

30 June 2022

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 to Defer 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 W2020L2-0004 (formerly Water Licence W2012L2-0001), Arctic Canadian Diamond Company Ltd. (Arctic Canadian) 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 Canadian 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 Canadian 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 27, 2021 Arctic Canadian notified³ 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. Arctic Canadian provided a water quality summary for SNP Stations 0008-Sa3 (point of Discharge from TRSP), 0008-Sa6, and 0008-Sa9b. On November 3, 2021 Arctic Canadian wrote⁴ to the Board to reaffirm their commitment to following the Board's Direction and included a summary of events for the Emergency Discharge. On December 20, 2021 Arctic Canadian submitted⁵ a request for deferral of the submission of the Study Report and Outfall Report. On January 24, 2022 the Board granted the extension request⁶ to Arctic Canadian.

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 – Plume Delineation Study – October 27_21

⁴[Ekati – Two Rock Sedimentation Pond Emergency Discharge Final Report – Nov 3 21.pdf \(mvlwb.ca\)](#)

⁵[Ekati - Two Rock Outfall Report and Plume Delineation Report - Extension Request - Dec 20 21.pdf](#)

⁶[Ekati - Two Rock Outfall Report and Plume Delineation Report- Extension Request - Decision Letter - Jan 24 22.pdf](#)



Included in this request for a deferral of submission are the Board's 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 Board's 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.*

With the above considerations in mind, Arctic Canadian was committed to taking a pre-Discharge sample as early as possible in the spring of 2022 to accommodate the timely completion of the Study and subsequent Study Report. Due to late freshet and unsafe conditions on the TRSP, a pre-discharge sample could not be taken until June 11, 2022. Considering the time required to complete the laboratory analyses, QA/QC laboratory results, submit a notification for Discharge, complete the Study (one week after Discharge) and subsequent Study Report, the August 15, 2022 deadline is not achievable.

To fulfill the requirements of the Study Report above, Arctic Canadian is required to notify the Board and the Inspector of any increases in Discharge rates and must complete the Study at the various Discharge rates until an operational Discharge rate of 0.1 m³/s is achieved (or the highest Discharge rate possible to achieve in 2022). To include all the directives listed above as well as accommodate a more efficient review, Arctic Canadian suggests the submission of the Study Report and Outfall Report 90 days after the cessation of Discharge at the TRSP for the 2022 year. The proposed submission timing would then allow for inclusion of all plume studies completed (i.e., at each increase in Discharge rate) within one report, any associated updates to the Two Rock Outfall Report, and reduce any unnecessary burden in the Board review process.

The Board also sent a letter to Arctic Canadian⁷ on November 19, 2021 sharing its view that the emergency Discharge situation appeared to be a result of poor planning and requested that Arctic Canadian formally

⁷ [Ekati - Two Rock Sedimentation Pond - WLWB Letter to Arctic Re Discharge from TRSP - Nov 19 21.pdf](#)



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reply with an indication of how similar situations could be avoided in the future. As outlined in the timeline above and demonstrated in this request, Arctic Canadian has shown commitment to notifying the Board of any potential changes or delays to reporting requirements in a proactive manner that is respectful of the Board's time and resources. Throughout the 2019 timeline of activity provided by the Board, Arctic Canadian would like to highlight their continued attempts to discuss the challenges with Decisions related to use of turbidity barriers and the corresponding unacceptable burden this placed on the company and subsequent inability to consider a diffuser. Arctic Canadian also requests the Board acknowledge that the 2020 to 2022 period outlined in their letter was occurring during the Companies' Creditor Arrangement Act (CCAA) and associated transition into Care and Maintenance, in addition to the substantial challenges posed by the COVID-19 pandemic. The pandemic limited both parties' ability to respond to requests in timelines matching that of the pre-pandemic. This resulted in delays on both ends that led to the emergency Discharge request referred to in the Board's letter. Since coming out of CCAA and working through the COVID-19 pandemic such emergency Discharge requests have not been repeated, and similar situations have been avoided.

Arctic Canadian 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,

Original signed by Laura Pacholski

Laura Pacholski, P.Chem.

Team Lead – Environmental Management and Monitoring

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