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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File: 2AM-WTP1826/TR/D1, 2

January 14, 2019

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E-mail: Jamie.Quesnel@agnicoeagle.com

Subject: Arsenic Water Treatment Plant Design Report; Type “A” Water Licence 2AM-WTP1826, Whale Tail Pit Project; Agnico Eagle Mines Limited

Dear Ms. Marcil and Mr. Quesnel:

The Nunavut Water Board (NWB or Board) received from Agnico Eagle Mines Limited (Agnico Eagle or Licensee) on November 29, 2018, the document entitled: “Arsenic Water Treatment Plant Design Report” (Report) as a requirement of Part D, Item 1 of Water Licence 2AM-WTP1826 (Licence) that was approved by the Minister of Crown-Indigenous Relations Canada on July 11, 2018. The Report was completed by SNC-Lavalin Inc. and dated November 22, 2018.

The Report indicates that the *global concept for water treatment at Amaruq is based on the reuse of the two Actiflo® from Meadowbank. Actiflo® is designed to treat mainly suspended solids (TSS). In Amaruq, it is expected to have arsenic (As) in the surface water due to the leachability of the rock. Therefore, the Actiflo® will be integrated into a treatment chain able to remove As to acceptable levels.*

The report also details that the volume and water quality information used for design are based on water balance and water quality Model. *Based on the information available to date, the AsWTP will be designed to treat the contact water for As and TSS. To do so, the ASWTP will include the following treatment steps:*

1. *Oxidation to oxidize the arsenic from As (III) to As (V).*
2. *pH adjustment.*
3. *Coagulation using ferric sulfate in order to co-precipitate the As (V) as ferric-arsenate precipitate.*
4. *Flocculation to enhance the settling of the precipitate formed in the coagulation step.*
5. *Clarification to separate the treated water from the precipitate. High-rate ballasted floc clarifiers will be used for this step of the treatment process.*

6. *Sludge thickening process to decrease storage requirements.*

The Report was distributed for interested parties' review with a deadline for submissions set at December 14, 2018. On December 13, 2018, the Environment and Climate Change Canada (ECCC) informed the NWB that they do not have comments at this time. On December 14, 2018, comments were received from the Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC). On December 21, 2018, Agnico Eagle provided responses to CIRNAC comments. On January 7, 2019, CIRNAC provided additional comments associated with Agnico Eagle responses. On January 14, 2019, Agnico Eagle provided an updated Report, dated January 11, 2019, reflecting CIRNAC's follow-up recommendations. On January 14, 2019, CIRNAC informed the NWB that they are satisfied with the updated Report.

The Board acknowledges that the Report addresses the requirements of Part D, Item 2 of Licence 2AM-WTP1826, and has accepted the Design Report for Arsenic Water Treatment Plant, as required by Part D, Item 1 of Licence. The Licensee is advised that the Board's review of this document is a verification that the proposed activity is consistent with the existing terms and conditions of the Licence and more specifically with the Part D, Item 2, and may proceed in accordance with the Report and drawings provided. It should be noted that the Board's "acceptance" is NOT intended or offered as any representation regarding the suitability of the plans nor third party verification of the design, construction, planning or engineering discussed in the document.

Should you have any questions, please feel free to contact the undersigned at (867) 360-6338 or karen.kharatyan@nwb-oen.ca at your earliest convenience.

Regards,

Karén Kharatyan
Director of Technical Services

cc: Distribution List - Meadowbank