

20 December 2021

Mason Mantla, Chair
Wek'èezhii Land and Water Board
#1, 4905-48th Street
Yellowknife, NT, CA
X1A 3S3

Re: W2020L2-0004 Ekati Diamond Mine Water Licence – Request for Deferral of Submission of Two Rock Plume Delineation Report and Two Rock Outfall Report Version 3.1

Dear Mr. Mantla:

In accordance with Part H, Condition 31 of the Water Licence WL2020L2-0004 (formerly Water Licence W2012L2-0001), Arctic Canadian Diamond Company Ltd. (Arctic) is required to submit a Plume Delineation Report (the Study Report), reporting on the results of a plume delineation study (the Study) within eight months of the beginning of Discharge from Two Rock Sedimentation Pond (TRSP). However, On September 30, 2021, the Wek'èezhii Land and Water Board (the Board) issued Direction¹ that Arctic is to submit the Study Report as well as Version 3.1 of the Two Rock Outfall Report (Outfall Report) on or before January 4, 2022. The Board's rationale for this Direction (i.e., earlier timeline for delivery of the Study Report) was to ensure adequate time is available prior to Discharge in 2022 to consider any changes to the Surveillance Network Program (SNP) station 0008-Sa9 or the Two Rock Outfall Report that may be required as a result of the Study as well as a more streamlined review by having both documents submitted at once.

Arctic received approval to Discharge water from TRSP to Horseshoe Lake on October 1, 2021 in accordance with the Reasons for Decision issued on September 30, 2021 and the Precautionary discharge Plan described in the Outfall Report². On October 19, 2021 Arctic notified³ the Board that they began discharging water from the TRSP to Horseshoe lake on October 2, 2021 at a pumping rate of 0.015 m³/sec and were required to increase the pumping rate on October 18, 2021 to 0.52 m³/sec to avoid an unwanted release of water from the TRSP and the irreparable damage to the TRSP dam. This notification included information on water quality at SNP Station 0008-Sa3 (RW12; point of Discharge from TRSP) and outlined the actions taken by Arctic.

On October 27, 2021 Arctic notified⁴ the Board that the plume delineation study was not completed due to the plume not being evident at the start of Discharge followed by weather and safety concerns. This notification outlined Arctic's commitment to completing the required Study once it is safe to do so in Spring of 2022. Arctic provided a water quality summary for SNP Stations 0008-Sa3 (point of Discharge from TRSP), 0008-Sa6, and

¹[Ekati - Two Rock Outfall Report - Version 3.0 - Reasons for Decision - Sep 30 21.pdf \(mvlwb.ca\)](#)

² [Two Rock Outfall Design Report, Version 3.0 \(mvlwb.ca\)](#)

³ [Ekati – Notification – Emergency Actions – Two Rock Discharge – Oct 19 21.pdf \(mvlwb.ca\)](#)

⁴ Ekati – Notification – Plume Delineation Study – October 27_21



0008-Sa9b. Arctic also proposed a submission date for the Study Report of August 15, 2022 along with the Outfall Report Version 3.1 in order to accommodate a more efficient review process.

On November 3, 2021 Arctic wrote⁵ to the Board to reaffirm their commitment to following the Board's Direction. A summary of events for the Emergency Discharge was also included. Following discussion with the Board staff regarding the appropriate process for this request, this letter provides the formal request for deferral of submission for both the Study Report and the Outfall Report Version 3.1 to **August 15, 2022**.

Included in this request for a deferral of submission are the Boards Directives to be included in Version 3.1 of the Outfall Report:

- **Revision A:** *The Board directs Arctic to include the requirement for tabular data in the Plume Delineation Study Report in Section 4 of Version 3.1 of the Two Rock Outfall Report.*
- **Revision B:** *The Board directs Arctic to update Section 5.4 of the Report to include the requirement to notify the Board and the Inspector prior to any Discharge rate increases in Version 3.1 of the Report.*
- **Revision C:** *The Board requires Arctic to include commitments made in response to DFO comment 1 and the DFO IR in Version 3.1 of the Report.*

Also included are the Boards Directives to be included in the Study Report:

- **Decision 6:** *The Board directs Arctic to include tabular data of expected effluent and receiving water quality in the Plume Delineation Study Report.*
- **Decision 7:** *The Board is requiring the Two Rock Plume Delineation Report to present the Study results as described in Section 4.0 of the Two Rock Outfall Report (i.e., at the reduced Discharge rate) and results from a Plume Delineation Study at the highest Discharge rate achieved in 2021, if it exceeds 0.015 m³/s.*
- **Decision 8:** *If Arctic does not achieve the operational Discharge rate (0.1 m³/s) in 2021, to require Arctic to include a revision to the Plume Delineation Study, in Version 3.1 of the Report that explains Arctic's plan for conducting a Plume Delineation Study at 'worst-case scenario conditions' to fulfill the requirements of Part H, Condition 31 of the Licence.*

Arctic trusts that you will find this to be clear and informative. Should you have any questions please contact Madison Jerhoff, Environmental Advisor – Aquatic Biology at Madison.Jerhoff@arcticcanadian.ca or 403 910-1933 ext 2407 or the undersigned at Laura.Pacholski@arcticcanadian.ca at 403 589 0689.

Sincerely,

⁵ [Ekati – Two Rock Sedimentation Pond Emergency Discharge Final Report – Nov 3 21.pdf \(mvlwb.ca\)](#)



**ARCTIC CANADIAN
DIAMOND COMPANY**

Naturally Beautiful. Mined Right.

Original signed by Laura Pacholski

Laura Pacholski, P.Chem.

Team Lead – Environmental Management and Monitoring

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Date: 20-December-2021