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February 5, 2024

File: MV2023X0037

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: Stark Lake Remediation Project – Notice of Preliminary Screening Determination – Application for Land Use Permit – Miscellaneous – Remediation – Stark Lake, NT**

The Mackenzie Valley Land and Water Board (Board) met on February 1, 2024 and considered the Application Package from Crown Indigenous Relation and Northern Affairs Canada – Contaminants and Remediation Division (CIRNAC - CARD) for Land Use Permit (Permit) MV2023X0037 for the Stark Lake Remediation (Project) in accordance with the *Mackenzie Valley Resource Management Act* (MVRMA).

The Board conducted a preliminary screening based on the public record for the proceeding. 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 can proceed with issuance of Permit MV2023X0037 on **Friday, February 16, 2024**.

The Board and staff look forward to continued communications throughout the pause period. Please contact Kathy Racher via [email](#) or at (867) 766-7457 with any questions or concerns regarding this letter.

Yours sincerely,

A handwritten signature in blue ink that reads "Tanya MacIntosh". The signature is written in a cursive style with a long horizontal stroke at the beginning.

Tanya MacIntosh  
Chair, Mackenzie Valley Land and Water Board

BCC'd to: Akaitcho Distribution  
Amy Allen – CIRNAC – CARD  
Kristin Moore – CIRNAC - CARD

Attached: Preliminary Screening Determination and Reasons for Decision



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## Preliminary Screening Determination and Reasons for Decision

Land Use Permit Application	
<b>File Number</b>	MV2023X0037
<b>Company</b>	Crown Indigenous Relations and Northern Affairs Canada – Contaminants and Remediation Division (CIRNAC – CARD)
<b>Project</b>	Stark Lake Remediation Project
<b>Location</b>	Stark Lake, NT
<b>Activity</b>	Miscellaneous
<b>Date of Decision</b>	February 1, 2024

### 1.0 Decision

In accordance with subsection 124(1) of the [Mackenzie Valley Resource Management Act](#) (MVRMA), the Mackenzie Valley Land and Water Board (MVLWB or Board) met on February 1, 2024 to make a preliminary screening determination on the Application from Crown Indigenous Relations and Northern Affairs Canada – Contaminants and Remediation Division (CIRNAC – CARD) (Applicant) for Land Use Permit MV2023X0037 (Permit)<sup>1</sup> for the Stark Lake Remediation Project (Project).<sup>2</sup>

The Board has decided not to refer the proposed Project to the Mackenzie Valley Environmental Impact Review Board (the Review Board) for Environmental Assessment because, based on the evidence, it is

<sup>1</sup>See MVLWB Online Registry [www.mvlwb.com](http://www.mvlwb.com) for CIRNAC – CARD – Stark Lake Remediation Project – [Permit Application – Dec7 23](#)

<sup>2</sup> The Project is the Miscellaneous, 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 opinion that the proposed Project will not have a significant adverse impact on the environment or be a cause of public concern.

The Board’s determination, including reasons for its decision, are detailed in sections [3.0](#) and [4.0](#).

## 2.0 List of Defined Terms and Acronyms

Applicant	Crown Indigenous Relations and Northern Affairs Canada – Contaminants and Remediation Division (CIRNAC – CARD)
Application	The complete application package submitted by the Applicant for Water Licence Land Use Permit MV2023X0037
Board	Mackenzie Valley Land and Water Board
CRP	Closure and Reclamation Plan
EA/EIR	Environmental Assessment/Environmental Impact Review
GNWT	Government of the Northwest Territories
GNWT-ECC	Government of the Northwest Territories – Environment and Climate Change
MVLWB	Mackenzie Valley Land and Water Board
MVRMA	<a href="#">Mackenzie Valley Resource Management Act</a>
Minister	Minister of Northern Affairs
ORS	Online Review System ( <a href="http://www.new.onlinereviewssystem.ca">www.new.onlinereviewssystem.ca</a> )
Party	As per the LWB <a href="#">Rules of Procedure</a> , an applicant, a person, or an organization participating in the regulatory proceeding for the Application.
Project	[Project Name OR the X undertaking], which is the proposed development (as defined in Part 5 of the MVRMA). <sup>3</sup>
Review Board	Mackenzie Valley Environmental Impact Review Board
SCP	Spill Contingency Plan
Standard Permit Conditions	LWB <a href="#">Standard Land Use Permit Conditions Template</a>
TG	Tłı̨cẖ Government
TK	Traditional Knowledge
WMP	Waste Management Plan

## 3.0 Background and Scope of Screening

On November 27, 2023, an Application was submitted for the remediation of the Stark Lake site. The Application was deemed incomplete on December 5, 2023 with additional information being provided on December 7, 2023. Distribution of the Application took place on December 8, 2023 with comments and recommendations due from reviewers on December 29, 2023. On January 2, 2024, CIRNAC – CARD requested additional time to provide a response, On January 18, 2024, the Board invoked section 22.2.b of the MVLUR. Responses were provided by CIRNAC – CARD on January 11, 2024.

<sup>3</sup> “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.”

An Engagement Record and Engagement Plan were included in the Application. CIRNAC - CARD noted they engaged with the following Parties:

- Lutsel'Ke Dene First Nation
- Akaitcho Territory Government
- Northwest Territory Métis Nation
- Denínu Kúé First Nation
- Fort Resolution Métis Government
- Yellowknives Dene First Nation
- Parks Canada

Engagement started in 2013 and ended in October of 2023. CIRNAC – CARD has been working with the identified parties for years in the formation of the closure and reclamation plan.

In accordance with paragraph 125(1)(a) of the [MVRMA](#), the Board must conduct a preliminary screening of the proposed Project to determine and report to the Review Board whether, in its opinion, the proposed 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 [4.0](#) below.

### **3.1 Scope of Screening:**

The Stark Lake exploration site is approximately 200 km east of Yellowknife, and 20 km East of Łutselk'e on the shorts of Stark Lake, adjacent to the East Arm or Great Slave Lake.

The original mineral claim area measures approximately 2.25 km by 1.5 km, with the former camp and mine area approximately 225m wide and 900 m long. The main camp area is located near the shore of Regina Bay while the mine area is approximately 700 m inland.

Activities on site will include:

- Sealing of mine shafts with benign waste rock materials, lean concrete and reinforced concrete plug.
- Anticipated volumes of materials to be managed, treated or disposed of are as follows:
  - 1,136m<sup>3</sup> of waste rock will be managed through engineering controls
  - 3.6m<sup>3</sup> of metals PAH impacted soils will be placed on the waste rock pile and capped.
  - 588 m<sup>3</sup> of combustible, non-hazardous debris will be incinerated on-site and the ash will be properly disposed of at an off-site facility.
  - 20 small zinc batteries will be packed and removed from site has hazardous waste.
  - 37,3 of non-combustible, non-hazardous debris will be packaged and properly disposed of at an off-site facility.
- Demolition of structures and disposal of the structural remains.
- Remove and disposal of hazardous materials in an appropriate off site landfill or incineration at an approved off site facility.
- Collection of exposed surface debris materials, materials from the domestic waste disposal area and the Winch site for incineration or disposal in an off-site landfill.
- Consolidation of waste rock piles at the main waste rock pole in front of the adit, re-grading, covering with a geotextile and impervious membrane package, and covering with clean fill.

The site is currently accessed by float plane or boat. There is one main road through the lower site, which continues to the former adit and waste rock area. Further, the existing historical road is overgrown, rough, and will require maintenance and/or additional construction for use during remediation. The final location of the camp and adit access road location will be selected by the contractor.

The location of the camp and camp infrastructure plan will be selected by the contractor. Camp infrastructure will include sleeping and washroom facilities, shower and wash facilities, camp kitchen, office and first aid facilities. The utilities and services required for camp operation includes heating, lighting, fuel, potable and domestic water systems

The camp capacity is limited to no more than 20 people, including onsite workers, camp staff, and departmental representatives. Other camp operations will include:

- Potable water – will be supplied from commercially sealed containers until there are at least two consecutive laboratory provided analytical results that meet the Canadian Drinking Water Quality Guidelines. Testing must be maintained for commercially provided water must be supplied.
- Grey water will be stored in tanks, treated to meet acceptable discharge standards, and then disposed of in a sewage pit at least 100m away from any water body.
- Camp fuel and chemicals will be stored in accordance with general legislation.
- Camp waste will be segregated as per the Waste Management Plan. Combustible waste will be incinerated on site and non-combustible waste will be removed from site for proper disposal.

### **3.2 Public Record and Regulatory Proceeding**

To assist the Board in its preliminary screening determination for the Project, the Board distributed the Application and a draft Permit for public review on December 8, 2023, 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 December 29, 2023, with responses from the Applicant due January 11, 2024. The Board received comments and recommendations from GNWT – Environment and Climate Change, Environment and Climate Change Canada, CIRNAC – Yellowknife and CIRNAC – Inspector. (attached).<sup>4</sup>

Since there were no requests to extend the reviewer comment deadline, 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 Schedule 4.1 of [Northwest Territory Métis Nation \(NWTMN\) Interim Measures Agreement](#),<sup>5</sup> the Board determined that written notice was given to the NWTMN and that a reasonable period of time was allowed for NWTMN to make representations with respect to the Application.

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<sup>4</sup> See MVLWB Online Registry for [CIRNAC – CARD – Stark Lake Remediation Project – Review Summary Table – Feb 2 24](#).

<sup>5</sup> See MVLWB Land Claims, IMAs, and Land Use Plans webpage to access the [Northwest Territory Métis Nation Interim Measures Agreement](#).

Pursuant to subsection 1.6, paragraphs (a) and (b) of the [Akaitcho Territory Dene First Nations \(ATDFN\) Interim Measures Agreement](#),<sup>6</sup> the Board determined that written notice was given to the ATDFN and that a reasonable period of time was allowed for ATDFN to make representations with respect to the Application.

In accordance with the Minister of Indian Affairs and Northern Development's 2003 [Policy Direction to the MVLWB Regarding Consultations with the Manitoba Denesuline](#),<sup>7</sup> the Ghotelnene K'odtjneh Dene (formerly Manitoba Denesuline) were notified of the Application through the ORS distribution. The Board did not receive any evidence from the Ghotelnene K'odtjneh Dene during the proceeding.

In accordance with the Minister of Indian Affairs and Northern Development's 2003 [Policy Direction to the MVLWB Regarding Consultations with the Saskatchewan Athabasca Denesuline](#),<sup>8</sup> the Saskatchewan Denesuline were notified of the Application through the ORS distribution. The Board did not receive any evidence from the Saskatchewan Denesuline during the proceeding.

#### **4.0 Potential Impacts and Proposed Mitigations**

Table 1 below summarizes:

- the potential impacts of the proposed Project;
- the concerns that were identified during the regulatory proceeding 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.

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<sup>6</sup> See MVLWB Land Claims, IMAs, and Land Use Plans webpage to access the [Akaitcho Territory Dene First Nations Interim Measures Agreement](#).

<sup>7</sup> See MVLWB Land Claims, IMAs, and Land Use Plans webpage to access the [Policy Direction to the MVLWB Regarding Consultations with the Manitoba Denesuline](#).

<sup>8</sup> See MVLWB Land Claims, IMAs, and Land Use Plans webpage to access the [Policy Direction to the MVLWB Regarding Consultations with the Saskatchewan Athabasca Denesuline](#).

**Table 1: Potential Impacts and Proposed Mitigations for the Proposed Project**

Potential Impact	Activity	<p align="center"><b>Proposed Mitigations</b></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
Land - Soil Contamination	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impact - Previous assessment work identified, which is summarized in the HHERA identified areas of contaminated soil. Approximately 3.6m<sup>3</sup> of metals in PAH impacted soil were identified at the site.</li> <li>• Mitigation Measures – contaminated soils area’s (metals PHC impacted soils) will be demarcated, excavated, and placed on the waste rock pile, which will then be capped. This will remove the potential for direct contact exposure pathway to the impacted materials. Confirmatory sampling will be completed to confirm the impacted soils have been removed.</li>   <li>• Potential Impact - Leak or spill of hazardous substances and fuels from construction equipment during clean up operations.</li> <li>• Mitigation Measures - A Spill Response Plan will be prepared detailing emergency response, spill kit requirements, lists of hazardous products on-site, Safety Data Sheets (SDS) for all chemicals on-site, and more. All fuels, gasses, or harmful substances will be contained within approved containers and transported according to the Transportation of Dangerous Goods Regulations. Prior to use, all equipment and vehicles will be inspected for leaks of any kind. Leaks will be addressed immediately. Equipment will be inspected daily, and inspection results documented. Spill trays will be utilized as necessary on stationary equipment. Spills and leaks will be cleaned-up and reported in accordance with the NT-NU Spill Report Form.</li>   <li>• The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions</li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.



Potential Impact	Activity	<b>Proposed Mitigations</b> <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
		include: <sup>9</sup> <ul style="list-style-type: none"> <li>○ 26(1)(g)</li> <li>○ 26(1)(m)</li> </ul>	
Land - Soil Contamination	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impact - There is potential for compaction due to heavy machinery operation.</li> <li>• Mitigation Measures - Schedule construction activities to occur during dry or frozen conditions. Construction activities involving earthwork may be suspended or altered during periods of very wet weather or high winds. An overall Erosion and Sediment Control Plan has been prepared, which provides additional details and is attached to this application.</li> <li>• The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include:<sup>10</sup> <ul style="list-style-type: none"> <li>○ 26(1)(a)</li> <li>○ 26(1)(f)</li> </ul> </li> </ul>	Based on the described mitigation, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.
Land - Change in Soil Structure	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impact - This potential impact as not likely due to the granular nature of the soils at the project site.</li> </ul>	Based on the described mitigation, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.

<sup>9</sup> See the MVLWB Policies and Resources webpage to access the LWB [Standard Land Use Permit Conditions Template](#).

<sup>10</sup> See the MVLWB Policies and Resources webpage to access the LWB [Standard Land Use Permit Conditions Template](#).

<b>Potential Impact</b>	<b>Activity</b>	<b>Proposed Mitigations</b> <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	<b>Board Analysis and Determination</b>
Land - Inability to Support Vegetation	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impact - Improper soil handling during construction may result in the inability to revegetate the land, in locations where vegetation is present.</li> <li>• Mitigation Measure - The area is part of the Taiga Shield Ecozone (High Boreal Ecoregion), and thus the vegetation typically consists of lichen woodland/rock lichen woodland with jack pine, black spruce, and white birch. Soils are very thin where present over bedrock, and only modestly thicker where remnant tills are found. Stands of jack pine and black spruce tend to occur in shallow depressions (Ecosystem Classification Group 2008). Dillon (2014: 6) confirmed the shallow nature of the soils as being typically no more than 10-20 cm thick, but up to 75 cm of material over bedrock at some locations. They characterize the vegetation as found only in areas with fine soil deposits, and consisting primarily of moss, root mat, grass, and shrubs. Aerial imagery indicates that the majority of lands within the Mine Claim area have exposed bedrock. The Winch site appears to have more vegetation, but also may be more poorly drained. The domestic waste disposal area is overgrown with re-established vegetation and ideally the disposal area would be left in place with removal of exposed surface debris. Soil handling measures may include, but are not limited to: Topsoil stripping areas will be minimized as much as possible; the area and volume of soils handled will be reduced to the greatest extent feasible; the duration between soil salvage and progressive reclamation will be minimized; disturbed areas will be reclaimed as soon as possible (progressive reclamation); construction activities will be scheduled to occur during dry conditions to the greatest extent feasible; conduct regular monitoring to ensure site-specific environmental protection measures are in place and functioning effectively.</li> </ul>	Based on the described mitigation, it is the Board's opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.

Potential Impact	Activity	<b>Proposed Mitigations</b> <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
		<ul style="list-style-type: none"> <li>• The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include:<sup>11</sup> <ul style="list-style-type: none"> <li>○ 26(1)(a)</li> <li>○ 26(1)(n)</li> </ul> </li> </ul>	
Permafrost – Loss or change in extent		<ul style="list-style-type: none"> <li>• Potential Impact - Stark Lake is located within the region of extensive discontinuous permafrost. Excavation of material and prolonged exposure could degrade the existing permafrost layer, if present.</li> <li>• Mitigation Measures - Limit the exposure of excavated areas prior to backfilling.</li> <li>• The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include:<sup>12</sup> <ul style="list-style-type: none"> <li>○ 26(1)(f)</li> </ul> </li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.
Surface Water – Water Flow or Level Changes	Project Activities	<ul style="list-style-type: none"> <li>• No natural drainages run through the Mine Claim Area, such impact is not likely to occur</li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.
Surface Water – Drainage Pattern	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impact - Excavation has the potential to impact existing surface drainage patterns.</li> <li>• Mitigation Measures - A grading and capping design has been</li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on

<sup>11</sup> See the MVLWB Policies and Resources webpage to access the LWB [Standard Land Use Permit Conditions Template](#).

<sup>12</sup> See the MVLWB Policies and Resources webpage to access the LWB [Standard Land Use Permit Conditions Template](#).

<b>Potential Impact</b>	<b>Activity</b>	<b>Proposed Mitigations</b> <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	<b>Board Analysis and Determination</b>
Changes		<p>developed to remediate the waste pile in situ. This included consideration of site drainage, erosion resistant cap design (liner and granular cover) and long-term pile stability. Specifically, the stream at the beach will be avoided.</p> <ul style="list-style-type: none"> <li>• The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include:<sup>13</sup> <ul style="list-style-type: none"> <li>○ 26(1)(f)</li> </ul> </li> </ul>	the environment, and will not be cause of public concern.
Air – Changes in air quality	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impact - During project work, air quality may be impacted by dust from machinery, emissions from equipment and smoke from the burning of waste wood. Impact is expected to be short term.</li> <li>• Mitigation Measure - Dust suppression will be conducted as required.</li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.
Air – Increased Greenhouse Gases	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impacts - A temporary increase in CO2 is anticipated during construction due to the operation of construction vehicles and generators.</li> <li>• Mitigation Measure - Idling of construction vehicles will be minimized where possible.</li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.
Vegetation – Direct Loss of Vegetation	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impacts - Brush clearing will be required on the historical road to gain access from camp area to mine site area and may be required for the creation of an equipment lay down and staging area. Brushing and light tree clearing may also be required for barge access depending on water levels at the time of construction.</li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.

<sup>13</sup> See the MVLWB Policies and Resources webpage to access the LWB [Standard Land Use Permit Conditions Template](#).

Potential Impact	Activity	<b>Proposed Mitigations</b> <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
		<ul style="list-style-type: none"> <li>• Mitigation Measures - Brushing, tree clearing and grading will be minimized to the extent required for the mobilization of the barge, vehicles, equipment, and site access.</li> <li>• The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include:<sup>14</sup> <ul style="list-style-type: none"> <li>○ 26(1)(a)</li> <li>○ 26(1)(f)</li> <li>○ 26(1)(o)</li> </ul> </li> </ul>	
Vegetation – Introduction of non-native species	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impacts - Potential introduction of non-native species, which would impact the native species on site.</li> <li>• Mitigation Measures - Where appropriate, the site will be re-seeded with an approved seed mix. Any erosion control materials required will be certified weed free by the manufacturer. Equipment will be clean and free of soil and vegetation prior to being transported to the site.</li> <li>• The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include:<sup>15</sup> <ul style="list-style-type: none"> <li>○ 26(1)(l)</li> <li>○ 26(1)(n)</li> <li>○ 26(1)(o)</li> </ul> </li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.

<sup>14</sup> See the MVLWB Policies and Resources webpage to access the LWB [Standard Land Use Permit Conditions Template](#).

<sup>15</sup> See the MVLWB Policies and Resources webpage to access the LWB [Standard Land Use Permit Conditions Template](#).

<b>Potential Impact</b>	<b>Activity</b>	<b>Proposed Mitigations</b> <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	<b>Board Analysis and Determination</b>
Vegetation – Increase Risk of Fire	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impacts - Fire due to operation of heavy machinery and equipment on-site. Additional potential impacts from what about incineration and camp cooking activities. mention permit, fire watch, bans, environmental conditions, etc.</li> <li>• Mitigation Measures - Fire mitigation equipment will be maintained in vehicles. There will also be a burn permit acquired, fire watch, and consideration of environmental conditions prior to burning activities.</li> <li>• The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include:<sup>16</sup> <ul style="list-style-type: none"> <li>○ 26(1)(c)</li> </ul> </li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.
Vegetation – Compaction of Vegetation	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impacts - Potential for compaction of vegetation during equipment movement and grading activities.</li> <li>• Mitigation Measure - Grading will be minimized to the extent required for the mobilization of the barge, vehicles, and equipment.</li> <li>• The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include:<sup>17</sup> <ul style="list-style-type: none"> <li>○ 26(1)(a)</li> </ul> </li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.

<sup>16</sup> See the MVLWB Policies and Resources webpage to access the LWB [Standard Land Use Permit Conditions Template](#).

<sup>17</sup> See the MVLWB Policies and Resources webpage to access the LWB [Standard Land Use Permit Conditions Template](#).

<b>Potential Impact</b>	<b>Activity</b>	<b>Proposed Mitigations</b> <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	<b>Board Analysis and Determination</b>
Terrestrial Wildlife Habitat – Direct loss or removal of Habitat, Dens, or Nests	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impacts - Wildlife known to the area include woodland caribou, Arctic wolf, fox, squirrel, vole, lemming, and various species of birds, ducks and geese (Columbia 2011) and may have dens or nests in the construction area that may require removal or disturbance.</li> <li>• Mitigation Measure - Brushing, tree clearing and grading will be minimized to the extent required for the mobilization of the barge, vehicles, equipment, and site access. If a den or nest is noted, consideration will be given to rearranging the work schedule to complete the work when the den or nest is animal/bird free.</li> <li>• The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include:<sup>18</sup> <ul style="list-style-type: none"> <li>○ 26(1)(h)</li> <li>○ 26(1)(n)</li> <li>○ 26(1)(q)</li> </ul> </li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.
Terrestrial Wildlife Habitat – Loss or removal of keystone species and/or Species at Risk habitat	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impacts - Wildlife known to the area include caribou, wolf, fox, squirrel, vole, lemming, and various species of birds, ducks and geese (Columbia 2011).</li> <li>• Mitigation Measures - Brushing, tree clearing and grading will be minimized to the extent required for the mobilization of the barge, vehicles, equipment, and site access.</li> <li>• The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions</li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.

<sup>18</sup> See the MVLWB Policies and Resources webpage to access the LWB [Standard Land Use Permit Conditions Template](#).

Potential Impact	Activity	<b>Proposed Mitigations</b> <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
		include: <sup>19</sup> <ul style="list-style-type: none"> <li>○ 26(1)(h)</li> <li>○ 26(1)(n)</li> <li>○ 26(1)(q)</li> </ul>	
Terrestrial Wildlife Habitat – Direct Injury or Mortality	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impacts - Potential loss of wildlife and birds due to construction activities, although risk is low.</li> <li>• Mitigation Measures - A wildlife monitor will be present on-site during construction. Speed limits will be observed on-site to reduce or avoid animal/vehicle impacts.</li> <li>• The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include:<sup>20</sup> <ul style="list-style-type: none"> <li>○ 26(1)(h)</li> <li>○ 26(1)(n)</li> <li>○ 26(1)(q)</li> </ul> </li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.
Terrestrial Wildlife Habitat – Disturbance to key lifecycle stages: breeding, feeding, nesting, staging	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impacts - Due to the location of the project and the need to do construction work in the snow-free season, there is potential to impact the breeding, feeding, nesting and staging in wildlife areas.</li> <li>• Mitigation Measures - A wildlife monitor will be present on-site during construction and a wildlife protection plan will be in use. Every effort will be made to avoid disturbing dens and nests, if found during the construction season.</li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.

<sup>19</sup> See the MVLWB Policies and Resources webpage to access the LWB [Standard Land Use Permit Conditions Template](#).

<sup>20</sup> See the MVLWB Policies and Resources webpage to access the LWB [Standard Land Use Permit Conditions Template](#).



Potential Impact	Activity	<b>Proposed Mitigations</b> <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
		<ul style="list-style-type: none"> <li>• The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include:<sup>21</sup> <ul style="list-style-type: none"> <li>○ 26(1)(h)</li> <li>○ 26(1)(n)</li> <li>○ 26(1)(q)</li> </ul> </li> </ul>	
Terrestrial Wildlife Habitat – Human – wildlife conflicts	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impacts - Negative human-wildlife interactions on-site during Construction.</li> <li>• Mitigation Measures - A wildlife monitor will be present on-site during construction and a wildlife protection plan will be in use. In addition, a Waste Management Plan has been developed which provides direction on disposal of garbage and other potential wildlife attractants.</li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.
Aquatic Habitat – Effects on health (toxins, metals, sediment, etc.)	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impacts - There is the potential for spills of hazardous/non-hazardous materials and sediment to impact water quality during the construction works. A Spill Contingency Plan is provided with this application which mitigates this risk.</li> <li>• Mitigation Measures - A Spill Contingency Plan and Erosion and Sediment Control Plan has been developed and is attached to this application.</li> <li>• The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include:<sup>22</sup> <ul style="list-style-type: none"> <li>○ 26(1)(m)</li> <li>○ 26(1)(n)</li> </ul> </li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.

<sup>21</sup> See the MVLWB Policies and Resources webpage to access the LWB [Standard Land Use Permit Conditions Template](#).

<sup>22</sup> See the MVLWB Policies and Resources webpage to access the LWB [Standard Land Use Permit Conditions Template](#).

<b>Potential Impact</b>	<b>Activity</b>	<b>Proposed Mitigations</b> <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	<b>Board Analysis and Determination</b>
Cultural Integrity and Heritage Resources – Change to or loss of heritage resources	Project Activities	<ul style="list-style-type: none"> <li>• Potential Impacts - The AIA (Lifeways 2023) identified one known heritage resource of limited heritage value on Territorial lands within the project construction footprint that will be impacted.</li> <li>• Mitigation Measures - The AIA recommended that recording of this resource is a sufficient mitigation measure.</li> <li>• Potential Impacts - The AIA (Lifeways 2023) identified a number of heritage resources on Federal lands, which were documented and recorded in detail as they fall within the project footprint and will be impacted during construction.</li> <li>• Mitigation Measures - Known archaeological resources within the project footprint were recorded in detail and as such the AIA recommended that they can be removed as part of the reclamation and closure of the site. There are other potential features likely located outside of the current project footprint that should be avoided unless soil contamination is identified.</li> <li>• The Board has standard permit conditions that are typically used to mitigate the identified potential impacts. These standard conditions include:<sup>23</sup> <ul style="list-style-type: none"> <li>○ 26(1)(j)</li> </ul> </li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.
Social and Economic Well-being – Increased human health hazard risk	Project Activities	<ul style="list-style-type: none"> <li>• No impacts anticipated. The existing adit will be sealed to prevent access. Hazards associated with interaction with waste rock/soil will be eliminated by capping.</li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.

<sup>23</sup> See the MVLWB Policies and Resources webpage to access the LWB [Standard Land Use Permit Conditions Template](#).

<b>Potential Impact</b>	<b>Activity</b>	<b>Proposed Mitigations</b> <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	<b>Board Analysis and Determination</b>
Social and Economic Well-being – Economic opportunities or losses.	Project Activities	<ul style="list-style-type: none"> <li>Potential Impacts - Positive impacts anticipated. There is economic opportunity for remediation activities and inclusion of Indigenous Participation Plan in procurement strategy. The LKDFN have mentioned that they would be interested in seasonal work such as vegetation brushing.</li> </ul>	Based on the described mitigation, it is the Board’s opinion that the proposed activities will not have a significant adverse impact on the environment, and will not be cause of public concern.

#### 4.1 Consideration of Potential Impacts

Based on the potential impacts and proposed mitigations identified above in Table 1, the Board considered whether the Project might have a significant adverse impact on the environment. In general, impacts of the Project on the environment can be mitigated through the use of standard permit conditions and/or project-specific conditions established by the Board as per the LWB [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.

A draft Permit was circulated for review during the regulatory proceeding, and all Parties were given the opportunity to provide comments and recommendations on the draft conditions. In finalizing the conditions, the Board will consider all of the evidence provided through the regulatory proceeding.

#### 4.2 Consideration of Public Concern

In addition to considering the potential impacts of the Project, the Board considered whether 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.

#### 5.0 Conclusion

The Board has reviewed all the evidence received during the regulatory process with respect to the Preliminary Screening of the proposed Project. Based on the evidence, it is the Board's opinion that the proposed 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.

If the Board does not receive a notice of referral to environmental assessment by February 15, 2024, the Board can issue the Permit on February 16, 2024.

SIGNATURE



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**Tanya MacIntosh, Chair**  
**Mackenzie Valley Land and Water Board**

February 5, 2024

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**Date**