issue: Land Farm and Bermed Containment Facilities

### References

Section 3.3.3.5 Land farm structure, page 20

### Comment

In section 3.3.3.5, the proponent states that sampling will be done at the Landfarm structure if any seepage for fuel contaminated water is encountered (As per Licence 2BB-MEL1424, Section D, Item 15 criteria).

INAC is concerned that the Freshet management plan does not contain information on water management at the Bermed Fuel Containment Facilities, or Landfarms ((As per Licence 2BB-MEL1424, Section D, Item 15 criteria)

### Recommendations

INAC recommends that a description of the contingency measures and details on treatment process in the event that water in the containment areas (mentioned below) does not meet discharge criteria

- Bermed Fuel Containment Facilities
- Landfarm structure