



PO Box 32, Wekweètì NT X0E 1W0
Tel: 867-713-2500 Fax: 867-713-2502

#1-4905 48th Street, Yellowknife NT X1A 3S3
Tel: 867-765-4592 Fax: 867-765-4593
www.wlwb.ca

August 24, 2021

Files: W2020L2-0004 (formerly W2012L2-0001),
W2021X0004, and W2021D0005

Mark Cliffe-Phillips
Mackenzie Valley Review Board
200 Scotia Centre
Box 938, 5102-50th Avenue
Yellowknife NT X1A 2N7

Sent by email

Dear Mark Cliffe-Phillips,

Re: Point Lake Project– Notice of Preliminary Screening Determination – Applications for Land Use Permits and Water Licence – Mining and Milling – Ekati Diamond Mine, NT

The Wek'èezhii Land and Water Board (Board) met on August 24, 2021 and considered the Permit Applications and Licence Amendment Application from Arctic Canadian Diamond Company Ltd. (Arctic) for Land Use Permits (Permits) W2021X0004 and W2021D0005 and Water Licence (Licence) W2020L2-0004 (formerly W2012L2-0001) for the Point Lake Project in accordance with the *Mackenzie Valley Resource Management Act* (MVRMA).

The Board conducted a preliminary screening based on the public record for the proceedings. Based on the evidence provided, the Board is satisfied the screening has been completed according to section 125 of the MVRMA and has decided **not to refer** the Project to environmental assessment. The Board's Preliminary Screening Determination and Reasons for Decision, as required by section 121 of the MVRMA, is attached.

If the Board does not receive notice of referral to environmental assessment, it will continue with the regulatory proceedings of Permits W2021X0004 and W2021D0005 and Licence W2020L2-0004 on **September 4, 2021, Saturday.**

The Board and staff look forward to continued communications throughout the pause period. Please contact Ryan Fequet at (867) 765-4589 with any questions or concerns regarding this letter.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "J Mackenzie".

Joseph Mackenzie
Chair, Wek'èezhii Land and Water Board

BCC'd to: Ekati Distribution List
Sheila Chernys, Arctic

Attached: Preliminary Screening Determination and Reasons for Decision



PO Box 32, Wekweètì NT X0E 1W0
Tel: 867-713-2500 Fax: 867-713-2502

#1-4905 48th Street, Yellowknife NT X1A 3S3
Tel: 867-765-4592 Fax: 867-765-4593
www.wlwb.ca

Preliminary Screening Determination and Reasons for Decision

| | |
|-------------------------|--|
| File Number | Type A W2020L2-0004 (formerly W2012L2-0001) and Type A W2021X0004/W2021D0005 |
| Company | Arctic Canadian Diamond Company Ltd. (Arctic) |
| Project | Point Lake Project |
| Location | Ekati Diamond Mine, NT |
| Activity | Mining and Milling |
| Date of Decision | August 24, 2021 |

1.0 Preamble

The Wek'èezhii Land and Water Board (Board or WLWB) is the regulator responsible for the use of land and water and the deposit of waste throughout Wek'èezhii. The Board also has responsibilities under Part 5 of the *Mackenzie Valley Resource Management Act* (MVRMA) as a regulatory authority and conducts preliminary screenings in accordance with the MVRMA, the relevant regulations and Guidelines issued by the Mackenzie Valley Environmental Impact Review Board. This preliminary screening decision has been unusual and challenging for the Board for the reasons set out below.

The approach taken to this screening by the Applicant is, in the Board's experience, without precedent. As part of its responses to the public review of the Point Lake Project Applications, Arctic Canadian Diamond Company Ltd. (Arctic) provided a letter on July 29th (the Arctic letter).¹ The Board acknowledges the important disclosure made in the Arctic letter about the business case for the Jay Project and the implications Arctic foresees for its operations if an Environmental Assessment (EA) were to be ordered for the Point Lake Project. If all the assumptions made by Arctic are accurate, the company is indicating that the delay occasioned by an EA would leave a gap in process plant feed in 2024 that would result in shutdown and closure of the Ekati mine. Arctic says that the loss of this mine would generate significant

¹ See WLWB Online Registry (www.wlwb.ca) for [Ekati – Point Lake – Amendment - Review Summary and Attachments – Jul 29 21](#) – p. 101, see letter from Arctic

adverse socio-economic impacts in the NWT. This may be true. But the Board’s responsibility under paragraph 125(1)(a) is to determine “whether, in its opinion, the [Point Lake Project] might have a significant adverse impact on the environment or be a cause of public concern. An impact on the environment is defined in the MVRMA as “any effect on land, water, air or any other component of the environment, as well as on wildlife harvesting, and includes any effect on the social and cultural environment or on heritage resources”.² Under paragraph 125(1)(b), the Board is to refer the proposal to the Review Board for an environmental assessment should the answer to either of the tests set out in paragraph 125(1)(a) be ‘yes’. The Board’s responsibility does not include consideration of the impacts on the [socio-economic] environment of not having the Ekati Mine Project because of the delays caused by an EA of the Point Lake Project.

The WLWB acknowledges the economic and socio-economic importance of the Ekati Mine to the NWT. However, the Board is of the opinion that consideration of the possible business implications for the Ekati Mine as a whole of a referral to EA of the Point Lake Project is not a necessary part of satisfying the requirements of paragraph 125(1)(a) of the MVRMA for the preliminary screening of the Point Lake Project. The Board has conducted a preliminary screening of the proposed Point Lake Project as required by law and with full consideration of all the relevant information available on the record and its decision is set out below.

2.0 Decision

In accordance with subsection 124(1) of the *Mackenzie Valley Resource Management Act* (MVRMA), the Wek’èezhìi Land and Water Board (Board) met on August 24, 2021 to make a preliminary screening determination on the Applications and amendment Application from Arctic Canadian Diamond Company Ltd. (Applicant) for Land Use Permits W2021X0004 and W2021D0005 (Permits)^{3,4} and Water Licence W2020L2-0004 (Licence)⁵ for the Point Lake Project (Project).⁶

The Board has determined that some Project activities and areas are exempt from preliminary screening, because they were previously screened and/or underwent an Environmental Assessment (EA). The Applicant has proposed new Project activities and areas, and the Board has decided not to refer the proposed changes to the Project to the Mackenzie Valley Environmental Impact Review Board (the Review Board) for Environmental Assessment because, based on the evidence, it is the Board’s opinion that the proposed changes to the Project will not have a significant adverse impact on the environment or be a cause of public concern.

² [Mackenzie Valley Resource Management Act](#), Section 111.

³ See WLWB Online Registry for [Ekati – Point Lake – Early Works Permit Application – May 31 21](#)

⁴ See WLWB Online Registry for [Ekati – Point Lake – Permit Application – May 31 21](#)

⁵ See WLWB Online Registry for [W2012L2-0001 – Ekati – Point Lake – Amendment Application – May 31 21](#)

⁶ The Project is the Point Lake Project, which is the proposed development, where “development” is defined in Part 5 of the MVRMA as: “any undertaking, or any part or extension of an undertaking, that is carried out on land or water and includes an acquisition of lands pursuant to the *Historic Sites and Monuments Act* and measures carried out by a department or agency of government leading to the establishment of a park subject to the *Canada National Parks Act* or the establishment of a park under a territorial law.”

The Board’s determinations, including reasons for its decisions, are detailed in sections 5 and 6.

3.0 List of Defined Terms and Acronyms

| | |
|--------------|--|
| AEMP | Aquatic Effects Monitoring Program |
| AOA | Archaeological Overview Assessment |
| Applicant | Arctic Canadian Diamond Company Ltd. |
| Applications | The complete application package submitted by the Applicant for Water Licence W2020L2-0004 and Land Use Permits W2021X0004/W2021D0005. |
| AQMP | Air Quality Monitoring Program |
| ATDFN | Akaiicho Territory Dene First Nations |
| Board | Wek’èezhii Land and Water Board |
| CMMP | Caribou Compensatory Mitigation Plan |
| CRMP | Caribou Road Mitigation Plan |
| CRP | Closure and Reclamation Plan |
| DFO | Fisheries and Oceans Canada |
| DKFN | Deninu Kųę First Nation |
| EA | Environmental Assessment |
| ECCC | Environment and Climate Change Canada |
| EQC | Effluent Quality Criteria |
| GNWT | Government of the Northwest Territories |
| GNWT-ENR | Government of the Northwest Territories – Environment and Natural Resources |
| GNWT-Lands | Government of the Northwest Territories – Lands |
| IEMA | Independent Environmental Monitoring Agency |
| IGO | Indigenous Governments and Organizations |
| KPSF | King Pond Settling Facility |
| MVLWB | Mackenzie Valley Land and Water Board |
| MVRMA | <i>Mackenzie Valley Resource Management Act</i> |
| Minister | Minister of the Government of the Northwest Territories – Environment and Natural Resources (GNWT-ENR) |
| NSMA | North Slave Métis Alliance |
| ORS | Online Review System (www.onlinereviewsystem.ca) |
| PAG | Potentially Acid Generating |
| Party | As per the MVLWB Rules of Procedures , an applicant, a person, or an organization participating in the regulatory proceeding for the Applications. |
| PDR | Project Description Report |
| Project | Point Lake Project, which is the proposed development (as defined in Part 5 of the MVRMA). ⁷ |
| PWNHC | Prince of Wales Northern Heritage Centre |
| Review Board | Mackenzie Valley Environmental Impact Review Board |
| SFE | Shake Flask Extraction |

⁷ “development” is defined in Part 5 of the MVRMA as:

“any undertaking, or any part or extension of an undertaking, that is carried out on land or water and includes an acquisition of lands pursuant to the *Historic Sites and Monuments Act* and measures carried out by a department or agency of government leading to the establishment of a park subject to the *Canada National Parks Act* or the establishment of a park under a territorial law.”

| | |
|-----------------------------|--|
| Standard Licence Conditions | MVLWB Standard Water Licence Conditions Template |
| Standard Permit Conditions | MVLWB Standard Land Use Permit Conditions Template |
| SCP | Spill Contingency Plan |
| SNP | Surveillance Network program |
| TG | Tłıchq Government |
| TK | Traditional Knowledge |
| TKEG | Traditional Knowledge Elders Group |
| TSS | Total Suspended Solids |
| WEMP | Wildlife Effects Monitoring Plan |
| WKSS | West Kitikmeot/Slave Study |
| WLWB | Wek'èezhii Land and Water Board |
| WMMP | Wildlife Management and Monitoring Plan |
| WMP | Waste Management Plan |
| WRRB | Wek'èezhii Renewable Resources Board |
| WRSA | Waste Rock Storage Area |

4.0 Background and Scope of Screening

Arctic submitted complete applications for a Type A Land Use Permit – Early Works (W2021X0004), Type A Land Use Permit (W2021D0005), and Type A Water Licence Amendment (W2020L2-0004) on May 31, 2021 for the Point Lake Project.

The Point Lake Project (the Project) is the open pit mining of Point Lake. Arctic has applied for a Water Licence Amendment for the dewatering, pit development, and associated activities for Point Lake. Arctic has applied for an early works Permit for the initial construction phase and a mining Permit for the operations phase. Arctic is requesting 5-year land use permit terms for each Permit.

The submitted Project Description included details on the pre-Application Engagement and on-going engagement, along with an engagement log for the pre-application period.⁸ Arctic has an approved *Ekati Diamond Mine Engagement Plan* which also describes Arctic's approach and alignment with Board Guidelines.^{9,10} Arctic noted that engagement included group, individual, and virtual public meetings.

The Licence previously underwent an amendment for the Jay Development, which required an Environmental Assessment by the Mackenzie Valley Environmental Impact Review Board (the Review Board). The Jay Report of Environmental Assessment was released on February 1, 2016, and included recommended Measures.¹¹ The Applications for the Jay Development were subsequently updated, and

⁸ See WLWB Online Registry for [Ekati – Point Lake – Project Description – May 31 21](#)

⁹ See WLWB Online Registry for [W2012L2-0001 – Ekati – Engagement Plan – Version 4.1 – Jul 27 18](#)

¹⁰ See MVLWB 'Policies and Guidelines' webpage for MVLWB (2018) [Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits](#).

¹¹ See Review Board's Online Registry at www.reviewboard.ca for [Jay Project Report of Environmental Assessment](#).

the Jay Development proceeded through the permitting and licencing process, with an amended Licence and new Permit issued.¹²

The Applications include proposed changes to the Ekati Project. Under Part 1, Schedule 1, section 2.1 of the Exemption List Regulations to the MVRMA, project areas and activities that have already been subject to Part 5 of the MVRMA are exempt from preliminary screening. The new Project activities/areas require screening by the Board in accordance with subsection 124(1) of the MVRMA.

In accordance with paragraph 125(1)(a) of the MVRMA, the Board must conduct a preliminary screening of the proposed changes to the Project to determine and report to the Review Board whether, in its opinion, the proposed changes to the Project might have a significant adverse impact on the environment or might be a cause of public concern. The details of the Board's analysis are set out in section 5 below.

4.1 Scope of Screening

Previously Assessed Areas and Activities:

The Board recognizes that activities at the Ekati Mine have undergone numerous levels of environmental impact assessment over the years. The following is a list of activities that the Board understands to have been previously considered and does not require preliminary screening at this time:

Mining Phase (operations)

- Haulage of kimberlite to the Process Plant on the Misery Road;
- Operation of the Process Plant and support infrastructure;
- Operation and maintenance of the Jay Road;
- Deposition of processed kimberlite into the approved Processed Kimberlite Containment Areas;
- Operation of the Main and Misery camps and support infrastructure;
- Maintenance of open pit mining equipment;
- Operation and maintenance of a water pipeline/pumping system from KPSF to Lynx open pit; and
- Site-wide environmental monitoring and reporting.

Post-Mining Phase (Closure and Reclamation)

- Removal of mining infrastructure; and
- Site-wide reclamation monitoring and reporting.

New Areas and Activities:

Early Works Phase and Mining Phase

- Short access road development from the Jay Road to the Point Lake site (roughly 500 m length, 25 m wide);

¹² See WLWB Online Registry for [W2012L2-0001 – Ekati – Water Licence – Amendment – Jay Development – RFD and Recommendation to Minister – May 29 17](#)

- Fish removal and dewatering of Point Lake;
- Temporary dewatering and minewater pipelines from the Point lake site to Lac du Sauvage and to KPSF;
- Point Lake open pit mining including use of explosives for blasting;
- Point Lake WRSA (49 ha footprint) and Overburden stockpile (24 ha footprint);
- Two seepage collection sumps for the Point Lake WRSA; and
- Site-based environmental monitoring and reporting.

Post-Mining Phase (Closure and Operations)

- Placement of Point Lake WRSA closure cover;
- Flooding and reclamation of Point Lake open pit;
- Reclamation of Point Lake road, overburden stockpile and WRSA seepage collection sumps; and
- Site-based reclamation monitoring and reporting.

4.2 Public Record and Regulatory Proceeding

To assist the Board in its preliminary screening determination for the Project, the Board distributed the Applications, a draft Licence, and draft Permits for public review on June 10, 2021, inviting reviewers to provide comments and recommendations on the Applications and the preliminary screening (e.g., on impacts and mitigation measures) using the Online Review System (ORS). Comments were due July 15, 2021, with responses from the Applicant due July 29, 2021. The Board received comments and recommendations from Deninu Kų́ First Nation (DKFN), Environment and Climate Change Canada (ECCC), Fisheries and Oceans Canada (DFO), Government of Northwest Territories – Land - Inspector (GNWT-Lands-Inspector), Government of Northwest Territories – Lands (GNWT-Lands), Independent Environmental Monitoring Agency (IEMA), North Slave Métis Alliance (NSMA), Tłıchų Government (TG), and Wek’èezhii Renewable Resources Board (WRRB). A cover letter for GNWT-Lands noted that all GNWT departments with interests related to the Project reviewed the application package, and GNWT-Environment and Natural Resources (GNWT-ENR) and GNWT-Education, Culture, and Employment (GNWT-ECE) also contributed comments. All comments from GNWT Lands, ENR, and ECE were submitted together, with comments from GNWT-Lands-Inspector submitted separately.¹³ Board staff also submitted questions. IEMA provided a letter indicating it recommended the Project be referred to EA.¹⁴

Comments were received on the draft Work Plan requesting an extension to the reviewer comment deadlines which was accommodated. Since the Work Plan was adjusted accordingly, the Board is satisfied that a reasonable period of notice was given to affected communities and First Nations, as required by subsection 63(2) of the MVRMA.

Pursuant to subsection 1.6, paragraphs (a) and (b) of the Akaitcho Territory Dene First Nations (ATDFN) Interim Measures Agreement, the Board determined that written notice was given to the ATDFN and that

¹³ See See WLWB Online Registry for [Ekati – Point Lake – Amendment - Review Summary and Attachments – Jul 29 21](#)

¹⁴ *Ibid.*, p. 91

a reasonable period of time was allowed for ATDFN to make representations with respect to the Applications.

The Board also provided notification to the TG on the Applications in accordance with the MVRMA for a “major mining project,” as defined in Chapter 23 of the Tłıchq Land Claims and Self-Government Agreement (Agreement). Arctic has provided written confirmation that it agrees that these applications are subject to Chapter 23.4.1 of the Agreement.

5.0 Potential Impacts and Proposed Mitigations

5.1 Consideration of Jay and Cumulative Effects

The Arctic letter reiterates and extends Arctic’s commitments to eliminate the Jay Project as a potential contributor to direct impacts and cumulative effects especially, on caribou. The Applicant’s position on the Jay Project has shifted over the course of the proceeding, beginning with a commitment to eliminate the Jay Waste Rock Storage Area and finishing with a firm commitment never to build the Jay project in the form that was assessed in the Jay Report of Environmental Assessment EA1314-01. This creates a novel situation.

As noted by Arctic, Jay cannot be “un-assessed”. Arctic’s solution is to request that the “Jay Project be removed in its entirety from the scope and conditions of the Water Licence”. The Board sees merit in this approach from the perspective of the preliminary screening because it reduces or eliminates Jay impacts or cumulative impacts from consideration in relation to the Point Lake Project preliminary screening. The Board also notes that these commitments and the requested change to the Licence satisfactorily address many concerns raised by reviewers of this Arctic Water Licence Amendment Application and the Point Lake Project (DKFN comment 9, GNWT comment 28, IEMA comments 3 and 5, TG comment 4, WRRB comments 3 and 5, and WLWB staff comments 7 and 8).

Once the Licence is amended to remove Jay authorizations, that project cannot be built. Arctic’s letter says that if Jay comes back, it will be on the basis of new technology and that it would be subject to Part 5 of the MVRMA. The deployment of new or untested technology is often a trigger for environmental assessment. In addition, the Jay cumulative effects assessment would have to be redone to factor in the Point Lake Project. Taking all of this into consideration, the WLWB believes that it is reasonable to conclude that the Jay Project as assessed in EA1314-01 is no longer reasonably foreseeable.

The proposed removal of the Jay Project obviously only applies to unbuilt portions of Jay. Consequently, consideration of the cumulative impacts of the Point Lake Project includes the presence and effects of the Jay Road. Provisions in the Licence and Permits related to the Jay Road must stay in place because it has been constructed. Review of all Licence conditions affected by Jay to see if they are affected by the removal of Jay from the Licence will, however, be necessary.

These reasons deal separately with caribou concerns but for the reasons explained below, the Board is of the understanding that Jay Measures continue to apply to the Point Lake Project and that for those

reasons, cumulative effects of this smaller project will be mitigated and will not be significant. The Board also notes that no Parties raised concerns with respect to cumulative effects outside of context of interactions with the Jay Project.

The Arctic proposal still leaves important procedural and practical questions unaddressed. For example, the Jay Report of EA included 22 Measures all of which by law had to be included in regulatory instruments applicable to Jay or Ekati or both, or otherwise implemented by governments, including the *Tijchq* Government. There is no provision in the MVRMA to vacate or remove these Measures. The removal of the Jay Project in its entirety may thus have effects on the roles and responsibilities of governments and other regulators as well. They may also have to review their approvals or authorizations to reflect this change. This kind of “mitigation” or change to a project which has already been assessed would, however, be easier to effect if the MVRMA provisions for Project Certificates and their amendment were in force.¹⁵ In the absence of this legislation, the MVRMA includes no explicit provisions for amending or removing conditions based on approved EA measures from instruments like a water licence. While these questions have been noted by the Board in the broader interests of the MVRMA process, the WLWB is not required to answer them for purposes of its preliminary screening. The Board simply suggests these questions for the consideration of governments and s. 126 MVRMA authorities.

5.2 Potential Impacts and Mitigations

Licence and/or permit conditions for the Project will be discussed in further detail by all Parties through the regulatory proceeding and will be finalized by the Board following completion of the regulatory proceeding.

Table 1 below summarizes:

- the potential impacts of the proposed Project;
- the concerns that were identified during the public review and how the Applicant addressed those concerns;
- the proposed and potential mitigations for the potential impacts; and
- the Board’s analysis of the potential impacts and proposed mitigations.

¹⁵ Such provisions were included in Bill C-88 which received Royal Assent June 21, 2019 but they have not yet been called into force.

Table 1: Potential Impacts and Proposed Mitigations for the Proposed Changes to the Project

| Potential Impact | Activity | <p align="center">Proposed Mitigations</p> <p align="center"><i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i></p> | Board Analysis and Determination |
|---|--|--|--|
| Soil contamination; changes in ground water quality | Use of petroleum products and/or chemicals; Transfer, storage, and use of explosives; Use of motorized and heavy equipment | <p>The Applicant proposed the following in the Applications:</p> <ul style="list-style-type: none"> • No bulk storage of petroleum products or chemicals on-site. Mobile equipment will be re-fueled off-site or by a mobile fuel truck with established procedures. A small diesel generator with a day-tank will be re-filled by a mobile fuel truck using established procedures. The day tank will include secondary containment to the satisfaction of the Inspector. Spills will be reported and remediated according to approved Waste Management and Spill Contingency Plans. • Spills will be reported and remediated according to the approved Spill Contingency Plan. • There will be no bulk storage of explosives on site. Operational quantities will be stored in authorized explosives magazines to the satisfaction of the Inspector. Established procedures are in place for explosives transfer and use that minimize nitrogen losses to wind dispersion. <p>The Board has standard Permit conditions which are typically used to mitigate the described impacts:</p> <ul style="list-style-type: none"> ○ Repair Leaks ○ Fuel Cache Secondary Containment ○ Secondary Containment – Refueling ○ Fuel Containment ○ Fuel on Land ○ Seal Outlet ○ Spill Contingency Plan ○ Spill Response ○ Drip Trays | Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern. |

| | | | |
|---|---|--|--|
| | | <ul style="list-style-type: none"> ○ Clean Up Spills ○ Report Spills ○ Waste Management <p>The Board has standard Licence conditions which are typically used to mitigate the described impacts:</p> <ul style="list-style-type: none"> ○ Effluent Quality Criteria ○ Spill Contingency Plan | |
| Land Impacts: soil compaction; destabilization/erosion; change in soil structure; inability to support vegetation | Stripping of overburden; transfer, storage, use of motorized and heavy equipment. | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Overburden to be excavated from the area of the open pit and placed into the designated overburden stockpile. During mine operations, visible erosion of the overburden will be monitored and retained with silt curtains placed in runoff flow paths. Approximately 25% of the placed overburden will be relocated for closure of the adjacent WRSA. The overburden stockpile will be seeded for closure to reduce erosion risk as described in the approved Closure and Reclamation Plan (CRP), and then monitored for erosion and vegetation growth. ○ Motorized and heavy equipment will operate only on designated roads and winter trails per the standard conditions of the Land Use Permits; use of existing roads will minimize disturbances. • The Board has standard Permit conditions which are typically used to mitigate the described impacts¹⁶: <ul style="list-style-type: none"> ○ Width Right-of-Way ○ Use Approved Equipment ○ Winter Roads ○ Progressive Erosion Control ○ Repair Erosion ○ Off-Road Vehicle Travel ○ Prevention of Rutting | Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern. |

¹⁶ See MVLWB 'Policies and Guidelines' webpage for MVLWB (2020) [Standard Land Use Permit Conditions](#).

| | | | |
|--|--|--|--|
| | | <ul style="list-style-type: none"> ○ Suspend Overland Travel ○ Vehicle Movement Freeze-up ○ Save and Place Organic Soil | |
| Ground water impacts: Water table alteration; infiltration changes; temperature changes; ground water recharge may have excess water (WLWB staff comment 12) | Withdrawal of groundwater; stripping of overburden; transfer, storage, and use of petroleum products and/or chemicals | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ No active withdrawal of groundwater. Small quantities of shallow groundwater are anticipated to be incidentally intercepted into the open pit and managed as minewater for the duration of mine operations. This will involve transfer of open pit minewater to the King Pond Settling Facility (KPSF). ○ For closure, the open pit will be flooded with natural lake water and the local shallow groundwater regime is expected to re-establish. • Mitigations proposed during review of Applications: <ul style="list-style-type: none"> ○ Arctic noted it was very confident groundwater discharge would be minimal, and noted the open pit was relatively shallow and would stay within depth of permafrost. It was observed that other pits excavated within permafrost all experienced very low groundwater inflows. The contingency option noted was to pump excess water to the Lynx pit. | Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern. |
| Permafrost impacts: Loss or change in extent of permafrost; changes in seasonal fluctuations; change in persistence | Stripping of overburden; Construction (development or alteration; widening, straightening, detours), maintenance, and operation of lines, trails rights-of-way | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Overburden to be removed within the area of the open pit and placed in a stockpile area; permafrost is anticipated to aggrade into the stockpiled overburden and will not degrade. ○ Permafrost expected to aggrade into the road, utility pad, and WRSAs. | Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern. |

| | | | |
|--|--|--|---|
| <p>Surface water impacts from water flow or level changes (permanent, temporary, seasonal); drainage pattern changes; wetland impairment; and additional water withdrawal for water balance augmentation (DFO comment 3)</p> | <p>Withdrawal of water from a watercourse; retaining, storing or diverting water</p> | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ No changes were proposed for new uses of freshwater (outside of dewatering of Point Lake). No changes to annual water withdrawal sources or rates, from those authorized in the W2020L2-0004 Licence for domestic or mine operations purposes are proposed. ○ Natural flows to Connor Lake and Christine will be reduced but diverted water will remain in same local watershed due to discharge through KPSF. ○ Water balance evaluations for KPSF have been verified to demonstrate Point Lake minewater can be effectively managed under existing Licence requirements which protect downstream surface water. ○ At closure, the open pit will be flooded with water from Lac du Sauvage to the same or approved water elevation and natural surface water flow re-established. ○ Dewatering Plan provided to outline activities and scheduling for dewatering for mitigating hydrological impacts. • Mitigations proposed during review of Applications: <ul style="list-style-type: none"> ○ DFO comment 3: In response to DFO noting water withdrawal may be required for water balance augmentation, Arctic responded that mitigation measures will be considered after potential effects are identified, and this information will be presented to DFO through the “Request for Review Process”. | <p>Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern.</p> <p>This potential impact(s) and mitigation(s) are discussed further in subsection 5.3.3 of this Reasons for Decision.</p> |
|--|--|--|---|

| | | | |
|--|---|--|---|
| <p>Impacts to surface water quality due to contaminants/inputs; seepage and/or runoff from WRSAs and Overburden Stockpile (ECCC comment 5, WLWB staff comment 5, IEMA comment 8, TG comments 6, 7, 8, 9, 10, and 13)</p> | <p>Transfer, storage, and use of petroleum products and/or chemicals near a watercourse; stripping of overburden adjacent to a watercourse; excavation or stockpiling of earth or gravel adjacent to a watercourse; stockpiling of overburden or waste rock</p> | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ No bulk storage of petroleum products or chemicals on-site. ○ Mobile equipment will be re-fueled off-site or by a mobile fuel truck with established procedures. ○ A small diesel generator with a day-tank will be re-filled by a mobile fuel truck using established procedures. The day tank will include secondary containment to the satisfaction of the Inspector. ○ Spills will be reported and remediated according to approved WMP and SECP. ○ Seepage and runoff from WRSA during operations to be collected in sumps and managed as minewater. ○ Water quality evaluations for KPSF have been verified to demonstrate Point Lake minewater can be effectively managed under existing Effluent Quality Criteria (EQC) and Licence requirements which protect downstream surface water. ○ Overburden stockpile will be monitored for visible erosion and controlled by silt curtains. ○ Residual stockpile after operations will be seeded to reduce erosion risk using methods described in approved CRP and will be monitored for erosion and vegetation growth. • Mitigations proposed during review of Applications with respect to water quality impacts from run/off seepage from WRSAs and Overburden stockpile: <ul style="list-style-type: none"> ○ Overburden sediment (ECCC comment 5, TG comment 6, and WLWB staff comment 5): Arctic responded that monitoring for excess sediment in runoff from the overburden stockpile would be done via the WRSA Seepage Surveys, which would result in sediment management as necessary. Arctic noted no chemical contaminants of concern in the overburden, that it would be actively revegetated for closure to address long-term sedimentation risks, and that it would be used for reclamation when opportunities arose which would be determined through the | <p>Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern.</p> <p>This potential impact(s) and mitigation(s) are discussed further in subsection 5.3.2 of this Reasons for Decision.</p> |
|--|---|--|---|

| | | | |
|--|--|--|--|
| | | <p>reclamation research plan.</p> <ul style="list-style-type: none"> ○ Seepage from Potentially Acid Generating (PAG) Rock (IEMA comment 8; TG comments 7, 8, 9, 10, and 13; WLWB comment 5): Arctic responded during operations all seepage would be collected in two sumps and would be sampled as per the Surveillance Network Program (SNP). Arctic noted that it was arranging for additional laboratory tests including Shake Flask Extraction (SFE) and would have a management plan that included seepage collection and placement of a thermally protective cover. ○ Arctic also noted that the newly proposed WRSA Seepage Response Framework could include the Point Lake WRSA. ○ Arctic plans to cover the entire surface so no metasediment is exposed. Arctic responded that the seepage from the WRSAs would be collected and monitored during closure and post-closure until it was safe for direct release, and that as such it did not consider post-closure seepage predictions necessary at this time. ○ Arctic noted that there was significantly less waste rock from the Point Lake pit as compared with the Jay Project. The Board recognizes that the higher percentage of metasediment at the Point Lake Project indicates a higher risk of seepage issues but notes the commitment from Arctic to continue collection of seepage from the WRSAs until the seepage is safe for direct release. The Board also notes that the interim CRP also accounts for this uncertainty at other stockpiles on the Ekati site and that the Point Lake Project, if approved, would need to be incorporated into the closure planning process. ○ Use of Lynx diabase in construction (TG comment 11): Potential post-closure water quality issues were raised, and it was recommended that this issue be considered further during the water licencing proceeding. The Board also recognizes that the diabase risk mitigation program is intended to ensure that Lynx diabase is only used for appropriate construction purposes. | |
|--|--|--|--|

| | | | |
|---|---|--|---|
| | | <ul style="list-style-type: none"> • The Board has standard Licence conditions that are typically used to mitigate the potential impacts described above¹⁷: <ul style="list-style-type: none"> ○ Effluent Quality Criteria ○ Effluent Quality - Toxicity ○ Effluent Discharge ○ Testing Before Discharge ○ Effluent Quality Criteria – Exceedance ○ Spill Contingency Plan ○ Report Spills ○ Spill Prevention and Response Equipment ○ Clean Up Spills ○ Material Storage – Ordinary High-Water Mark ○ Objective – Prevent Waste Into Water ○ Daily Inspections of Discharge Locations ○ Erosion Control ○ Construction Material – Geochemical Criteria ○ Water Intake Screen ○ Wastewater Use | |
| <p>Impacts to water quality of KPSF and Lynx Pit from dewatering and minewater inputs (WLWB staff comments 11 and 13)</p> | <p>Dewatering; minewater management</p> | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Dewatering Plan submitted to outline mitigations during dewatering. • Mitigations proposed during review of Applications: <ul style="list-style-type: none"> ○ Arctic responded that it had a high degree of confidence that the KPSF and Lynx pit could safely accommodate the second stage dewatering, and that the KPSF had previously been used to effectively manage minewater within EQC. It was noted that Total Suspended Solids (TSS) concentrations had not been modelled during dewatering, given the short time frame of the program, and that Arctic’s site-specific experience with suspended sediment when dewatering has demonstrated it settles quickly; it was | <p>Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern.</p> |

¹⁷ See MVLWB ‘Policies and Guidelines ‘ webpage for MVLWB (2020) [Standard Water Licence Conditions and Schedules.](#)

| | | | |
|--|--|--|--|
| | | <p>further identified that the dewatering inflows would have a positive effect on water quality as it would mix with Misery underground minewater.</p> <ul style="list-style-type: none"> ○ There is a contingency of pumping water to the Lynx Pit. Arctic noted that the use of Lynx Pit to accommodate Point Lake dewatering would improve water quality in the pit, and closure of Lynx pit would likely be accelerated by the volume. There is the additional contingency of pumping water back to Misery open pit if closure water quality criteria for in-pit concentrations are not achieved at Lynx pit. | |
| Impacts to surface water quality (ECCC comments 2, 3, and 4) | Dewatering; blasting; excavation or stockpiling of earth or gravel adjacent to a watercourse | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Dewatering Plan submitted to outline mitigations for erosion during dewatering. • Mitigations proposed during review of Applications related to monitoring: <ul style="list-style-type: none"> ○ Uncertainty of Water quality monitoring during dewatering (ECCC comment 2): ECCC noted water quality monitoring in the receiving environment was not mentioned in the Point Lake Dewatering Plan, and recommended the Proponent provide information related to receiving environment monitoring during dewatering. Arctic responded that the monitoring of suspended sediment and other constituents in the outflow is the established and effective method for preventing effects, and that additional monitoring was not necessary as the Point Lake water is similar to the quality of Lac du Sauvage. The Board notes the Point Lake Dewatering Plan outlines sampling for the dewatering outflow for pH, TSS, and turbidity, as well as visual erosion checks. Water quality samples are to be collected in association with the SNP, and grab samples from the dewatering outflow will be collected prior to dewatering and on the last day of dewatering for TSS, total ammonia, major ions, physical parameters, and total metals. ○ Uncertainty of Water quality monitoring during Operations (ECCC | Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern. |

| | | | |
|---|---------------------------------------|---|---|
| | | <p>comment 3): Arctic responded that the potential effect on water quality was dust from blasting, and that experience and previous monitoring demonstrates there was a low risk to water quality in these lakes. Arctic noted that as a precautionary measure a full suite of water quality data is planned to be collected. Arctic also noted that the potential effect was temporary with a duration of four to five years of mining activity, and that amending the Aquatic Effects Monitoring Program (AEMP) for the Project was complex and unnecessary for the nature and scope of risk identified.</p> <ul style="list-style-type: none"> ○ The Board recognizes these proposed monitoring details (e.g., parameters, frequency, duration, etc.) are not yet approved and there is still opportunity for discussion amongst Parties. ○ Minimal Thinner Lake baseline data for determining Overburden Stockpile erosion runoff impacts (ECCC comment 4): Arctic responded that baseline data was collected at Thinner Lake during under-ice and open-water seasons of 2019 and 2020, and that additional data was being collected for 2021. Arctic noted it believed the three years of data was considered sufficient to evaluate potential effects of runoff from the overburden stockpile on Thinner Lake, and that if changes were observed, sediment and/or erosion control measures could be implemented. ○ The Board notes that the AEMP includes sites in Lac du Sauvage, and the rest of the proceeding can explore and determine if changes to the AEMP would be needed to monitor for impacts. | |
| <p>Impacts to surface water quality: atmospheric nitrogen losses from blasting (WLWB staff comment 1)</p> | <p>Blasting and use of explosives</p> | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Nitrogen from blasting can become locally airborne; blast design and operating procedures aim to minimize this impact. Applicant also notes that operationally, nitrogen losses represent poor blasting outcomes and product wastage and are undesirable operationally. Connor, Alexia, and Thinner Lakes to be monitored for nitrogen compounds to verify atmospheric losses and initiate adaptive management as needed. | <p>Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern.</p> |

| | | | |
|--|---|--|---|
| | | <ul style="list-style-type: none"> • Mitigations proposed during review of Applications: <ul style="list-style-type: none"> ○ Atmospheric nitrogen losses from blasting (WLWB staff comment 1): Arctic responded that it proposed water quality samples be collected at Connor, Alexia, and Thinner Lakes twice per open water season through the SNP which would provide appropriate reporting mechanisms, and initiate adaptive management when needed. | |
| <p>Air impacts: changes in air quality; harm to living things; increased greenhouse gases; effectiveness of Air Quality Monitoring Program (AQMP) and mitigation options</p> | <p>Burning of fossil fuels; mobilization and operation of equipment for construction and operational activities; increased road traffic</p> | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Diesel generator to supply electricity demand for Project. Fossil fuel usage and emissions minimized through operating procedures including regular maintenance, inventory control, and minimizing equipment usage. Green House Gas emissions are publicly reported and evaluated through the Mining Association of Canada Towards Sustainable Mining program. ○ Road traffic on Misery Road will be above current levels but expected to be similar to those that underwent environmental assessment for the Jay Project. Mitigation measures in place for road dust include speed limits and use of dust suppressant; road dust to be monitored and results used to enhance on-going mitigations. • Mitigations proposed during review of Applications: <ul style="list-style-type: none"> ○ AQMP effectiveness and potential mitigation options (DKFN comment 5): When questioned about the effectiveness of the AQMP, Arctic responded that it is implemented to monitor site-wide meteorological data, air contaminant and greenhouse gas emissions, ambient air quality, and dust deposition. Arctic noted that the AQMP tracks the effectiveness of air quality programs at Ekati but does not contain specific mitigation measures. Lessons learned from previous dust suppressant projects would be assessed for use in high-traffic areas of the Point Lake Project. Arctic also noted that as part of the review process it would review and propose updates to the AQMP to incorporate the Point Lake | <p>Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern.</p> |

| | | | |
|--|--|---|--|
| | | Project. | |
| Vegetation impacts: direct loss of vegetation and loss of Species at Risk or may-be-at-risk plants; change in species composition; introduction of non-native (invasive) species; increased risk of fire; compaction of vegetation | Stripping of overburden; construction (development or alteration: widening, straightening, detours), maintenance, and operation of lines, trails, or rights-of-way; reclamation activities (levelling, contouring, placement of fines or woody debris, re-vegetation, fertilization); excavation or stockpiling of earth and/or gravel; use of motorized and heavy equipment | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Direct loss of vegetation expected from overburden stripping from around Point Lake perimeter and overburden submerged in the lake; overburden to be stockpiled and will be re-seeded at closure. ○ Site access road and utility pad will disturb area of approximately 2.1 ha but disturbance area is minimized by using existing roads and infrastructure. ○ The CRP is subject to public review and approval and will guide reclamation activities for re-vegetation; including overburden stockpile seeding and road/utility pad scarification. • Mitigations proposed during review of Applications: <ul style="list-style-type: none"> ○ TG noted that Arctic did not plan to vegetate the WRSAs at closure and believed it should be further discussed (TG comment 5). Arctic responded that the proposed closure cover for the Point Lake WRSA was construction rock and not able to be revegetated. The Board notes that Arctic indicated the rock surfacing was necessary for the WRSAs for erosion prevention and believes further discussion on the most appropriate cover design, including potential revegetation, can be discussed through the closure and reclamation planning process. • The Board has standard Permit conditions which are typically used to mitigate the described impacts for direct loss of vegetation, increased risk of fire, and compaction of vegetation: <ul style="list-style-type: none"> ○ Width Right-of-Way ○ Detours and Crossings ○ Winter Roads ○ Off-Road Vehicle Travel ○ Prevention of Rutting ○ Suspend Overland Travel | Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern. |

| | | | |
|--|--|--|--|
| | | <ul style="list-style-type: none"> ○ Vehicle Movement Freeze-up | |
| Vegetation impacts: effects on plant health (dust, metals, toxins) | Burning of fossil fuels; increased road traffic; transfer, storage, and use of petroleum products and/or chemicals; use of motorized and heavy equipment | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Diesel generator to supply electrical demand which is minimized by using existing infrastructure. Diesel fuel to be burned to operate equipment. The Project requires continuation of consumption of fossil fuels for base operations, however, fossil fuel usage and emissions are minimized through operating procedures including regular maintenance, inventory control, and minimizing equipment usage. Green House Gas emissions are publicly reported and evaluated through the Mining Association of Canada Towards Sustainable Mining program. ○ Road traffic on Misery Road will be above current levels but expected to be similar to those which underwent environmental assessment for the Jay Project. Mitigation measures in place for road dust include speed limits and use of dust suppressant; road dust to be monitored and results to enhance mitigations on-going. ○ No bulk storage of petroleum products or chemicals on-site. Mobile equipment will be re-fueled off-site or by a mobile fuel truck with established procedures. A small diesel generator with a day-tank will be re-filled by a mobile fuel truck using established procedures. The day tank will include secondary containment to the satisfaction of the Inspector. Spills will be reported and remediated according to approved Waste Management and Spill Contingency Plans. • The Board has standard Permit conditions which are typically used to mitigate the described impacts: <ul style="list-style-type: none"> ○ Spill Contingency Plan ○ Report Spills ○ Spill Prevention and Response Equipment ○ Clean Up Spills ○ Waste Management | Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern. |

| | | | |
|--|---|--|---|
| <p>Direct loss or removal of habitat, dens, or nests including keystone species/SAR sensitive habitat (WLWB staff comment 2)</p> | <p>Stripping and storage of overburden and waste rock; construction (development or alteration: widening, straightening, detours), maintenance and operation of lines, trails, or rights-of-way</p> | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ The esker is known to be an important landscape feature of the caribou movement corridor. It is located west of the project site and will not be disturbed by the Project. ○ While the area of the overburden stockpile (24 ha) is noted to be a permanent loss of caribou habitat, the closure/reclamation of overburden stockpile itself will be carried out according to approved CRP including active seeding. ○ Access road and utility pad will disturb approximately 2.1 ha but closure of road and pad will take place according to approved CRP, including scarification of surfaces. • Mitigations proposed during review of Applications: <ul style="list-style-type: none"> ○ When asked about esker overlap with the project (DKFN comment 1), Arctic responded that eskers are ecologically and culturally important features, and available TK had been incorporated into Project design to respect and limit esker disturbance. Arctic noted that habitat definitions from the West Kitikmeot/Slave Study (WKSS) Society regional ecological classification was used to measure land cover types for the terrestrial areas of the Point Lake Project footprint. An overlap of 127 m² was noted as a very small area of overlap. ○ With respect to how sensitive habitat was classified for the Project, Arctic responded that it used the phrase “sensitive habitat” in reference to aquatic habitat, and for terrestrial habitat it used habitat definitions from the WKSS Society regional ecological classification conducted by Matthews et al. (2001). It was noted that 88.2 ha of wildlife habitat was to be removed or disturbed. The terrestrial “sensitive habitat” considered the esker complex land accounted for 0.01 ha of the 88.2 ha. Arctic noted that its general mitigation is to minimize the area of disturbance to the extent practicable, through Project design and use of existing infrastructure where possible. | <p>Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern.</p> |
|--|---|--|---|

| | | | |
|--|---|---|---|
| <p>Impacts to caribou movement and ecological health/mortality from construction and operation of WRSAs/overburden stockpile/rights-of-way/open pit (DKFN comments 8, 10, and 13, TG comments 4 and 6, IEMA comment 6, WLWB staff comment 6)</p> | <p>Stripping and stockpiling of overburden and waste rock; construction (development or alteration: widening, straightening, detours), maintenance and operation of lines, trails, or rights-of-way</p> | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Implementation of Wildlife Effects Monitoring Plan (WEMP) which includes the Caribou Road Mitigation Plan (CRMP). ○ Established operational mitigation measures will apply to Project. ○ Prioritization of waste rock placement in north WRSA. ○ Exclusion of unconstructed Jay WRSA increases width of north-south corridor of caribou movement corridor east of Project. ○ WRSA and overburden stockpile to be reclaimed according to interim-CRP and community engagement to be conducted specific to optimizing WRSA configuration and Jay Road caribou crossing enhancement. ○ Wildlife safety measures for stockpiles will be determined through ongoing site-wide reclamation research under the interim-CRP. ○ Open pit to be flooded and wildlife safety measures implemented for safe egress. ○ Final closure designs to be developed collaboratively to achieve approved closure objectives and require WLWB approval prior to implementation. ○ Construction and operations of access road subject to established WEMP and CRMP. Access road will have integrated caribou crossings. ○ Misery Road traffic to increase above current levels but remain similar to those that underwent environmental assessment for the Jay Project. The CRMP was a commitment of the Jay Project and has been implemented site-wide and will apply to Point Lake. ○ Caribou ramps and crossings are in place at strategic locations on Misery and Jay roads, using field-based TK input for locations and designs. Caribou crossing to be integrated along Project access road, and caribou crossing on Jay Road to be enhanced with field-based TK. • Mitigations proposed during review of Applications: <ul style="list-style-type: none"> ○ Arctic responded that WRSA placement optimization was expected | <p>Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern.</p> <p>This potential impact(s) and mitigation(s) are discussed further in subsection 5.3.1 of this Reasons for Decision.</p> |
|--|---|---|---|

| | | | |
|--|--|---|--|
| | | <p>to be a similar process to the 2015 site visit by Indigenous community members to the Jay Road esker, when recommendations were provided on orientation and methods of constructing the esker crossing, and that it wished for a similar visit for the Point Lake project. Arctic finds that the proposed configuration of the WRSA at the Point Lake site, along with other mitigation measures results in low risk to caribou movement, and referred to GNWT-Lands comment 30 which stated that the GNWT's view was that caribou impacts can be mitigated through the WMMP.</p> <ul style="list-style-type: none"> ○ With respect to the overburden stockpile, Arctic responded that its evaluation of potential effects had not found the residual overburden stockpile represented a post-closure concern for caribou movement. It also noted that it intended for the reclamation research plan to include potential opportunities for use of residual overburden. ○ Arctic committed to a minimum 200 m setback from the local esker and Thinner Lake by the west metasediment (WRSA) pile and overburden stockpile, and also noted that a WRSA Design Report would need to be submitted and approved prior to construction of WRSAs. ○ With respect to geotechnical configuration risks to the final location configuration and design for the WRSAs (GNWT-Lands comments 21 and 22), Arctic responded that it would intend to submit the WRSA Design Report shortly following a Licence Amendment approval, and that the timing fit with construction timelines. Arctic also noted that it expected there to be negligible risk with the geotechnical field verifications as they would refine design parameters but not require a relocation of the WRSAs. ○ The Board notes that review of a WRSA Design Report would provide the opportunity for input from Parties, and believes it is an appropriate mitigation. ○ Data provided by GNWT which tracks movement of Bathurst and | |
|--|--|---|--|

| | | | |
|--|--|--|--|
| | | <p>Beverly/Ahiak herd caribou is to be used to plot movement pathways through Project area and in the caribou deflection model for adaptive management. When asked about model suitability (DKFN comment 15 and WRRB comment 4) rationale was provided for model inputs, and Arctic noted that an update to the model with recent caribou movement data would result in shorter deflection pathways and reduction in energetic costs. Arctic responded that the Jay Project model results remain relevant and conservative for potential effects from the Point Lake Project. Arctic also noted the models incorporated conservative assumptions of higher than expected values of potential effects.</p> <ul style="list-style-type: none"> ○ Comments were received about the uncertainty related to the effectiveness of the WMMP and CMMP (DKFN comment 2, IEMA comment 4, WRRB comment 3). Arctic responded that it did not agree with the comments and noted that statements about unproven effectiveness were based on selective sampling of monitoring data. The Board notes that the WMMP has been supported by the GNWT for application for the Point Lake Project which Arctic notes has mitigations for barrier effects. ○ With respect to implementation of Jay measures related to Caribou (GNWT-Lands comment 29, WLWB staff comment 8), Arctic responded that the CMP had been partially implemented by the previous owner and provided a table with current status of plan elements, noting that it intended to resume implementation and provide timelines at the Technical Workshop scheduled for September. Arctic responded that the construction and operation of the Point Lake Project would not eliminate any of the existing caribou crossings on the Jay Road. ○ In response to cumulative effects concerns with the Jay Project (IEMA comment 3, TG comment 5, DKFN comment 9, WLWB staff comment 8), Arctic responded that based on engagement feedback and business planning, Arctic is proposing the Jay Project be removed in its entirety, which could ensure no risk of | |
|--|--|--|--|

| | | | |
|---|--|---|---|
| | | <p>concurrent activities. Arctic also compared the Jay and Point Lake WRSA volumes, footprints, and heights, noting the overall significant reduction in size, as well as decreased use of the Jay Road east of Point Lake with the removal of the Jay Project, to demonstrate the comparable reduction in project size with Point Lake. This is further discussed in Section 5.1. The Board also notes that no Parties raised concerns with respect to cumulative effects outside of context of interactions with the Jay Project.</p> <ul style="list-style-type: none"> • The Board has standard Permit conditions which are typically used to mitigate the described impacts: <ul style="list-style-type: none"> ○ Caribou Disturbance ○ Habitat Damage | |
| Impacts to caribou movement and ecological health from dewatering | Dewatering activities | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Implementation of WEMP which includes the CRMP. ○ Lay-flat pipes to be used for temporary lake dewatering. ○ Dewatering schedule for one summer season (June to September) when caribou presence typically lower compared to fall/winter. | <p>Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern.</p> <p>This potential impact(s) and mitigation(s) are discussed further in subsection 5.3.1 of this Reasons for Decision.</p> |
| Sensory disturbances to wildlife (IEMA comment 5) | Stripping of overburden; construction (development or alteration: widening, straightening, detours), maintenance and operation of lines, trails, or rights-of- | <ul style="list-style-type: none"> • Mitigations proposed during review of Applications: <ul style="list-style-type: none"> ○ Implementation of WEMP including the CRMP which include mitigations for road traffic, aircraft operations, staff education, and waste management, regular wildlife surveys, and tiered responses to caribou presence. ○ Periodic review of WEMP and engagement with Indigenous communities and GNWT. ○ Regular maintenance of equipment. ○ Use of existing roads and infrastructure to limit area and disturbance locations. | <p>Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern.</p> |

| | | | |
|---|---|--|---|
| | way; increased traffic risk to wildlife; increased human presence; noise (use of heavy equipment, blasting, crushing, drilling) | | |
| Lack of Traditional Knowledge for Project development (WRRB comment 2, IEMA comments 2 and 7, and WLWB staff comments 9 and 10) | Project design | <ul style="list-style-type: none"> • Mitigations proposed during review of Applications: <ul style="list-style-type: none"> ○ Arctic responded that it was well established through Indigenous TK and science that the north-south corridor west of Lac du Sauvage was and is traditionally used by caribou in annual migrations. Field studies and TK were used to identify potential historic or existing caribou movement corridors in the Jay Project study area which included the Point Lake Project area. Arctic noted that movement pathways from radio-collared caribou were used to update information collected for the Jay Project. Arctic noted that the TKEG had formed as per the Jay EA Measure 6-5 and evolved to a site-wide scope rather than Jay Project specific, and that due to the COVID-19 pandemic had not been able to meet in 2020 or to date in 2021, but was attempting to re-establish the group for field-based TK programs in 2022. Arctic noted that existing TK was used in the Project design and environmental mitigation measures. Arctic also noted that it is developing a Point Lake Traditional Knowledge Plan to be circulated to and discussed with IGOs. ○ Arctic responded that a Traditional Knowledge Management Framework had been submitted by the previous owner to address Measure 7-1, and that Arctic intends to combine engagement on the Framework with Measure 7-2 for an on-the-land culture camp. Arctic noted that it intends to develop an implementation plan to fulfill the intent of Measure 7-2 with a focus on the Point Lake Project. There were comments about not enough opportunity to provide TK input to the Project design, however the Board notes | <p>Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern.</p> <p>This potential impact(s) and mitigation(s) are discussed further in subsection 5.4.1 of this Reasons for Decision.</p> |

| | | | |
|---|--|--|--|
| | | that there is an ongoing discussion about this and that future incorporation of TK is expected. The Board can consider including Licence conditions to require incorporation of TK, such as into the design of Project components. | |
| Impacts to critical bear habitat and study update (DKFN comments 6 and 7) | General project activities | <ul style="list-style-type: none"> • Mitigations proposed during review of Applications: <ul style="list-style-type: none"> ○ With respect to critical bear habitat, Arctic responded with a detailed habitat description and noted that the 2012-2017 study was a special study that was not intended to continue. Arctic also noted that given the limited size of the point lake project, adverse impacts to regional grizzly bear populations was not expected but that on-site monitoring as part of the WEMP would mitigate any potential direct impacts during operations and into closure. | Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern. |
| Terrestrial wildlife impacts: effects on wildlife health (toxins, metals, etc.); human wildlife conflicts | Transfer, storage, and use of petroleum products and/or chemicals; on-site storage or disposal of wastes (domestic garbage, sewage, waste petroleum products, drilling waste and hydraulic flowback fluids, hazardous wastes, etc.); other | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ No bulk storage of petroleum products or chemicals on-site. Mobile equipment will be re-fueled off-site or by a mobile fuel truck with established procedures. A small diesel generator with a day-tank will be re-filled by a mobile fuel truck using established procedures. The day tank will include secondary containment to the satisfaction of the Inspector. Spills will be reported and remediated according to approved WMP and SCP. Other mitigations include regular equipment maintenance, use of drip trays/absorbent pads for servicing/refueling; storage and handling of hazardous substances as per applicable regulations; storage of fuel at central bulk fuel farm within bermed areas; and handling of hydrocarbon impacted material as per management plan. ○ Small amounts of domestic garbage and sewage on site for field office/safety trailer use only and minimization of risk of attraction of animals by using existing infrastructure. ○ Other site-wide mitigations to be applied at Project site include: implementation of WEMP and periodic review including engagement with Indigenous communities and GNWT; no new sources of attractants; WMP and practices in place; SCP in place; hydrocarbon-contaminated soil treated at land farm; hydrocarbon- | Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern. |

| | | | |
|-------------------------|--|---|---|
| | | <p>contaminated snow and ice taken to lined containment facility; appropriate management of food wastes; littering and feeding wildlife prohibited; deterrent measures available as needed; recyclables/waste hazardous materials stored appropriately to prevent exposure until shipped off-site to approved facility; education and reinforcement of proper waste management practices and habituation issues provided to site workers and visitors; enclosed sanitary sewage treatment plant; sewage from remote washrooms trucked to main camp facility; incinerator enclosed and camp wastes burned frequently; regular inspections of landfill sites and waste storage areas.</p> <ul style="list-style-type: none"> ○ Existing measures in place to minimize human-wildlife interactions including awareness training. • The Board has standard Permit conditions which are typically used to mitigate the described impacts: <ul style="list-style-type: none"> ○ Waste Management ○ Spill Contingency Plan | |
| Aquatic habitat impacts | Withdrawal of water from a watercourse; retaining, storing, or diverting water | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations to loss and alteration of fish habitat in the Applications: <ul style="list-style-type: none"> ○ Dewatering of Point Lake expected to result in elevated sediment levels in water during the later stages of dewatering; dewatering to take place over two stages according to an approved Dewatering Plan to minimize excess sediment entering Lac du Sauvage. Water with elevated sediment to be pumped to KPSF. ○ Other mitigations include: use of temporary above ground cells for increased pumping efficiency and reduced suspended solids prior to pumping; dewatering lake water containing TSS greater than 25 mg/L will be pumped to KPSF for incorporation into existing minewater management; dewatering outflows to Lac du Sauvage to be placed in locations to minimize erosion risk with confirmatory inspection and monitoring; use of sedimentation and erosion control measures as needed; and optimization of project | <p>Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern.</p> <p>This potential impact(s) and mitigation(s) are discussed further in subsection 5.3.3 of this Reasons for Decision.</p> |

| | | | |
|---|--|---|---|
| | | <p>footprint to limit disturbance area.</p> <ul style="list-style-type: none"> ○ Aligning road route and placing WRSA/overburden stockpile/seepage collection sumps to avoid aquatic habitat including stream crossings and sensitive habitat; ○ Fisheries offsetting plan to be developed with DFO along with community engagement to offset unavoidable fish habitat losses for Point Lake open pit mining; ○ Reclamation of Point Lake open pit to include flooding of pit with Lac du Sauvage water and allow for surface outflow to return to natural drainage as per approved CRP. <ul style="list-style-type: none"> ● Mitigations proposed during review of Applications: <ul style="list-style-type: none"> ○ Flow reduction (DFO comment 3 and WLWB staff comment 3): In order to quantify impacts and subsequent mitigations for winter survival rates and ability to access suitable spawning habitat for fish, Arctic responded that it is collecting data at three hydrometric monitoring stations in the 2021 open-water season, and that information would be used to assess potential water volume decreases and effects on habitat access downstream of Point Lake. Arctic noted that effects to downstream fish habitat that cannot be mitigated will be quantified and offset through the “Request for Review” process. ● The Board has standard Permit conditions which are typically used to mitigate the described impacts: <ul style="list-style-type: none"> ○ Habitat Damage | |
| <p>Aquatic species impacts: effects on health (toxins, metals, sediment, blasting, etc.) resulting in ecological impacts;</p> | <p>Stripping of overburden adjacent to a watercourse; blasting near a watercourse; watercourse</p> | <ul style="list-style-type: none"> ● The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Dewatering of Point Lake expected to result in elevated sediment levels during the later stages of dewatering; dewatering to take place over two stages according to an approved Dewatering Plan to minimize excess sediment entering Lac du Sauvage. Water with elevated sediment to be pumped to KPSF. ○ Other mitigations include: Project-specific Dewatering Plan for | <p>Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern.</p> <p>This potential impact(s) and mitigation(s) are</p> |

| | | | |
|---|--|--|--|
| <p>serious harm to fish (DFO comment 2)</p> | <p>alteration, ditch construction, channelling, training, installation of culvert); withdrawal of water from a watercourse; retaining, storing, or diverting water</p> | <p>approval using temporary above ground cells for increased pumping efficiency and reduced suspended solids prior to pumping; dewatering lake water containing TSS great than 25 mg/L will be pumped to KPSF for incorporation into existing minewater management; dewatering outflows to Lac du Sauvage to be placed in locations to minimize erosion risk with confirmatory inspection and monitoring; use of sedimentation and erosion control measures as needed; and optimization of project footprint to limit disturbance area.</p> <ul style="list-style-type: none"> ○ Blasting near fish-bearing watercourses has previously been safely undertaken at Ekati mine; blasting to adhere to DFO’s <i>Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters</i> ○ Fisheries offsetting plan to be developed with DFO along with community engagement to offset unavoidable fisheries loss. ○ Fish-out to occur concurrent with dewatering according to DFO guidance and with community engagement. <ul style="list-style-type: none"> ● Mitigations proposed during review of Applications: <ul style="list-style-type: none"> ○ Serious harm to fish (DFO comment 2): DFO noted a Request for Review process was necessary for the project due to the fact that the Project will result in “serious harm to fish” and a project-specific authorization was required from DFO. DFO noted that preliminary conversations had been initiated with the Applicant, and that the process of determining appropriate offsetting would consider impacts of the project on fish and fish habitat. Arctic responded that it would continue this work with DFO and an application for a Fisheries Act Authorization and Offsetting Plan was anticipated in late 2021. ○ Best practices regarding blasting, fish-out, and end-of-pipe fish protection screens were recommended for the Project (DFO comments 5, 6, and 7), and Arctic noted that it would further engage with DFO regarding appropriate practices and use most recent guidance. | <p>discussed further is subsection 5.3.3 of this Reasons for Decision.</p> |
|---|--|--|--|

| | | | |
|--|---|---|---|
| | | <ul style="list-style-type: none"> ○ The Board notes that it could require conditions stipulating the completion of other regulatory processes including the Request for Review, Fisheries Authorization, and offsetting plans be completed prior to project activities commencing or other appropriate project milestones. • The Board has standard Licence conditions which are typically used to mitigate the described impacts: <ul style="list-style-type: none"> ○ Spill Contingency Plan ○ Report Spills ○ Spill Prevention and Response Equipment ○ Clean Up Spills ○ Effluent Quality Criteria ○ Effluent Quality - Toxicity ○ Effluent Discharge ○ Testing Before Discharge ○ Effluent Quality Criteria – Exceedance ○ Material Storage – Ordinary High-Water Mark ○ Objective – Prevent Waste Into Water ○ Daily Inspections of Discharge Locations ○ Erosion Control ○ Construction Material – Geochemical Criteria ○ Water Intake Screen ○ Wastewater Use | |
| <p>Aquatic species impacts: changes to migratory movement patterns; flow reduction changes impacts winter survival and habitat access (DFO comment 3 and</p> | <p>Withdrawal of water from a watercourse; retaining, storing, or diverting water</p> | <ul style="list-style-type: none"> • Mitigations proposed during review of Applications: <ul style="list-style-type: none"> ○ Flow reduction (DFO comment 3 and WLWB staff comment 3): In order to quantify impacts and subsequent mitigations for winter survival rates and ability to access suitable spawning habitat for fish, Arctic responded that it is collecting data at three hydrometric monitoring stations in the 2021 open-water season, and that information would be used to assess potential water volume decreases and effects on habitat access downstream of Point Lake. Arctic noted that effects to downstream fish that cannot be | <p>Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern.</p> <p>This potential impact(s) and mitigation(s) are discussed further in subsection 5.3.3 of this Reasons for Decision.</p> |

| | | | |
|---|---|---|--|
| WLWB staff comment 3) | | mitigated will be quantified and offset through the “Request for Review” process. | |
| Wildlife harvesting: loss or reduction in game species populations; effects on traditional land use, subsistence, and harvesting rights | Stripping of overburden; noise (use of heavy equipment, blasting, crushing, drilling); construction (development or alteration: widening, straightening, detours), maintenance and operation of lines, trails, or rights-of-way; increased traffic risk to wildlife; withdrawal of water from a watercourse | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Arctic notes that the Ekati Diamond Mine is within the traditional and current harvesting areas of Inuit, Dene, and Métis people and the CRP seeks to provide for those land uses after mine closure. | Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern. |
| Cultural integrity and heritage resources: change to or loss of cultural integrity; change to or loss of traditional lifestyle; change to or loss of heritage resources | Construction (development or alteration: widening, straightening, detours), maintenance and operation of lines, trails, or rights-of-way; increased human presence; withdrawal of water from a | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ No archaeological sites have been recorded within the project footprint; impacted lands have been interpreted to have low potential for impact to unrecorded sites ○ An Archaeological Overview Assessment (AOA) prepared for the project recommended no further assessment and was submitted to the Cultural and Heritage Division at the Prince of Wales Northern Heritage Centre (PWNHC). A letter was received from the GNWT in review of the AOA noting that no further archaeological work was recommended.¹⁸ ○ Archaeological Management Plan and Chance Find Procedure in | Based on the described mitigations, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern. |

¹⁸ See WLWB Online Registry for [W2012L2-001 – Ekati – Point Lake – AOA Review Letter – Jul 7 21](#)

| | | | |
|--|---|---|---|
| | <p>watercourse; retaining, storing or diverting water</p> | <p>place to mitigate risk of disturbance of existing/newly identified heritage resources. GNWT-Lands (comment 27) noted that the Archaeological Management Plan should be updated, but Arctic responded that it is a high-level document with a general framework and did not require amendment. Arctic noted that detailed archaeological surveys are managed on a project-specific basis.</p> <ul style="list-style-type: none"> • The Board has standard Permit conditions which are typically used to mitigate the described impact: <ul style="list-style-type: none"> ○ Archaeological Buffer ○ Site Disturbance ○ Site Discovery and Notification ○ Archaeological Overview ○ AIA | |
| <p>Impairment of recreational or traditional uses of land or water; impairment of aesthetic quality of the land or water</p> | <p>Noise (use of heavy equipment, blasting, crushing, drilling); transfer, storage and use of petroleum products and/or chemicals; Construction (development or alteration: widening, straightening, detours), maintenance and operation of lines, trails, or rights-of-way; increased human access and presence; operating in a remote location inaccessible or not easily accessible by</p> | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Project components to be reclaimed according to approved CRP, seeking to provide for continued traditional land use. ○ Spill Contingency Plan in place including regular equipment maintenance, drip trays/absorbent pads, uses, storage and handling of hazardous substances according to regulations, and fuel stored at central bulk fuel farms with bermed storage areas. ○ Dewatering of Point Lake to be conducted according to approved Dewatering Plan and will be offset through a Fisheries Act Authorization. ○ The Board also notes that the Request for Review Process through DFO will also mitigate any potential impacts to fish and fish habitat. ○ Project components to be reclaimed according to approved CRP, seeking to provide for continued traditional land use | <p>Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern.</p> |

| | | | |
|---|--|---|--|
| | emergency aid; withdrawal of water from a watercourse | | |
| Changes to the use of the area by other non-Indigenous people (e.g. trappers, outfitters, residents, hunters, forest harvesters, etc.) | Increased human access and presence | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Policies are in place for employees and visitors regarding no hunting, no fishing, and no recreational access onto land. | Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern. |
| Economic opportunities or losses (employment, training) | General project implementation | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Continuation of positive socio-economic benefits of the Ekati Mine through continued northern employment/contracting/purchasing, Impacts Benefits Agreements and royalty payments, and support of community development/well-being programs. | Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern. |
| Increased human health hazard or risk | Noise (use of heavy equipment, blasting, crushing, drilling); transfer, storage and use of petroleum products and/or chemicals; Construction (development or alteration: widening, straightening, detours), maintenance and operation of lines, trails, or rights-of- way; increased human access and presence; operating in a remote location | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Health and safety regulations in place for employees and visitors. ○ Spill Contingency Plan in place including regular equipment maintenance, drip trays/absorbent pads, uses, storage and handling of hazardous substances according to regulations, and fuel stored at central bulk fuel farms with bermed storage areas. ○ First aid, medical facilities, and staff/emergency evacuation procedures in place. | Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern. |

| | | | |
|---|--|--|--|
| | inaccessible or not easily accessible by emergency aid | | |
| General cumulative impacts as applicable to project components; cumulative impacts to caribou; cumulative impacts and lack of TK and engagement input to Project (IEMA comment 7) | All activities | <ul style="list-style-type: none"> • The Applicant proposed the following mitigations in the Applications: <ul style="list-style-type: none"> ○ Exclusion of the Jay WRSA from the Licence. Arctic noted in its Application that concerns had been raised regarding potential cumulative effects to caribou movement. Arctic suggested that removing the Jay WRSA from the Licence would eliminate potential cumulative barrier effects. In responses to review of the Application and in a cover letter, Arctic further stated that it was now proposing that the Jay Project as a whole be excluded from the Licence. Arctic noted that if the Jay Project were to proceed in the future it would be significantly different than the project previously assessed in 2016 and would require Preliminary Screening and/or other assessment. This is further discussed in Section 5.1. • Mitigations proposed during review of Applications: <ul style="list-style-type: none"> ○ In response to comments about cumulative impacts from Jay and the need for additional input from Elders, other TK holders, and the communities, Arctic responded that it was now proposing removing the Jay project as a whole and referred to the TK available for the Point Lake area. Arctic also noted that it had described an ongoing approach to gathering additional field-based TK, and the development of the Point Lake Traditional Knowledge Plan which seeks to understand and address gaps in use of TK for the Project. ○ The Board also notes that no Parties raised concerns with respect to cumulative effects outside of context of interactions with the Jay Project. | Based on the described mitigations, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment and is not a cause of public concern. |

5.3 Consideration of Potential Impacts

Based on the potential impacts and proposed mitigations identified above in Table 1, the Board considered whether the changes to the Project might have a significant adverse impact on the environment. More detailed consideration of specific potential impacts and associated mitigations related to caribou, post-closure seepage quality, and fish and fish habitat are discussed below in subsections 5.3.1 to 5.3.3.

In general, the Board believes the impacts of the changes to the Project on the environment can be mitigated through the use of permit and licence conditions of two general types:

1. conditions in the existing Permit and/or Licence, including requirements for management and monitoring plans, with revisions where necessary; and
2. new or unique conditions that may be needed to mitigate potential impacts of the changes to the Project that may not be addressed by the conditions in the existing Permit and/or Licence, and which may be from the Board's standard conditions list or established by the Board as per the MVLWB [Standard Process for Creating New Conditions](#)

These conditions may include requirements for management and monitoring plans that provide detailed information regarding the implementation of mitigation measures and the evaluation of their effectiveness. The conditions will be discussed in further detail by all Parties through the regulatory proceeding and will be finalized by the Board following completion of the regulatory proceeding.

In addition, and as discussed further in subsection 5.3.1 and 5.3.3, the Board believes impacts to the environment can also be mitigated through other regulatory instruments and processes (e.g., subsection 95(2) of the *Wildlife Act*, the *Fisheries Act* and the DFO Request for Review).

5.3.1 Effects to Caribou

The status of barren-ground caribou herd frequenting the Point Lake area is not much improved from the situation which was before the Review Board during the Jay Project EA in 2016. It is, however, understood from the numerous comments from Parties (DKFN comments 2 and 8, GNWT-Lands comment 28, IEMA comments 3-6, TG comment 3, WRRB comment 3, and WLWB staff comment 8) that the importance of this area as a migration corridor continues.

The Jay Project EA applied measures to mitigate environmental impacts on caribou. These Measures were captured in the Wildlife Effects Monitoring Plan, Caribou Road Mitigation Plan, and the Caribou Compensatory Mitigation Plan. These plans, and in particular the Wildlife Effects Monitoring Plan (WEMP), conditionally approved in June 2017, have now been accepted by the Minister of ENR for purposes of subsection 95(2) of the *Wildlife Act*.¹⁹ They apply to the whole Ekati site, including Point Lake. It is thus the WLWB's understanding that all the Jay Measures addressing wildlife impacts have been implemented and rolled into the WEMP and other plans mentioned above, and that Arctic is bound by this plan which will continue to apply. In its approval of the WEMP for the purposes of subsection 95(2) of the *Wildlife Act*, the

¹⁹ See WLWB Online Registry for [W2012L2-0001 – Ekati – GNWT requirement for a WMMP – Jun 23 21](#)

GNWT has stated its expectation that “an adaptively modified version of it will receive further public review when Arctic applies to renew their water licence, which expires October 18, 2023.”²⁰

During the public review of the Point Lake Project Applications, the GNWT stated that it “is of the view that the impacts to wildlife and wildlife habitat associated with this Project can largely be addressed through the diligent and consistent application of the mitigation and monitoring approaches outlined in the WMMP for the Ekati Mine” (GNWT-Lands comments 28). This assessment by GNWT was made with two stipulations: (1) the removal of the Jay WRSA and Arctic’s assurance that it would not proceed with the Jay Project without major revisions; and (2) the expectation that Arctic will revise the Caribou Road Mitigation Plan based on recent monitoring data and analysis conducted by IEMA. The Board has addressed the first stipulation in section 5.1 of this Reasons for Decision and is of the opinion that the second stipulation can be addressed through the review and approval of the WEMP under subsection 95(2) of the *Wildlife Act*. The Board also notes GNWT’s recommendation to the Board, that “from a wildlife and wildlife habitat perspective, referral to environmental assessment is not necessary to better understand the residual effects of this development” (GNWT-Lands comment 30).

Together, the requirement of the WEMP under subsection 95(2) of the *Wildlife Act* and the information provided by the GNWT during the public review of the Point Lake Project Applications have satisfied the Board that impacts to caribou will be mitigated.

5.3.2 Post-Closure Seepage Quality

The Project Description Report (PDR) proposes that all metasediment obtained from the Point Lake Open Pit will be deposited into the WRSA. As described in the PDR, nearly all (i.e., 99%) of the waste rock is expected to be metasediment. Based on the geochemical assessment presented in Appendix E of the PDR, the proposed Point Lake WRSA will consist almost entirely of PAG rock. Arctic has proposed to collect seepage from the WRSA during operations and direct it to the KPSF to be managed through existing processes and structures. The proposed closure plan for the Point Lake WRSA includes the construction of a thermal cover as described in Appendix F of the PDR. Appendix F also proposes the closure and reclamation of seepage collection sumps once the WRSA seepage has been deemed acceptable for release to the environment, which Arctic anticipates will be approximately 10 years following reclamation of the WRSA.

As part of the application, no seepage quality predictions were provided to support the anticipated timeline of ‘10 years following reclamation of the WRSA’. The TG asked Arctic if it could provide post-closure water quality predictions for the WRSA (TG comment 7). The TG also noted the appearance of less geochemical sampling and analysis of Point Lake waste rock as compared to that done during the licensing phase for other Ekati Mine developments (TG comment 9). Arctic responded that it was not considered necessary at this time given its commitment to collect seepage until it was deemed suitable for release and that a smaller amount of waste rock will be generated for this project as compared to that proposed for Jay. In response, Arctic committed to conducting additional testing to better demonstrate the

²⁰ See WLWB Online Registry for [W2012L2-0001 – Ekati – GNWT requirement for a WMMP – Jun 23 21](#)

geochemical behaviour of the material. Without this information, it is currently unknown if a 10-year window following reclamation of the WRSA is a reasonable or achievable timeframe within which to expect water quality to be suitable for release to the environment.

IEMA and the TG commented on the increased risk of acid-generation of Point Lake waste rock when compared to other metasediment waste rock at Ekati (IEMA comment 8; TG comment 8). The TG also noted that there would be small amounts of pegmatite in the Point Lake WRSA, which has higher concentrations of arsenic and uranium (TG comment 8). IEMA stated that “The Agency is concerned that this could lead to future long-term seepage and water quality issues” (IEMA comment 8). The TG noted that since seepage would enter the environment at closure, that seepage quality would most likely be a post-closure issue and said it would like to better understand the predicted post-closure WQ for the Point Lake WRSA (TG comment 8). In response to these two comments, Arctic explained its approach to using existing knowledge from other waste rock at the site. Based on this knowledge, it has proposed: to collect seepage during operations and closure; construct a thermal cover at closure; and extend existing monitoring programs to the Point Lake WRSA (i.e., seepage sampling, ABA testing). In response to reviewer comments, Arctic also stated:

Key closure risks and contingencies related to the Point Lake Project components are the same as those identified in the ICRP Version 3.0 (Dominion 2018; Project Description Report – Section 4.4.10). The contingency measures described for the risk of poorer than anticipated seepage quality from the Ekati Diamond Mine WRSAs include monitoring and testing of water quality, updating or conducting predictive modelling, or developing mitigative or remedial options if necessary.

No mitigative or remedial options are currently presented by Arctic. The Board understands that one of the contingencies for poorer than anticipated seepage water includes collection; however, one of the four core principles of the *MVLWB Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories* is “no long-term active care requirements”.

The Board understands that the geochemistry of the proposed WRSA for Point Lake poses a potentially greater risk of poor seepage water quality post-closure and that there is uncertainty regarding the length of time required for post-closure seepage collection. The Board however recognizes that closure options for the Point Lake WRSA can be further addressed through existing Licence requirements (e.g., Closure and Reclamation Plan) and that the Board can consider including modeling and/or prediction requirements prior to construction of the WRSA in the Licence. Thus, the Board is of the opinion that mitigations can be addressed and implemented through the licensing phase. The Board also notes that the approved interim CRP for the Ekati site includes an approved closure goal of no long-term care at closure.²¹ As part of this preliminary screening determination, the Board has assumed no need for perpetual water collection/treatment post-closure, as per the approved interim CRP. If during the course of the licensing proceeding it comes to light that there is a need for long-term active care, the Board may need to further address mitigation needs before completion of the licence amendment.

²¹ See WLWB Online Registry for [W2012L2-0001 - Ekati – ICRP – Version 3.0 – Part 1 – Aug 15 18](#) and [W2012L2-0001 – ICRP – Version 3.0 – Part 2 – Aug 15 18](#)

5.3.3 Effects to Fish and Fish Habitat

Section 4.4.3 of the PDR explains the need for Fish-out and Dewatering of Point Lake as part of the proposed project activities. Section 2.4.3 of the PDR identified that the Project “will result in “serious harm to fish” as defined in the *Fisheries Act* and will require a project-specific authorization from Fisheries and Oceans Canada.” During the public review, DFO recommended that Arctic continue to work with DFO on this issue (DFO comment 2). Arctic responded that it anticipates submitting its application for a *Fisheries Act* Authorization and associated Offsetting Plan in late 2021.

During the public review, DFO identified that draining of Point Lake could have downstream effects (DFO comment 3). More specifically, DFO explained that Point Lake is the headwater lake for a small watershed (including Connor and Alexia Lakes) and that removing the hydrologic contribution of Point Lake may affect the winter survival rate of fish and their ability to access suitable spawning habitat. DFO recommended that Arctic “include a discussion on the contribution of Point Lake to the overall water balance of its watershed and the effects that the removal of this contribution will have on fish and fish habitat” (DFO comment 3). DFO noted in its recommendation that baseline information was crucial to understanding this importance and that the information should be used to model effects to winter volumes of Connor and Alexia Lakes. In response, Arctic stated it was undertaking data collection during the 2021 open-water season to better understand the effects of removing Point Lake to the downstream water bodies. Arctic also stated that:

Potential effects to fish and fish habitat, mitigation measures, quantification of fish habitat losses, and offsetting plans will be presented to DFO through a “Request for Review” and/or through an Application for Authorization under the *Fisheries Act*, which are anticipated to be submitted in late 2021.

Based on the above, the Board understands that there is uncertainty about the potential impacts to fish and fish habitat downstream from Point Lake, and that the assessment currently being conducted by Arctic will lead to a ‘Request for Review’ and/or an application for a *Fisheries Act* Authorization. The Board understands that this process will result in DFO requiring mitigations and/or Fisheries Authorization if required. For these reasons, the Board believes that the DFO processes for Point Lake and the lakes downstream from Point Lake will mitigate the potential effects to fish and fish habitat. The Board also notes that DFO has referral authority under subsection 126(2)(a) of the MVRMA and has not recommended referral at this time but could do so at a later time if deemed necessary.

The Board notes that one of the mitigations suggested by DFO in its comments was the need to augment/add water to the Point Lake watershed from Lac du Sauvage (DFO comment 3). The Licence does not currently include water use for this purpose and water use for this purpose was not included in the Application. If mitigations identified by DFO during its process include water use from Lac du Sauvage, a Water Licence amendment will likely be required and would be subject to Part 5 of the MVRMA.

5.4 Consideration of Public Concern

In addition to considering the potential impacts of the changes to the Project, the Board considered whether the changes to the Project might be a cause of public concern. Based on the evidence provided during the regulatory proceeding, the Board did not identify any comments or issues that indicate that the Project is a cause of public concern.

The Board recognizes that while IEMA did recommend the Point Lake Project go to Environmental Assessment,²² the concerns raised by IEMA with respect to caribou movement, waste rock geochemistry, and Traditional Knowledge input have in the Board's view, been adequately addressed as per the discussion in subsections 5.3.1, 5.3.2, and 5.4.1, respectively, and as outlined in Table 1 of this Reasons for Decision.

Parties did have comments regarding the use of Traditional Knowledge, which is discussed in more detail in subsection 5.4.1. This discussion outlines why the Board is of the opinion that any outstanding concerns and associated mitigations can be addressed and implemented through the licensing phase.

5.4.1 Use of Traditional Knowledge

During the public review, IEMA and the WRRB commented on the lack of Traditional Knowledge used in the proposed Project, particularly with respect to understanding how the location and configuration of the Point Lake WRSA may impact caribou movement (IEMA comment 7; WRRB comment 2). The NSMA noted its concern about knowledge gaps on relevant TK in the long-term monitoring of the sustainability of the Point Lake Project (NSMA comment 1). DFKN asked Arctic to provide an update on its work with communities to monitor caribou movement and effectiveness of mitigation (DKFN comment 4). WLWB staff asked how Arctic will engage with TK holders throughout the life of the Project (WLWB staff comment 9) and the TG requested that Arctic provide more information about its approach for engaging with Tłjchq communities, knowledge holders and TG staff to better define and identify impacts and mitigations throughout the life of the Project (TG comment 3).

In response to these comments, Arctic explained that the Application information described that TK is available for the Point Lake area, some of which was from the Jay EA, and that existing TK was used in this design of the Project. Arctic expressed its belief that it has reasonably and appropriately applied existing TK to the design of the Project and to the mitigations measures to the extent required. Arctic also described its plan to gather additional field-based TK and outlined its initiatives to work with Indigenous communities on caribou monitoring and mitigation (see response to DFKN comment 4 and NSMA comment 1 for more details). In addition to these initiatives, Arctic also explained in its responses that it is developing a Point Lake Traditional Knowledge Plan (TK Plan) with the intent of understanding and addressing gaps in the use of TK for the Project. Arctic stated that a draft TK Plan could be circulated and possibly discussed at the Technical Session for the proceeding.

²²See WLWB Online Registry for [W2012L2-0001 – Ekati – Point Lake Amendment – Review Summary and Attachments – Jul 29 21](#). p. 91

The Board understands that the Company used existing TK to develop its proposed project design and mitigations, but that it did not engage with TK holders to obtain guidance on how to modify the proposed design. Rather, the Company intends to do this as part of the proceeding and through on-going initiatives. While the Board is of the opinion that it would have been more beneficial to have incorporated this knowledge as part of the Application, it recognizes that it is not an application requirement. Additionally, the Board recognizes that the current Licence includes a requirement for all submissions to “identify all recommendations based on Traditional Knowledge received, describe how the recommendations were incorporated into the submission and provide justification for any recommendation not adopted”.²³ As mentioned above, Arctic is developing a TK Plan to present to Parties. If deemed appropriate through the proceeding, the TK Plan could be included as a Licence requirement to mitigate any concerns related to the incorporation and use of TK. Finally, the Board may also consider the need for other TK-related requirements (e.g., TK workshop, Design Report Schedule requirements, etc.) prior to the commencement of some or all project activities. Thus, the Board is of the opinion that any outstanding concerns and associated mitigations can be addressed and implemented through the licensing phase.

6.0 Conclusion

The Board completed previous preliminary screenings and environmental impact assessments of the Ekati Project and received a Report of Environmental Assessment for the Jay Development, however, the Applications include proposed changes to the Project. Accordingly, the Board has determined that Project activities that have already been subject to Part 5 of the MVRMA are exempt from preliminary screening under Part 1, Schedule 1, section 2.1 of the Exemption List Regulations to the MVRMA. The Board has conducted a preliminary screening of the proposed changes to the Project.

The Board has reviewed all the evidence received during the regulatory process with respect to the Preliminary Screening of the proposed changes to the Project. Based on the evidence, it is the Board’s opinion that the proposed changes to the Project will not have a significant adverse impact on the environment or be a cause of public concern, as set out in paragraph 125(1)(a) of the MVRMA. The Board has therefore decided not to refer the proposed changes to the Project to Environmental Assessment and will resume the regulatory process.



August 24, 2021

Joseph Mackenzie
Chair, Wek’èzhìi Land and Water Board

Date

²³ See WLWB Online Registry for [W2012L2-0001 – Ekati – Water Licence – Apr 22 21](#). See Part B, Condition 16.