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January 31, 2024

File: W2022L2-0001

Kurtis Trefry
Arctic Canadian Diamond Company Ltd.
900-606 4 Street SW
Calgary, AB T2P 1T1

Sent by email

Dear Kurtis,

Re: Ekati – Waste Rock and Ore Management Plan Version 12.0 – Lac de Gras, NT

The Wek'èezhìi Land and Water Board met on January 24, 2024 and considered Version 12.0 of the Waste Rock and Ore Storage Management Plan (the WROMP), submitted by Arctic Canadian Diamond Mine Ltd (Arctic) on November 9, 2023 as required by Water Licence (Licence) W2022L2-0001 and by the Board's Reasons for Decision for Version 11.1 of the WROMP and Version 1.1 of the Point Lake WRSA Design Plan and Point Lake WRSA Prediction Report.^{1,2}

The Board has determined that Version 12.0 of the WROMP meets the requirements of Part H, Condition 3 and Schedule 6, Condition 2 of the Licence and the Board's previous direction. The Board hereby approves Version 12.0 of the WROMP as submitted. The details of the Board's decision are set out in the attached Reasons for Decision.

The Board notes that Version 13 of the WROMP is to be submitted within 90 days of the approval of the Seepage Response Framework (which is required by Part H, Condition 7 of the Licence). Version 13 is to include the revisions outlined in the attached Reasons for Decision and should be prepared in accordance with the Land and Water Board's *Document Submission Standards*.³

As discussed in the attached Reasons for Decision, concerns regarding seep screening criteria and seepage management responses are expected to be captured by the development of the Seepage Response

¹ See WLWB Online Registry for [Ekati – WROMP V11.1 – Reasons for Decision – Nov30 22](#)

² See WLWB Online Registry for [Ekati - Point Lake WRSA Design and Seepage Prediction Report - V 1.1 - Reasons for Decision - Nov 6 23](#)

³ See WLWB Policies and Guidelines webpage for MVLWB [Document Submission Standards](#).

Framework (SRF) required by Part H, Condition 7 of the Licence. The Reasons for Decision outline expectations regarding consideration of feedback relevant to the SRF that was received during the review of WROMP V12.0. Further, until the SRF is approved and implemented, Arctic is required to increase the frequency of seep screening as described in the Reasons for Decision.

The attached Reasons for Decision also includes direction regarding the Annual Water Licence Report and steps to address which company name should be used in submissions moving forward.

Please direct questions or concerns regarding this letter to Ryan Fequet in writing.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Mason Mantla', written in a cursive style.

Mason Mantla
Chair, Wek'èezhìi Land and Water Board

Bcc'd to: Ekati Distribution List
Attached: Reasons for Decision



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Reasons for Decision

Reference/File Number:	W2020L2-0004 (Type "A" Water Licence)
Licensee:	Arctic Canadian Diamond Company Ltd. (Arctic)
Subject:	Waste Rock and Ore Management Plan Version 12.0

Decision from the Wek'èezhìi Land and Water Board Meeting of January 24, 2022

1.0 Decision

On November January 24, 2024 the Wek'èezhìi Land and Water Board (WLWB or the Board) considered Arctic Canadian Diamond Company Ltd.'s (Arctic's) Waste Rock and Ore Storage Management Plan (WROMP) Version 12.0.¹ In consideration of the submission, previous Board direction, reviewer comments, and proponent responses, the Board has made the following decisions:

1. To approve Version 12.0 of the WROMP;
2. To require Arctic to submit Version 13.0 of the WROMP within 90 days of the approval of the Seepage Response Framework. Version 13.0 is to include Revisions #1 to 10.
3. Until the Seepage Response Framework is approved and implemented, require Arctic to increase the frequency of seep screening. Specifically, Arctic is to screen samples within 30 days of receiving the water quality results;
4. To require the Seepage Response Framework to consider the comments pertaining to seep screening and adaptive management that were submitted to the Board during the WROMP V.12.0 review (i.e., GNWT-ECC comments 7, 8, and 12; IEMA comments 5, 8, 9, and 10);

¹ See WLWB Online Registry for [Ekati - WROMP - V12.0 - Part 1 of 2 - Nov 9 23.pdf](#) and [Ekati - WROMP - V12.0 - Part 2 of 2 - Nov 9 23f](#)

5. To require Arctic to include information regarding the results of the WRSA physical stability inspections in the Annual Water Licence Report;
6. To require Arctic to engage with GNWT-ECC regarding the name of the operating company to determine whether a name change request or Assignment application should be submitted to the Board. If either is required, Arctic is to submit it immediately. If neither is required, Arctic is to provide an update with an explanation to the Board.

2.0 Background

Version 12.0 of the WROMP was submitted by Arctic on November 9, 2023. Version 12.0 of the WROMP was submitted as required by Part H, Condition 6(a) of Water Licence W2022L2-0001.^{2,3} Version 12.0 of the WROMP was also submitted to address direction from the Board's Reasons for Decision for Version 11.1 of the WROMP and Version 1.1 of the Point Lake WRSA Design Plan and Point Lake WRSA Prediction Report.^{4,5}

The WROMP outlines the methods for characterizing, managing, storing, and monitoring waste rock and ore at the Ekati site. To monitor the interactions of potential impacts of the waste rock within the Waste Rock Storage Areas (WRSAs) and the environment, Arctic completes water quality monitoring of the seeps from the WRSAs and monitors the geochemistry of the rock placed within the WRSAs. The WROMP presents the details of these monitoring programs. The seepage and rock monitoring are completed according to the schedule and methods described in the WROMP.

Annually, the results of the monitoring are reported within the Annual Report as required by Part B, Condition 13; Schedule 1, Condition 1 of the Licence. Additionally, every three-years, a report interpreting the results of all survey data collected since Project start is to be submitted for Board approval.

Version 11.1 of the WROMP was approved by the Board on November 30, 2022 with direction given to Arctic to submit Version 12.0 of the WROMP by the sooner of, the time to update the WROMP for the Point Lake Project or based on the outcomes from the current Licence Renewal Proceeding, and to include the revisions outlined in the corresponding Reasons for Decision.⁶

The timing of the WROMP submission aligns with the requirements for commencement of the Point Lake Development; an updated WROMP is required prior to placement of waste rock associated with the

² Note that Version 12.0 was submitted under Part H, Condition 3(a) of W2020L2-0004, which has since been replaced by the renewed Water Licence W2022L2-0001.

³ See WLWB Online Registry for [Ekati - Renewal - Water Licence - Issuance Letter and Licence - Dec 1 23](#)

⁴ See WLWB Online Registry for [Ekati – WROMP V11.1 – Reasons for Decision – Nov30 22](#)

⁵ See WLWB Online Registry for [Ekati - Point Lake WRSA Design and Seepage Prediction Report - V 1.1 - Reasons for Decision - Nov 6 23](#)

⁶ See WLWB Online Registry for [Ekati – WROMP V11.1 – Reasons for Decision – Nov30 22](#)

project (as per Part H, Condition 6(a) of the Licence). In the WROMP V.12.0 cover letter, Arctic noted that it is planning to commence construction of the Point Lake Open Pit in the near future and requested an expedited review and approval process for the WROMP, to the extent possible, to maintain the project's development timeline.

Version 12.0 of the WROMP was distributed for public review on November 28, 2023, inviting reviewers to provide comments and recommendations using the Online Review System (ORS). Comments and recommendations were received by the deadline of December 21, 2023, from the Independent Environmental Monitoring Agency (IEMA), Government of the Northwest Territories – Environment and Climate Change (GNWT-CC), Tłıchq Government (TG), Environment and Climate Change Canada (ECCC); Board staff also submitted questions. Arctic provided responses to reviewer comments by the deadline of January 9, 2024. The review summary is available on the ORS.⁷

3.0 Reasons for Decision

Version 12.0 of the WROMP, along with the associated conformity table that describes how previous Board direction was addressed, were reviewed. All reviewer comments and proponent responses submitted during the public review period were also reviewed. Based on the review, the Board has decided to approve Version 12.0 of the WROMP, with additional direction for Version 13.

➤ ***Decision #1: The Board has approved Version 12.0 of the WROMP.***

Required revisions to the WROMP (i.e., Revisions 1 through 10) are discussed throughout this Reasons for Decision (RFD) and have been grouped into the following topics: The Point Lake Development, Seepage Response Framework, and other topics pertaining to waste rock and seepage management. The Board notes that WROMP V.12.0 was submitted to allow for advancement of the Point Lake Project and as such, does not address all the requirements of the renewed Licence, which came into effect on December 18, 2023.⁸ In particular, Part H, Condition 7 requires that Arctic submit a Waste Rock Storage Area Seepage Response Framework (SRF) to the Board for approval within 90 days of Licence (i.e. in March 2024). The SRF must identify any proposed changes to the WROMP, and all approved changes are to be included in future versions of the WROMP.

Many of the comments and recommendations received during the review of WROMP V.12.0 pertain to the selection and application of the mitigation measures that are used to address seep EQC exceedances, and to the seepage screening criteria, both of which will be discussed in detail during the development and review of the SRF. Other comments submitted to the Board during the WROMP review relate to changes to the Licence that took place during the renewal (e.g., the new definition of Receiving Environment, change of company name etc.). Arctic has suggested that all the other renewal-related revisions can be addressed alongside the SRF-related revisions, and do not require immediate updates

⁷ See WLWB Online Review System (new.onlinereviewssystem.ca) for [Waste Rock and Ore Management Plan Version 12.0](#)

⁸ See WLWB Online Registry for [Ekati - Renewal - Water Licence - Issuance Letter and Licence - Dec 1 23](#)

that would delay the WROMP approval. The Board is of the opinion that the revisions can be addressed in Version 13. The Board requires that a revised WROMP be submitted within 90 days of approval of the SRF.

- ***Decision #2: Arctic is to submit Version 13.0 of the WROMP within 90 days of the approval of the Seepage Response Framework. Version 13.0 is to include Revisions #1 to 10.***

3.1 Point Lake Development

The Point Lake Development was approved through an amendment to Licence W2020L1-004, which was issued on May 13, 2022.⁹ Extensive discussion regarding the Point Lake Development also took place during the Licence renewal proceeding, particularly as it pertained to seepage and runoff from the proposed WRSA, and updates to the WROMP are driven by the upcoming Point Lake operations. Several comments and recommendations pertaining to the Point Lake Development were received during the review of WROMP V.12.0. The Board has reviewed the comments and responses and has decided that some revisions to the WROMP are required. However, because of the nature of the revisions – which involve the inclusion of information already provided during the public review, as well as information pertaining to a monitoring plan that has not yet been developed – the Board believes it is appropriate for Arctic to move forward with the Point Lake development and include the necessary revisions in Version 13.0 of the WROMP. These topics are discussed in greater detail in sections 3.1.1 through 3.1.5 of this RFD.

3.1.1 WRSA Seepage Collection Channels

GNWT-ECC (comment 11) and IEMA (comment 1) noted that while the WROMP speaks to the monitoring of seepage collection ditches and sumps for physical stability and flow losses, and commits to subsequent investigations should flow losses be detected (as per WROMP V.11.1 commitments), the frequency of monitoring and investigations is unclear, as is the method by which flow losses will be determined. GNWT-ECC recommended that Arctic update the WROMP to include the frequency of monitoring, investigations, and the method by which flow losses will be determined or observed for the performance of WRSA Seepage collection channels. IEMA recommended that Arctic include the thresholds for visual monitoring that they will use to decide when other types of monitoring, including installation of wells, is required. Board staff (comment 6) also requested that Arctic clarify what factors would be considered and what criteria would lead to the installation of monitoring wells.

Arctic responded that monitoring for possible seepage losses is intended to be part of the twice per year inspections of physical stability, that incidental observations of seepage flow and possible flow losses will also be made during seepage surveys conducted monthly during the ice-free season, and that monitoring will be a visual inspection that leads to specific detailed investigations where a need is identified. Initial indications of flow loss could include observed water emergence or wet spots downgradient of the channel, observed loss or reduction in flow in the channel, and deformation or slumping of the

⁹ See WLWB Online Registry for [Ekati - Amendment - Point Lake - Issuance Letter and Water Licence - May 13 22](#)

downgradient channel sides or berms. Arctic stated that monitoring wells represent one possible means of investigating an area of suspected flow losses, and that a determination of whether a monitoring well(s) would be installed would be made based on the circumstances at hand.

IEMA (comment 1) noted that WRSA Design Plan V.1.1 proposed the installation of downstream wells if seepage surveys and visual inspections indicate the channels are not performing as intended, but that has been replaced by “shallow groundwater monitoring” and requested Arctic explain this change. IEMA further recommended that as part of the Point Lake seepage collection channels, Arctic should install a series of sub-surface monitoring wells immediately downstream of the unlined collection channels and regularly monitor the wells to determine the presence, movement, and quality of seepage in the substrate soil. Arctic responded that because there is no connectivity to the sub-permafrost groundwater regime, any monitoring would specifically target shallow groundwater. Arctic disagreed with the recommendation to immediately install wells, recommending instead that a visual monitoring program that leads to detailed investigation and remedial action on an adaptive management basis is appropriate.

The Board is of the opinion that the installation of groundwater monitoring wells is not necessarily required, provided a robust visual monitoring program is in place. As Arctic explains, monitoring wells are one of a suite of available adaptive management options that can be employed should visual inspections identify changes in physical stability or loss of flow in the WRSA seepage channels. To improve clarity, the Board requires that the WROMP be revised to include a description of seepage channel monitoring frequency, a description of the indications of flow loss that will be used to trigger adaptive management, and a description of the adaptive management strategies that could be used.

- ***WROMP Revision #1: In Version 13 of the WROMP, Arctic is to include a description of seepage channel monitoring frequency, a description of the indications of flow loss that will be used to trigger adaptive management, and a description of the adaptive management strategies that could be used.***

3.1.2 Humidity Cell Testing

Tłı̨chǫ Government (comment 2) commented that through the Point Lake Licensing process, the Board required Arctic to continue its kinetic (Humidity Cell) tests, and that while the WROMP says results of the continued testing are in Appendix H.2, Tłı̨chǫ Government was unable to locate them. Tłı̨chǫ Government recommended that the WROMP be updated to include the results and interpretations of the humidity cell tests (HCTs) for potentially acid generating (PAG) rock at Point Lake. Arctic responded that “Appendix H of WROMP V.12 provides the detailed geochemical report that was provided in the Point Lake WRSA Seepage Prediction Report that was recently approved by the Board”, and that “this report provides current detailed reporting on the HCT's.” Arctic also confirmed that the HCT's will continue until otherwise approved by the Board. Arctic’s response also provided a summary of the biochemical analyses submitted in the WROMP.

The Board notes that responses submitted by Arctic during the WRSA Design Plan and WRSA Seepage Report Versions 1.1 review (GNWT ECC Comment 8) state that “The Humidity Cell Tests (HCTs) “continue

to be in operation (currently at test week/cycle 91 on August 29, 2023)",¹⁰ yet the WROMP Appendix H is dated August 2022, and as such it may not reflect the most current information. However, the Board is of the opinion that an update is not required at this time, as discontinuance of HCT testing will require a request to the Board, and such a request would be expected to include all relevant supporting information.

3.1.3 Overburden Infiltration Monitoring

Tłıchq Government (comment 4) commented that during the review of WRSA Design V.1.1, Arctic had committed to investigating methods for monitoring infiltration into/through overburden till at the Ekati Mine (so to determine infiltration rates in the overburden layer of the WRSA cover) and requested an update. Arctic replied that it has not yet identified a monitoring program that is appropriate for inclusion into the WROMP but was continuing to investigate. The Board requires that the WROMP be revised to include a description of the proposed overburden infiltration monitoring program. If no appropriate monitoring program has been identified at the time, Arctic shall provide an update on the steps it has taken to develop one. Once developed, the monitoring results shall be provided in the Annual Report as per Schedule 1, Condition 1(n)(v).

- ***WROMP Revision #2: In Version 13 of the WROMP, Arctic is to include a description of the overburden infiltration monitoring program and clarify that the results of the program will be provided in the Annual Report.***

3.1.4 Long term Seepage Quality

IEMA (comment 3) commented that "modelling to predict seepage quality for Point Lake WRSA is premised on the assumption that the vast majority of the waste rock will remain eternally frozen" with "flow through the WRSA expected to be very slow, with contaminant loads potentially further delayed due to attenuation mechanisms along the flow path", and that "given freezing conditions are considered a key mitigation to minimize dissolution and migration of contaminants, the status of frozen conditions in the waste rock should be considered an early indicator that the mitigation is working and will work in the long-term." IEMA recommended Arctic provide a more proactive adaptive management plan for addressing uncertainty about long-term seepage water quality, and that the plan should include monitoring, analysis, and response related to the status of freezing conditions in any WRSAs that have potentially acid-generating waste rock and covers.

Arctic responded that post-closure thermal monitoring of the Point Lake WRSA will be addressed by the planned post-closure adaptive management program – broadly through the ICRP, and through a facility-specific plan as per Part K, Condition 12 of the Licence, which requires the submission of a final closure cover design that must address "How the company will protect water quality if the cover does not perform as well as expected, including mitigations and contingencies." The Board is of the opinion that the issue

¹⁰ See WLWB Online Review System for [Ekati Point Lake WRSA Design and Seepage Prediction Report V1.1](#)

of long-term seepage monitoring is best addressed through closure submissions. The Board is of the opinion that no adjustments to the WROMP are necessary with regards to this item at this time.

3.1.5 WRSA Design Plan

During the public review, Board staff followed up on one of the Decisions from Versions 1.1 of the Point Lake WRSA Design and Seepage Prediction Report (Board staff comment 5). That decision required Arctic to address a comment from Board staff related to information on bench size and the quantity of rock to be tested during geochemical sampling. In the conformity table with WROMP Version 12.0, Arctic stated that information regarding bench size and the quantity of rock to be tested during geochemical sampling does not need to be included within the WROMP. In review of the WROMP, Board staff asked Arctic to clarify how it will ensure that a sufficient volume of rock is tested in order to confirm the pre-mining geochemical characterizations (Board staff comment 5). Arctic responded that it had determined that three samples per rock type per bench per year will provide an adequate number of samples for the purpose of the sampling program, and that “the program established in the WROMP was designed to ensure that the sample set is representative by providing for samples distributed throughout the open pit. Because the sampling program is based on a set frequency of sampling independent of a prescribed total number of samples...the predicted total number of samples is not required in the WROMP.” The Board is of the opinion that Arctic has adequately addressed the comment, and that no adjustments to the WROMP are necessary with regards to this item at this time.

3.2 Seepage Response Framework

There is currently no approved Seepage Response Framework (SRF). In Version 11 of the WROMP, Arctic proposed a SRF, but it was not approved by the Board because the proposed seepage thresholds were greater than the Licence EQCs. In its Reasons for Decision, the Board noted the SRF appeared premature, and in the submitted form, did not comply with the Licence.¹¹ The Board subsequently decided: a) to require Arctic to propose seepage management that is consistent with the requirements of Water Licence W2020L2-0004 in the WROMP Version 11.1; and b) until there is a Board-approved WROMP that addresses management of seeps that exceed EQCs at the point the seep daylight from the Waste Rock Storage Area, Arctic is required to notify the GNWT Inspector and the Board if a seep exceeds an EQC at point of daylighting from the WRSA, and to seek the GNWT Inspector’s direction on how to manage the seep.¹²

WROMP V.11.1 was approved, with the Board noting that the 2022 Licence Renewal was forthcoming and that any changes to EQCs and/or response strategies could be proposed at that time.¹³ During the Licence Renewal, Arctic included a proposed conceptual SRF in its November 2, 2022 Application, noting during the proceeding that the current practice does not appear satisfactory to reviewers and the Board, and the

¹¹ See WLWB Online Registry for [Ekati – WROMP – 2019 Seepage Survey Report and WROMP V11 – Reasons for Decision – Mar 15 22.pdf](#)

¹² Ibid

¹³ See WLWB Online Registry for [Ekati – WROMP V11.1 – Reasons for Decision – Nov30 22.pdf](#)

use of the proposed SRF would be a more appropriate risk-based approach.¹⁴ During the proceeding, no parties had any issue in principle with the use of the proposed SRF; however, there was much discussion during the proceeding regarding its application, including how it would work in practice and in conjunction with existing Licence requirements, and what information should be included in the SRF. The Board subsequently decided to require Arctic to submit a WRSA SRF for approval within 90 days of the issuance of Licence W2022L2-0001.¹⁵

Arctic did not propose any new changes to its adaptive management strategies in WROMP V.12.0. Instead, it noted that a new SRF was forthcoming, and suggested that changes to adaptive mitigation and seep screening criteria would take place as a result of the SRF review. In the meantime, it proposed ongoing seepage management consistent with the WROMP V.11 Reasons for Decision. During the review of WROMP V.12.0, reviewers brought forward a number of comments and recommendations pertaining to this topic. These issues are discussed below. In general, the Board is of the opinion that these topics can be addressed as part of the review of the forthcoming SRF; where it deemed necessary, the Board has set requirements for that submission.

3.2.1 Adaptive management and mitigations

Tłıchǫ Government (comment 1) acknowledged that the SRF will include action levels and mitigations and thus did not comment on content in WROMP Version 12 that is related to the upcoming Seepage Response Framework. Arctic acknowledged the requirement to submit the SRF by March 2024.

GNWT-ECC (comment 12) and IEMA (comment 5) commented that as per the WROMP V.11.1 RFD direction, WROMP 12.0 is to include timelines to complete the initial responses for adaptive management of seeps and the timing to screen for seeps of potential concern; however, no timelines or procedures were included. GNWT-ECC noted that Arctic has simply committed to working with an Inspector to determine an appropriate adaptive management response. Arctic committed to providing procedures/timelines for seepage management, and directions on the implementation in the SRF.

Given the impending submission of the SRF, the Board is of the opinion that the concerns regarding the selection and implementation of mitigation measures that were brought forward during the WROMP V.12.0 review will be best addressed through the review of the SRF. The Board recognizes that future versions of the WROMP will reflect the content of the SRF, once approved. It also acknowledges that the approval of the SRF may take time, and that ongoing seepage management is required in the interim. Improvements to the identification, reporting, and responses to seeps of potential concern can be actioned prior to the approval of the SRF.

Currently, as described in GNWT-ECC comment 12, seepage screening appears to occur annually, so it is possible that a seep be sampled multiple times (i.e., spring and fall) before results are screened to identify the SoPC or EQC exceedance. As such, there could be delays in adaptive management actions and

¹⁴ See WLWB Online Registry for [Ekati - Renewal - Summary of Proposed Changes - Nov 2 22.pdf](#)

¹⁵ See WLWB Online Registry for [Ekati - Licence - Renewal - Recommendation to Minister and Reasons for Decision - Oct 17 23.pdf](#)

regulatory reporting to the Board and the Inspector. The Board is of the opinion that more frequent screening would allow for earlier identification of SoPCs and EQC exceedances, so that adaptive management actions and subsequent reporting could occur sooner. Until the new SRF is approved and implemented, the Board requires that samples be screened within 30 days of receiving the water quality results.

- ***Decision #3: Until the Seepage Response Framework is approved and implemented, Arctic is to increase the frequency of seep screening. Specifically, Arctic is to screen samples within 30 days of receiving the water quality results.***

3.2.2 Seep Screening Criteria

Many of the review comments pertain to the way that Arctic determines and manages SoPCs and the use of EQC as a screening criterion. Overall, recommendations were for this process and/or rationale to be revised in the WROMP (GNWT ECC comments 7, 8 and 12, IEMA comment 5, 8, 9 and 10). The Board recognizes that there are issues with the existing seepage approach in the WROMP, and previous Decisions have addressed the issue surrounding flagging a seep once an EQC is exceeded. This issue was extensively discussed throughout the Licence renewal proceeding and the company is required to provide a response framework that will function more like an adaptive management framework (by including earlier triggers and applying mitigation measures before exceedances occur).

The SRF is to be submitted in March 2024. The Board is of the opinion that a parallel process to update the WROMP in the interim would not be efficient, but recognizes that this leaves some gaps, especially if the revised SRF takes time to be approved. The Board has thus provided the above screening requirements to help address this gap.

The comments received on this topic included significant technical feedback from parties about the type of data to use when developing the criteria. The Board is of the opinion that the recommendations were adequately addressed for the purpose of this current review but requires that the feedback be considered further by Arctic when it develops the SRF.

- ***Decision #4: The Seepage Response Framework is to consider the comments pertaining to seep screening and adaptive management that were submitted to the Board during the WROMP V.12.0 review (i.e., GNWT-ECC comments 7, 8, and 12; IEMA comments 5, 8, 9, and 10).***

3.3 Other Topics

3.3.1 Definition for Receiving Environment

GNWT-ECC (comment 4) commented that Arctic was still using the old definition for Receiving Environment, rather than the one included in the renewed Water Licence and recommended the WROMP be updated to reflect the current definition. Arctic responded that the considerations of the LWBs Waste and Wastewater Management Policy should be applied once a review of the SRF has been completed. The Board notes that WROMP Version 12.0 was submitted prior to the issuance of the renewed Water Licence.

The Board also recognizes that updating the use of this term will be necessary when incorporating the SRF into the WROMP once its approved. Furthermore, the RFD on the Renewed Licence specified the following:

The Board recognizes that until a Seepage Response Framework is approved, there may be some questions about the regulation of seepage at Ekati. The Board would like to clarify that until the WRSA Seepage Response Framework required by Part H, Condition 7 is approved, the Board's decisions respecting Version 11 of the WROMP will continue to apply.

In other words, until the new SRF is approved, Arctic is required to notify the GNWT Inspector and the Board if a seep exceeds an EQC at point of daylighting from the WRSA, and to seek the GNWT Inspector's direction on how to manage the seep. With this in mind, the Board is of the opinion that an update to the terminology can wait until the next version of the WROMP.

- ***WROMP Revision #3: In Version 13 of the WROMP, Arctic is to include updated terminology for Receiving Environment and Receiving Water, to align with the Renewed Water Licence.***

3.3.2 Discontinuation of Reference Seeps

Tłıchq Government (comment 3), GNWT-ECC (comment 5), IEMA (comment 7), ECCC (comment 1) and Board staff (comment 2) all requested further information regarding Arctic's suggestion for the potential discontinuation of monitoring at reference seeps REF-005, REF-040, and REF-037. Arctic responded to all parties that REF-005 and REF-040 have shown indications of mine impacts and REF-0037 is less than 2 km from Sable and could thus be affected by dust, suggesting the reference points may not be fulfilling their original aim. Arctic further noted that it has a robust dataset of non-mining impacted seepage from the site (pre-mining) which may be more useful. Arctic notes that it continues to sample at these reference seeps, and that requested change to protocols would be accompanied by more formal requests and justifications prior to any change in sampling. The Board acknowledges that Arctic is not currently proposing to discontinue this monitoring and that Arctic will provide a more formal request should it wish to pursue this option in the future. The Board notes that the comments and recommendations provided on this topic outline the information that parties have indicated they would like to see when considering such a request. ***The Board is of the opinion that it would be valuable for Arctic to consider this information in any future proposal to discontinue sampling.***

3.3.3 Seep Mixing Zone Factors

GNWT ECC (comment 6) recommended that references to seepage mixing zone factors be removed from the WROMP as mixing zones are not included in the Water Licence or any associated Plans for WRSAs, since EQCs apply where the seep 'daylights' and enters the Receiving Environment from a WRSA. Arctic responded that part of the requirement for the Seepage Response Framework is to evaluate EQC and mixing zones, including providing evidence that mixing zones for seepage were considered in setting Effluent Quality Criteria or a proposal of how Arctic will ensure aquatic benchmarks are met in Receiving

Water that receives seepage. Arctic further responded that any relevant updates to the WROMP should be undertaken once the SRF has been completed.

The Board notes that it is currently unknown if any mixing zones will be relevant for seeps but that this will be evaluated during review of the SRF. The Board is of the opinion that it would be most effective to update the WROMP accordingly once the SRF is approved.

- ***WROMP Revision #4: In Version 13 of the WROMP, Arctic is to ensure that any reference to mixing zones reflects the documentation and Board decision associated with the SRF.***

3.3.4 Sable Development WRSA

Tłıchq Government (comment 5) noted that section 2.4 of the WROMP (i.e., the section that provides background information on the approved activities and storages areas) describes mining and waste rock storage at all Ekati mine site developments except for Sable. Tłıchq Government recommended that section 2.4 be updated to include waste rock storage at the Sable Development. The Board notes that consideration of the Sable Development has been included in other parts of the WROMP as was required by the Licence and previously approved; however, it appears that adding it to the background section was missed. In response, Arctic committed to ensuring the information is included in the next WROMP revision.

- ***WROMP Revision #5: In Version 13 of the WROMP, Arctic is to include information on the Sable Development in section 2.4.***

3.3.5 Waste Rock Characterization

Use of NP/MPA

GNWT-ECC (comment 3) commented that some sections of the WROMP referred to NP/AP as the criteria by which waste rock is determined to be PAG or Non-PAG, while others referred to NP/MPA. GNWT-ECC recommended that Arctic define NP/MPA and clarify the differences and similarities between NP/AP and NP/MPA. Arctic responded that the two terms can be used interchangeably and committed to a consistent use of terminology in the next revision.

- ***WROMP Revision #6: In Version 13 of the WROMP, Arctic is to use consistent terminology for NP/AP, and to define MPA if it is choosing to use it instead of AP.***

Board staff (comment 1) noted that while section 3.1.2 had been updated to reflect the most recent criteria to define if rock is potentially acid generating or non-potentially acid generating, (i.e., NP/AP < 1 is PAG rock, NP/AP < 2 is considered as PAG rock for operational management, and NP/AP > 2 is non-PAG rock), other sections still made reference to the old criteria. Arctic committed to updating future versions of the WROMP to reflect the new criteria.

- ***WROMP Revision #7: In Version 13 of the WROMP, Arctic is to use the most recent criteria for defining if rock is PAG or non-PAG.***

Sobek/Modified Sobek Method

GNWT-ECC (comment 9) requested clarification on Arctic's use of the standard Sobek procedure versus the Modified Sobek Procedure for calculating NP/AP, as it appeared the two terms might be being used interchangeably, despite their differences (i.e., that the modified method "reduces over-estimation of bulk NP relative to the standard Sobek method"). IEMA (comment 6) also recommended that Arctic describe how historical Acid Base Accounted (ABA) results using the Standard Sobek procedure can be compared to recent results using the Modified Sobek procedure. Arctic responded that the standard Sobek Method was utilized (with the exception of Point Lake waste rock) to determine the NP of waste rock until 2021. From that point onward, the Modified Sobek Method has been, and will continue to be utilized to determine the NP in all waste rock. Arctic clarified that the method used to measure NP does not change the classification of the rock as PAG or Non-PAG, as the thresholds for classification remain the same (metasediment rock types are managed as PAG irrespective of the NP classification. Rock with an NPR <2 will be classified as PAG). The Board is of the opinion that Arctic has adequately addressed the comment, and that no adjustments to the WROMP are necessary with regards to this item at this time.

3.3.6 Lynx Diabase Risk Mitigation Program

GNWT-ECC (comment 10) noted that section 7.5.1 states that "Acid-base accounting sampling of placed construction rock containing diabase will be undertaken by the Environment Department or operations staff trained by the Environment Department" and requested confirmation that acid-base accounting analysis for the Lynx Diabase Risk Mitigation Program is completed at a laboratory accredited by the Canadian Association for Laboratory Accreditation. Arctic confirmed that only the sampling is done by mine staff, but that lab analyses were performed at an accredited laboratory. Given the plan states that it is the sampling, not the analyses, that is done by mine staff, the Board is of the opinion that no adjustments to the WROMP are necessary with regards to this item at this time.

3.3.7 Toe Berms

IEMA (comment 2) commented that several sections of the WROMP refer to the use of toe berms as a mitigation method that will limit runoff water from waste rock. IEMA noted that toe berms are usually designed to allow water to pass through, so to limit the accumulation of water within structure, and while in some instances they can reduce sediment transport via filtration, they are not used to limit runoff. IEMA requested Arctic clarify the purpose of the toe berms in the mitigation and management of seepage. Arctic responded that these structures should still be considered a potential mitigation method, as they can be applied at the toe of a WRSA, or further down gradient and designed to meet specific risk or adaptive management issues. Arctic committed to reviewing and adjusting, as necessary, the language referencing "toe berms" to ensure it is current and relevant.

- ***WROMP Revision #8: In Version 13 of the WROMP, Arctic is to include any necessary revisions to address IEMA comment 2.***

3.3.8 WRSA Physical Stability

IEMA (comment 4) commented that while the WROMP describes the monitoring of physical stability of the WRSAs, it does not identify who will conduct the inspection. IEMA suggested that annual inspections be carried out by a qualified geotechnical engineer and monthly inspections be carried out by on-site staff, as per engineer-approved procedures, and that monitoring should continue for inactive WRSAs. IEMA also recommended that the results of the inspections be included in the Annual Reports. Arctic responded that the WRSAs are monitored by on-site staff during waste rock placement and that semi-annual inspections are conducted by the Environment team as part of seepage collection surveys. Areas of instability or hazards are reported to the on-site technical team and are elevated in consultation with a qualified geotechnical engineer if corrective action is required.

The Board acknowledges the requirement for Arctic to build in accordance with design and performance aspects that will be assessed and monitored at closure and suggests that there are sufficient checks and balances in place to ensure physical stability concerns are addressed. The Board is requiring the inclusion of the inspection reporting done by mine staff in the Annual Report as a mechanism to ensure inspections are taking place, and for the early identification and communication of potential WRSA physical stability concerns.

- ***Decision #5: Arctic is to include information regarding the results of the WRSA physical stability inspections in the Annual Water Licence Report***

- ***WROMP Revision #9: In Version 13 of the WROMP, Arctic is to provide the information on inspections that was provided in response to IEMA comment 4, and to indicate that the results of the inspections will be communicated in the Annual Report.***

3.3.9 Company Name

GNWT-ECC (comment 2) recommended that the WROMP be updated to correctly refer to the operating company as Burgundy, rather than Arctic, and Arctic committed to the update in the next version of the WROMP. The Board is unsure if this should be a required revision because it is unclear if documents/decisions should be referring to Arctic or Burgundy. The Board acknowledges that Burgundy appears to be the operating Company; however, the Licence has been issued to Arctic and no request for a name change or application for an Assignment has been received by the Board. It is also the Board's understanding that GNWT-ECC has not indicated that either is required. Prior to making any updates to future submissions, the Board requires Arctic to engage with GNWT-ECC to determine whether a name change request or Assignment application is necessary. The outcome should be communicated to the Board and the next version of the WROMP (and all future Licence submissions) can be updated accordingly.

- ***Decision #6: Arctic is to engage with GNWT-ECC regarding the name of the operating company to determine whether a name change request or Assignment application should be submitted***

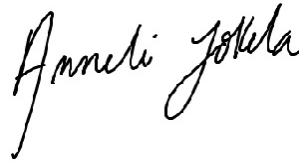
to the Board. If either is required, Arctic should submit it immediately. If neither is required, Arctic is to provide an update with an explanation to the Board.

- *WROMP Revision #10: In Version 13 of the WROMP, Arctic is to refer to the operating Company based on the outcome of Decision #6.*

Signed the 31st day of January, on behalf of the Wek'èezhìi Land and Water Board



Mason Mantla
Chair, Wek'èezhìi Land and Water Board



Witness