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July 24, 2024

File: W2022L2-0001; W2024D0005

To all Parties,

Re: Information Requests Resulting from Sable Underground Technical Session – Type A Water Licence Amendment (W2022L2-0001) and Land Use Permit Application (W2024D0005)

The Wek'èezhìi Land and Water Board (WLWB) would like to thank all Parties who participated in the Technical Session to discuss Arctic Canadian Diamond Company Ltd.'s (Arctic's) Type A Water Licence Amendment Application (W2022L2-0001) and Land Use Permit Application (W2024D0005). The session was beneficial in helping to identify and clarify issues raised by Parties and has contributed to a better understanding of the information on the record.

There were several requests for specific information made by Parties during the Technical Session. In an effort to ensure that sufficient evidence is on the record so Parties can make comprehensive submissions to the Board and allow the Board to make an informed decision, the WLWB is requesting the following information from the identified Parties no later than July 31, 2024, except for IR#2 which is to be submitted by August 7, 2024.

The following Information Requests #1-9 are being issued to Arctic:

IR #1 to Arctic: Due to an October 2021 release from the Two Rock Sedimentation Pond (TRSP), nitrite exceeded benchmarks in Horseshoe Lake in 2022, even though the nitrite EQC was not exceeded. It was explained that this was likely because TRSP effluent was discharged too late in the season and nitrate in effluent converted to nitrite after discharge. Nitrate concentrations are predicted to rise during Sable Underground (SUG) mining. To prevent future nitrite benchmark exceedances, Arctic is to propose one or more options for amending Water Licence conditions and/or management plan requirements. In this response, include considerations for managing water levels/discharge from the TRSP, including thoughts about a requirement for a Trigger Action Response Plan.

IR #2 to Arctic (due two weeks): As a sensitivity analysis, Arctic is to update the current TRSP mixing model by increasing groundwater inflow for all years of mining by 50%. Arctic is to use the outputs of this sensitivity analysis to provide predictions of water quality at the edge of the mixing zone in Horseshoe Lake.

IR #3 to Arctic: To assist Parties in understanding the conservatism built into the base case Water Quality Model used to estimate Sable Underground water quality, Arctic is to use existing Misery Underground data to provide a comparison of spring and summer average water quality, spring and summer 95th percentile water quality, versus winter average water quality used in the base case. This will include rationale for why winter data from Misery underground is conservative and clarify which data is used as an input for the Sable/TRSP/Horseshoe Lake water quality model.

IR #4 to Arctic: Arctic is to address the following related to water quality mixing in Horseshoe Lake:

- a) Provide additional information to support the prediction/expectation that aquatic effects benchmarks will still be met at the 100 m mixing zone once groundwater inflows are directed to the Two Rock Sedimentation Pond (TRSP);
- b) With the input of groundwater inflows, Arctic to provide an explanation for why it is still appropriate to be verifying the 20:1 dilution in the Two Rock Plume Delineation Study; and
- c) Provide rationale for why new mixing-zone modelling is not needed.

IR #5 to Arctic:

- A. With respect to the TRSP water quality model, Arctic to provide rationale and evidence for the proportions of calibration adjustments assigned to each source, as well as details about how it developed calibration factors (including graphs of before/after calibration results).
- B. Based on the feedback provided by IEMA during the Technical Session, Arctic is to provide one of the following:
 1. An explanation for why no further adjustments to the calibration approach is possible or necessary; or
 2. Revise the calibration approach to incorporate adjustments of inputs from both waste rock and groundwater sources. This revised calibration may include calibration of the Ulu Lake component of the model in support of adjustment of waste rock inputs.

Should Arctic revise the calibration approach (under IR#5, B(2)) and the revised approach changes the base-case results, updated results for IR# 2 should be provided.

IR #6 to Arctic: Arctic to provide updated Tables 4-1 and 4-2 (from the Project Description Report, Appendix B) that include predicted concentrations for the comprehensive parameter suite used in the source terms. Any response to IR#2 and potentially IR #5 from the technical session is also to include the comprehensive parameter suite.

IR #7 to Arctic: Arctic to provide any additional information it would like Parties to consider with respect to the potential inclusion of a Drip Tray condition in the Land Use Permit for Sable Underground Mining. This response should consider the Board's decision regarding the permit condition that was included in the Early Works Permit. Arctic's response may also include a proposed amendment to the Drip Tray condition that was included in the Early Works Permit or the Drip Tray condition included in the Mackenzie Valley Land and Water Board's Standard Land Use Permit Conditions, with supporting rationale.

IR #8 to Arctic: Arctic to confirm the sampling requirements it is proposing at Surveillance Network Program (SNP) stations 0008-Sa2a (Sable Pit Minewater) and 0008-Sa2b (Sable Underground Water). Please provide any rationale for proposed changes from the Application and/or in response to the Public Review comments.

IR #9 to Arctic: Arctic to provide or reference existing conceptual-level information on the closure and reclamation activities for the Sable Underground Project, including plans associated with any additional infrastructure (e.g., camp).

In order to ensure the regulatory process proceeds efficiently, we ask that Arctic endeavor to submit the requested information as soon as possible to allow Parties to begin preparing their interventions. As per the Work Plan,¹ responses to all the enclosed Information Requests must be submitted to the Board by July 31, 2024, with the exception of IR# 2 which is to be submitted August 7, 2024. All information submitted to the Board regarding this Water Licence proceeding will be posted on the WLWB's Online Registry.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Ryan Fequet', with a stylized flourish at the end.

Ryan Fequet,
Executive Director, WLWB

BCC to: Ekati Distribution List

¹ See WLWB Online Registry (www.wlwb.ca) for [Ekati - Sable UG - Work Plan - Version 1 - May 10 24](#).