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Richard Dwyer

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Manager of Licensing  
Nunavut Water Board  
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Gjoa Haven, Nunavut  
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Bathurst Inlet  
Kingaok

October 10<sup>th</sup>, 2019

Bay Chimo  
Umingmaktok

**Re: KIA's Comments to TMAC's responses on Geochemical Criteria for Naartok East Crown Pillar Recovery at Madrid North.**

Cambridge Bay  
Ikaluktutiak

Dear Richard Dwyer, the KIA's geoenvironmental consultant, BGC Engineering Inc. (BGC) has reviewed TMAC's responses to KIA's recommendations on the geochemical criteria for Naartok East Crown Pillar Recovery at Madrid North.

BGC has provided the following comments on TMAC's responses:

Gjoa Haven  
Okhoktok

Overall, the queries have been addressed with well-thought responses and supporting information. In particular, it is greatly appreciated that Table 2-1 and Table 3-1 (of Appendix A of the original submission) and the flow chart (Appendix B of the original submission) have been revised due to previous errors.

Taloyoak

Kugaaruk

It should be noted that all three interveners (i.e., KIA, ECCC and CIRNAC) requested further support associated with the 70 ppm arsenic criterion. Overall, TMAC's response to our arsenic criterion query (KIA-NECP-4) provides good validation to the arsenic criterion. However, the coincidence of this query from the three interveners may warrant some follow up with TMAC/SRK (e.g., for efficiency, via a conference call) to ensure adequate responses are provided for this common concern.

If such a follow up was requested, a suggestion would be to confirm the ML/ARD management program has provisions to monitor leachate chemistries following placement of waste rock for construction. The purpose would be to mitigate (and manage, if needed) potentially high (and likely short-lived) arsenic concentrations (i.e., up to 0.2 mg/L and in exceedance of CCME arsenic guidelines of 0.005 mg/L) that may occur from suitable construction material (i.e., <70 ppm arsenic) prior to the stabilization of elemental release rates. The potential for such elevated arsenic concentrations is noted by Figure 2-4 of Appendix A of the original submission, which compares maximum field barrel leachate concentrations versus arsenic solid-phase contents.



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Thank you

A handwritten signature in black ink that reads "John Roesch".

John Roesch, P.Eng.

Senior Hope Bay Project Officer  
Kitikmeot Inuit Association, Department of Lands and Environment

Cc Geoff Clark, Director, KIA, Department of Lands and Environment