

May 13, 2020

Tara Arko
Director of Technical Services
Nunavut Impact Review Board
PO Box 1360
Cambridge Bay, NU X0B 0C0

Re: Agnico Eagle's Response to Comments Received on Agnico Eagle's Saline Effluent Discharge to the Marine Environment Proposal (the Waterline Proposal)

Dear Ms. Arko,

Thank you for providing comments received by the Nunavut Impact Review Board (**NIRB**) on or before May 8, 2020 on Agnico Eagle Mines Limited's (**Agnico Eagle**) "Saline Effluent Discharge to the Marine Environment" Proposal (the **Waterline Proposal**). Agnico Eagle has summarized these comments by theme in the attached table, and provided its response. Agnico Eagle thanks all interveners and individuals that provided their comments within this process.

Agnico Eagle also wishes to clarify that it has not applied for an amendment to the Meliadine Gold Mine Project Certificate, as no changes have been identified that would be necessary for the Waterline Proposal to proceed. As Agnico Eagle has emphasized, it wishes to commence construction of the waterline in August 2020, and commence discharge to the marine environment from the waterline and related infrastructure starting in May 2021. As such, Agnico Eagle requests NIRB's timely consideration and guidance on next steps.

Should you have any questions or require further information, please contact the undersigned.

Regards,



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Summary of Agnico Eagle Responses to Comments to NIRB on the Waterline Proposal

Themes	Interveners/General Public	Primary Themes	Responses
Caribou	GN BLHTO KHTO KivIA NTI KWB Public	<p>Request for additional details regarding Construction Design and alternatives investigated</p> <p>Questions whether the waterline may act as a barrier to caribou and their calves, and whether existing monitoring and mitigation is sufficient to address this concern</p> <p>Questions whether waterlines have been used in Nunavut previously</p>	<p><u>Construction Design and Alternatives</u></p> <p>Waterline will be laid directly on the tundra within the easement and at the toe of the AWAR. This will reduce visual disruption for caribou and will allow for eased crossing.</p> <p>Alternative designs for the waterline include trucking and elevation of the waterline above ground. However, based on best management practices, it is not recommended to install the line above ground due to wind induced-vibrations and visual effects. Buring the line was considered and is not feasible and not recommended for this infrastructure.</p> <p><u>Protection of Caribou</u></p> <p>Overall Agnico Eagle has compiled best management practices and community concerns respecting caribou and has adjusted design already based on these: diameter is a small as possible, within an already impacted footprint, construction schedule outside sensitive season and laid directly on the ground to reduce potential disruptions to caribou. In addition Agnico Eagle has committed to build land user and caribou crossings in known caribou movement corridors and high-value habitats and in areas identified by land users.</p> <p>The TEMP already includes monitoring such as behavior monitoring and review of collaring data to assess effect of the project on caribou population. This is sufficient to identify any potential effects on caribou, so they can be addressed should they arise. The TEMP will continue to be reviewed and updated as appropriate in according with existing NIRB Project Certificate terms and conditions.</p> <p>The TEMP already includes detailed caribou protection measures, including provisions to close the AWAR during caribou migration. Implementation of this mitigation has been done since approval of the Project Certificate and has been successful and completed in close collaboration with KivIA, GN and HTO.</p> <p><u>Current Use of Waterlines in Nunavut</u></p> <p>The proposed waterline is not new technology. The city of Rankin Inlet already operates a waterline. Agnico Eagle Meliadine Site has numerous waterlines around site and monitoring shows site has not impeded caribou migration since construction has commenced.</p>
Dust	ECCC	Concerns respecting potential for dust arising from traffic on AWAR.	Operation of the waterline will eliminate traffic on the AWAR arising from the transportation of saline water, which will eliminate a potential source of dust.



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<p>Marine</p>	<p>BLHTO CIRNAC DFO KivIA KHTO ECCC Public</p>	<p>Confirmation that discharge to the marine will be protective of the marine environment and clarification regarding toxicity testing</p> <p>Water management/treatment</p> <p>Questions re change in the flows (history)</p> <p>Modelling</p> <p>Provide further clarity respecting water treatment</p>	<p><u>Federal Jurisdiction over Marine Discharge</u></p> <ul style="list-style-type: none"> The MDMER are a complete regulatory framework which provides for protective discharges to the marine environment in compliance with the MDMER and the <i>Fisheries Act</i>. Additional provisions relating to discharge are included in the Lease issued under the <i>Territorial Lands Act</i>. Discharge criteria and volumes are not set by the Project Certificate. Discharge criteria and reporting criteria with respect to volumes are set by the MDMER and are a legal requirement which Agnico Eagle will follow. This will ensure there are no negative effects to marine ecosystems or ability of Inuit to fish. The specific location of the final discharge point will be modified in consultation with ECCC, in accordance with the MDMER and Agnico Eagle will undertake all required toxicity testing under the MDMER <p><u>Change in flow history</u></p> <ul style="list-style-type: none"> The original discharge rate of 800 m3/day presented in the FEIS Addendum was based on a maximum groundwater inflow rate of 420 m3/day (from the 2016 Golder model), TDS reduction and a discharge duration of 365 days per year at 100% availability. The updated discharge volume are based on a discharge duration of 101 days (during open water season) at 90% availability is applied. The September 2019 Golder model reported a maximum inflow of 580 m3/day. Adding in surface precipitation to saline ponds to the balance brings up the required discharge rate further to 6,300 m3/day. The values upwards of 12,000 m3/day is required to dewater all saline pond over a period of two years. <p><u>Mixing zone modeling</u></p> <ul style="list-style-type: none"> Agnico Eagle completed mixing zone modeling as presented in the Melvin Bay Diffuser Design (Tetra Tech, 2020) for the proposed multiport diffuser. Conclusions are as follows: <ul style="list-style-type: none"> The diffuser system is adequate to process effluent discharges from 6,000 m3/d to 20,000 m3/d while achieving dilution compliance within the regulated mixing zone. The target dilution factor of 11:1 can be reached within a horizontal distance of 1 m for all tested scenarios. The effluent plume would not reach the bottom of the ice layer under all conditions considered. <p><u>Water Treatment</u></p> <ul style="list-style-type: none"> The underground contact water collected in the Saline Ponds (SPx) would be treated for suspended solid (TSS) removal through a series of clarifiers having capacity up to 12,000 m3/d. To manage total dissolved solids (TDS) concentration of the final effluent, a TDS adjustment will be implemented to achieve an appropriate level. The treatment contact time would be selected to allow a flexibility in term of flow rate to be managed. The treatment plant will discharge an effluent in compliance with the MDMER criteria.
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			<p>Meliadine. For such applications, it is important that NIRB continue to process applications in a timely way. NIRB timelines should not be routinely extended.</p> <p>Should NIRB decide further procedural steps in relation to the waterline are necessary, Agnico Eagle is supportive of a timely and flexible approach that utilizes readily available technologies (telephone and writing) appropriate to the current restrictions applicable in Nunavut.</p>
Consultation	<p>BLHTO</p> <p>KHTO</p> <p>IHTO</p>	<p>Ensure community has been consulted with respect to waterline proposal</p>	<p>Agnico Eagle completed engagement sessions with KHTO, Hamlet, KivIA in January 2020 to inform Project Description. Feedback received were incorporated in the waterline project design, as described above.</p> <p>Agnico Eagle completed additional engagement sessions in March 2020 with the community of Rankin. Feedback received was incorporated into the Project Description as presented in section 5.1 of the FEIS Addendum (2020).</p>
COVID 19	KivIA	<p>Confirming that any waterline construction would proceed in a manner that would address and prevent risk related to COVID-19</p>	<p>Preventive measures- COVID-19</p> <p>Agnico Eagle established comprehensive preventive measures protocol related to the COVID-19 situation as part of operations as presented below.</p> <p>On-site measures</p> <p>The working schedule has been temporarily changed to a 28-28 schedule to reduce the number of passenger flight days to protect the health and well-being of our employees at both sites.</p> <p>In addition, several preventive measures have been implemented throughout the pandemic and will remain until further notice:</p> <ul style="list-style-type: none"> • Active testing process on-sites for all employees as of April 6 (laboratory installed at Meliadine). • Active screening prior to boarding since March 13, 2020. • As of March 19, 2020, Nunavummiut employees are being sent in their community and asked to self-isolate to prevent an eventual spread of the virus to their families and communities. • Preventive measures in the cafeteria (handwashing station, meal schedules, etc.) • Automated Temperature Detection device in front of cafeterias. • Awareness Campaign – on-sites and on social media. • Physical distancing – in transportation (plane and bus) and on-site. • Increase in frequency of cleaning (toilets, cafeteria, etc.). • AWAR Protocol – no employees allowed in any communities. • Creation of a Hygiene Committee to oversee the implementation and application of the measures.



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			<ul style="list-style-type: none">• All passengers in the aircraft and buses must wear a mask that covers their mouth and nose at all time during the flight or ride when they are at 2 meters or less from another passenger. Masks are to be worn at all times on site. <p>Rankin Inlet measures:</p> <ul style="list-style-type: none">• Awareness Campaign – on social media and radio for the communities.• No face-to-face meetings allowed in Rankin Inlet.• AWAR procedure – all transportation from Itivia to Meliadine is made on the bypass road.• A no-contact procedure is in place to avoid contact between on-site employees and community members.• The Agnico Eagle Community Office has been closed as a preventive measure on March 17 until further notice. <p>For the construction of the Waterline Project, Agnico Eagle will continue to apply this protocol and work with different government agencies (including the Nunavut Chief Public Health Officer) to evaluate the integration of the Inuit workers into the Project.</p>
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