



KIA Lands Department NWB Response

LICENCE: Water Licence 2AM-MEL1631

DATE: April 21, 2020

SUBJECT: Request for Comment from the Nunavut Water Board

INTRODUCTION

The Nunavut Water Board (NWB) hosted a teleconference on April 16, 2020 to discuss Agnico Eagle's application to authorize the release of water from Containment Pond 1 (CP1) on an emergency basis at concentrations in excess of those permitted under Water Licence 2AM-MEL1631. The NWB issued a follow up memorandum on April 17, 2020 asking for parties to provide comment on the following two questions:

1. *"Are you aware of any limitations that could affect the accessibility or availability of sampling/laboratory testing as proposed in the monitoring program proposed by Agnico Eagle in support of the Amendment Application?"*
2. *"Are there any contingencies that have been considered, such as alternative on-site testing or alternative sampling, that could be implemented if these types of limitations arise while the proposed monitoring program is being carried out in 2020?"*

RESPONSES

The Kivalliq Inuit Association (KIA) Lands Department with the support of technical consultants from Hutchinson Environmental Sciences Ltd. provide the following responses to the NWB's questions.

Question 1 Response

Analytical laboratories, including those used by Agnico Eagle in past years (ALS Environmental¹), have been deemed an essential service in many of the provinces; we expect samples sent to laboratories to be analyzed in a relatively timely manner similar to pre-COVID19.

KIA is however concerned with Agnico Eagle's capacity to transport samples from Meliadine to laboratories during the pandemic. We understand the response to COVID19 has limited the number of flights in and out of the communities. We further understand Agnico Eagle has locked down the Meliadine site to the extent feasible. These transportation limitations will create challenges as Agnico Eagle seeks to transport water for chemical and toxicological analysis to certified laboratories at the frequency committed to during the teleconference and in their response to KIA.

¹ <https://www.alsglobal.com/en-ca/myals/news/2020/03/still-here-to-keep-you-moving-als-tribology-laboratories>



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Question 2 Response

Alternative sampling approaches should only be applied if laboratory analysis is not available during the COVID19 pandemic.

We recommend the use of specific conductivity as a surrogate for full chemical analysis in the event alternative sampling approaches are required to assess discharges from CP1. We also suggest Agnico Eagle implement continuous specific conductivity measurements at MEL-14 to assess effluent as part of an alternative sampling strategy.

This alternative approach will require the development of a statistical relationship between field measurements of specific conductivity and laboratory measured total dissolved solids (TDS) using data collected no earlier than October 2019. A similar relationship between field and laboratory measurements of TDS can be developed if a field multimeter capable of measuring TDS is available.

Use of specific conductivity or TDS field measurements as a surrogate for laboratory measured TDS and the contributing ions is seen as a viable alternative strategy during the pandemic given the ionic composition of the effluent in CP1 appears to be relatively stable over time (Agnico Eagle's responses to technical comments KivIA-6)². A verified relationship between the field and laboratory measured parameters will allow Agnico Eagle to monitor effluent concentrations at the diffuser and at the edge of the mixing zone in the absence of laboratory analysis.

We note that the relationship between field and laboratory measurements will not have a perfect correlation (i.e. $R^2 = < 1$). Agnico Eagle should therefore present a proposed approach to applying field data in a regulatory context to the water management working group (as agreed to during the April 16 teleconference and in Agnico Eagle's responses to KivIA-7^{Error! Bookmark not defined.}) for approval. We also highlight the need for all monitoring and management measures implemented by Agnico Eagle to be done so with the oversight of the water management working group.

We understand Agnico Eagle will also need to implement toxicological testing associated with the discharges. We are not aware of a viable alternative to toxicological testing that can be applied as an alternative approach during the pandemic. KIA therefore reiterates the need for more stringent TDS criteria^{Error! Bookmark not defined.} both at the diffuser as well as at the edge of the mixing zone than what Agnico Eagle has proposed in their application.

² Agnico Eagle Mines Ltd. – Meliadine Division. 2020. Emergency Amendment Responses; Meliadine Mine – Water Licence 2AM-MEL1631. Submitted to the Nunavut Water Board on April 6, 2020.



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CLOSING

KIA continues to express concern for Agnico Eagle's proposed licence amendment. We reiterate that many of the technical concerns raised by KIA and the other intervenors are still outstanding, and remain concerned that the release of saline water from CP1 will negatively impact Inuit perception of water and fish in Meliadine Lake and the downstream environment.

Nevertheless, KIA appreciates the ongoing opportunities to participate in the NWB process. If you have any questions pertaining to our submission, please do not hesitate to contact:

Luis Manzo, KIA Director of Lands: lmanzo@kivalliqinuit.ca

Richard Nesbitt, Technical Consultant to KIA: richard.nesbitt@environmentalsciences.ca