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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No.: **2AM-MEL1631/TR/J1**

March 11, 2020

Sara Savoie
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Agnico Eagle Mines Limited
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Email: sara.savoie@agnicoeagle.com

RE: Interim Closure and Reclamation Plan; Type "A" Water Licence No. 2AM-MEL1631, Meliadine Gold Project, Agnico Eagle Mines Limited

Dear Ms. Savoie:

The Nunavut Water Board (NWB or Board) has completed a technical review of the Plan entitled "*Meliadine Interim Closure and Reclamation Plan 2019"* dated December 12, 2019 (Plan) provided to the Board by Agnico Eagle Mines Limited (Agnico Eagle or AEM) on December 13, 2019 to fulfill the requirements of Part J, Item 1 of Water Licence No. 2AM-MEL1631 (Licence).

This document presents the first Interim Closure and Reclamation Plan (ICRP) for the Commercial Operation phase of the Meliadine Gold Project. The general purpose of this ICRP is to update the Preliminary Mine Closure and Reclamation Plan produced for the development phase of the Project. This ICRP, based on the current life of mine, provides increasing levels of detail on the closure and reclamation of individual project components and details for components, which are to be progressively reclaimed earlier in the mine life.

Upon receipt, the submission was distributed for a four (4) week public review with a deadline set at January 17, 2020. On or before the deadline for comments, the NWB received submissions from Environment and Climate Change Canada (ECCC), Crown-Indigenous Relations and Northern Affairs (CIRNA) and the Kivalliq Inuit Association (KivIA). In its submission, the KivIA indicated that they had no comments related to the Interim Closure & Reclamation Plan at this time.

On January 17, 2020, Agnico Eagle was asked to address the comments provided by the parties, along with the comments provided by the NWB.

All correspondence relevant to this submission is available from the NWB's ftp site using the following link:

ftp://ftp.nwb-oen.ca/registry/2%20MINING%20MILLING/2A/2AM%20-%20Mining/2AM-MEL1631%20Agnico/3%20TECH/J%20A%20and%20R/ICRP/

On February 24, 2020, Agnico Eagle submitted their responses to the comments confirming the following:

Comment #	Proponents' comments /AEM's responses
ECCC-1	**Closure Water quality objectives – pits and connection to surface Waters**
	AEM commits to modify the ICRP to specify the Water quality objectives for closure (baseline conditions or national water quality objectives). AEM commits to include a *map illustrating post-closure drainage conditions to and from the pit lakes* within the next version of the ICRP.
ECCC-2	**Closure Water quality objectives – Arsenic**
	AEM commits to identify the parameters that do not have receiving environment guidelines or site-specific objectives and include these parameters into the Water Quality Post-Closure Monitoring Program. AEM commits to review and update the onsite Water quality forecast throughout different operational stages and discuss these updates in the next versions of the ICRP. AEM commits to include Total Arsenic (in addition to dissolved Arsenic) into their analysis.
ECCC-3	**Closure of the mine site – erosion/ instability management**
	AEM clarified that *selected equipment will remain on site until the end of post-closure, in order to complete corrective work if required.* Additionally, the necessary equipment can be available from the Municipality of Rankin Inlet and mobilized via AWAR, which will remain open during post-closure.
ECCC-4	**Closure of the Landfarm – removal of linear, drainage in the active layer**
	AEM clarified that *the liner will be left in place and covered with additional material if required.* Additionally, *berm and base will be sampled on a 10 metre grid to determine if these soils are free from PHC contamination.*
ECCC-5	**Waste Rock Storage Facilities – WRSF cover placement, management of contact Water**
	AEM corrected Section 5.2.5.8 to reflect that the closure cover system is not proposed for the Waste Rock Storage Facilities (WRSF) and that *the thermistors will be installed to monitor the freeze-back and permafrost development*. AEM clarified that *the contact Water management system for the WRSFs will remain in place until mine closure activities are completed* and Water quality meets regulatory requirements.

ECCC-6	**Soil Chemistry – new MDMER discharge limits**
	AEM understands that the discharge limits in the amended Regulations for MDMER come into force June 1, 2021.
ECCC-7	**Waste Rock Storage Facilities – distance to the lakes, leachate quality**
	AEM provided the distances from the WRSFs to the closest ponds and lakes and clarified that there are multiple catchment areas within the mine footprint and that contact water will be diverted to the respective containment ponds and eventually to CP1. *The WRSFs water management infrastructure will remain in place until mine closure activities are completed and monitoring results* (MEL-21, MEL-22, MEL-23) meet the regulatory requirements.
CIRNA-1	**Review of Updated Security Estimate**
	AEM plans to review the cost estimate with CIRNA and KivIA in Q2 2020.
CIRNA-2	**Closure Schedule: extend post-closure monitoring to 25 years and interim care and maintenance to 5 years**
	Agnico Eagle does not agree with extending monitoring out to 25 years, and there has been no technical justification for the change since the project certificate and Water License was issued. *Agnico Eagle believes that a period of three (3) years for interim care and maintenance is adequate for the Meliadine ICRP* in accordance with the Reclaim User Manual Guide (GNWT, 2017).
CIRNA-3	**Parameters and schedules for Post Closure Monitoring**
	AEM clarified that Table 2 of the Licence includes all of the required data and *is considered in the closure cost estimate. The locations of the monitoring stations are presented in Appendix G of the ICRP.* *Further details on the closure and post-closure Water quality monitoring program will be included in the final version of the closure plan, due one year prior to closure.*
CIRNA-4	**Arsenic treatment, potential increased cost for water treatment/arsenic removal**
	AEM clarified that the freeze-back of the tailings will inhibit any seepage of arsenic and that *monitoring will continue until the freeze-back has been achieved. A complementary system to the existing Effluent Water Treatment Plant (EWTP) could be added in order to treat arsenic within CP1 if required. [ ] As the main source of arsenic in CP3 is predicted to be from residual process water that is assumed to be present in the filtered tailings, if arsenic level would be measured within CP3 and CP1, it will likely occur during the operation stage of the mine. Therefore, the treatment system for arsenic, if required, would be expected to be installed during the period of operations, rather than in the closure phase.* *The annual operational cost for the interim water treatment is estimated at $561,460 and is considered for three (3) years of treatment, for a total of $1,684,380, included in the "Interim Care and Maintenance" portion of the cost estimate, [plus a contingency of 20% adding $336,876.]*

CIRNA-5	**Applicable regulatory guidelines - MDMER**
	AEM specified that *the Metal and Diamond Mining Effluent Regulations (MDMER) will be included in the regulatory guidelines list for the Meliadine Project in the next version of the ICRP.*
NWB-1	**Water Balance – CP5 volumes**
	AEM clarified that the ICRP was based on the Water Management Plan from Q1 2019, which did not account for the CP5 discharge point movement.
NWB-2	**Water Balance – SWTP inputs and outputs**
	AEM clarified that the Saline Water Treatment Plant (SWTP) encompasses two salt-maker units with a solids mode capacity of 66 m^3/day each and a maximum targeted treatment rate of 132 m^3/day (3960 - 4092 m^3/month).
NWB-3	**Water Balance – October – December volumes, increased Na and Cl**
	AEM clarified that *any co-mingling of underground Water to CP1 is the result of waste rock brought to surface and placed in the CP1 catchment. Residual Water in the waste rock will eventually flush out due to exposure to the elements and end up in CP1.*

The above responses were provided to the parties for confirmation of satisfaction. On February 28, 2020, ECCC confirmed that they reviewed AEM's responses and have no further comments. In correspondence dated March 3, 2020, CIRNA indicated that AEM's responses *addressed all but CIRNAC's comment #2 on the issue of closure schedule* and recommended that *the current closure schedule be considered as interim, and the final closure schedule be determined after AEM has demonstrated the long-term physical and chemical stability of the mine site with monitoring data.*

After completing the technical review, the NWB finds the *Interim Closure and Reclamation Plan* functional and generally satisfying the Licence requirements, and by copy of this letter has approved the above stated document through the Board Motion No. 2019-A1-016, dated March 10, 2020, as required by Part J, Item 1 of the Licence. The Licensee is advised to update the Plan and submit it to the Board for review in accordance with the commitments made on February 24, 2020.

While the Interim Closure and Reclamation Plan is being approved at this time, the Board concurs with CIRNA that it is difficult to demonstrate mine site physical and chemical stability without the appropriate field monitoring data and reminds the Licensee that Part J, Item 5 of the Licence requires submission of the Final Closure and Reclamation Plan for the NWB's approval at least twelve (12) months prior to the expected end of planned mining.

Additionally, the Board notes that even though the updated Financial Security Cost Estimate was included into the Plan, the Board is of understanding that the Cost Estimate will be further discussed with CIRNA and the KivIA, and therefore, will not amend the Security under the current Water Licence at this stage. The Board expects the results of this discussion between Agnico Eagle, CIRNA, and the KivIA to be provided to the NWB as soon as possible.

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
Nunavut Water Board,
Technical Advisor

Cc: Distribution List – Meliadine