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November 1, 2021

File: MV2021X0019
MV2021L1-0009

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: Imperial Oil Limited – Notice of Preliminary Screening Determination – Applications for Land Use Permit and Water Licence – Miscellaneous/Industrial – Well Abandonment

The Mackenzie Valley Land and Water Board (Board) met on October 28, 2021 and considered the Applications from Imperial Oil Resources (Imperial) for Land Use Permit (Permit) MV2021X0019 and Water Licence (Licence) MV2021L1-0009 for the Jean Marie River – Well Abandonment (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 can proceed with issuance of Permit MV2021X0019 and Licence MV2021L1-0009 on **Friday November 12, 2021**.

The Board and staff look forward to continued communications throughout the pause period. Please contact Shelagh Montgomery at (867) 766-7457 with any questions or concerns regarding this letter.

Yours sincerely,



Mavis Cli-Michaud

Chair, Mackenzie Valley Land and Water Board

BCC'd to: Dehcho Distribution List
Jaclyn Mersereau, Imperial Oil Limited

Attached: Preliminary Screening Determination and Reasons for Decision



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Preliminary Screening Determination and Reasons for Decision

File Number	MV2021L1-0009 and MV2021X0019
Company	Imperial Oil Limited
Project	Jean Maire River Re-Abandonment – Well B-48
Location	Jean Marie River, NT
Activity	Industrial (Licence) and Miscellaneous (Permit)
Date of Decision	October 28, 2021

1.0 Decision

In accordance with subsection 124(1) of the *Mackenzie Valley Resource Management Act* (MVRMA), the Mackenzie Valley Land and Water Board (MLWB or Board) met on October 28, 2021 to make a preliminary screening determination on the Applications from Imperial Oil Limited (Applicant) for Land Use Permit MV2019X0019 (Permit)¹ and Water Licence MV2021L1-0009 (Licence)² for the Jean Maire River Re-Abandonment Project (Project) at Well B-48.³

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 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 the sections 3 and 4.

¹ See MLWB Online Registry www.mvlwb.com for Imperial Oil Limited – [Permit Application – September 20, 2021](#).

² See MLWB Online Registry www.mvlwb.com for Imperial Oil Limited – [Licence Application – September 20, 2021](#).

³ The Project is the Jean Marie River Well Re-Abandonment 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."

2.0 List of Defined Terms and Acronyms

Applicant	Imperial Oil Limited
Applications	The complete application package submitted by the Applicant for Water Licence MV2021L1-0009 and Land Use Permit MV2021X0019.
Board	Mackenzie Valley Land and Water Board
CRP	Closure and Reclamation Plan
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
MVLWB	Mackenzie Valley Land and Water Board
MVRMA	<i>Mackenzie Valley Resource Management Act</i>
ORS	Online Review System (www.onlinereviewssystem.ca)
Project	Jean Marie River Well Re-Abandonment Project, which is the proposed development (as defined in Part 5 of the MVRMA). ⁴
Review Board	Mackenzie Valley Environmental Impact Review Board
Standard Licence Conditions	MVLWB Standard Water Licence Conditions Template
Standard Permit Conditions	MVLWB Standard Land Use Permit Conditions Template

3.0 Background and Scope of Screening

On September 10, 2021, Imperial submitted Applications for both a Licence and Permit to complete the Jean Maire River Well Re-Abandonment Project. The overall program objective is to re-abandon the JMR-B-48 well and includes the following:

- Building of winter access from the JMR community road to the well site (approximately 3.3 km);
- Cross the Jean Marie River by constructing an ice bridge capable of supporting all loads;
- Prepare the site for equipment required to perform the re-abandonment;
- Establish a camp;
- Support the logistics of the drilling rig; and
- Perform the initial – preliminary reclamation of the site.

Equipment List:

Number	Description
6	Bunkhouses/Portable structures
1	Well site garbage bin
1	Kitchen/portable structure
1	400 bbl tank

⁴ “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.”

1	BOP Stack
1	Casing/hailed on a Hi-boy
1	Cement bins/2 bins haul on one load
2-3	Cementing equipment/bunker and pumper units
1	Dozer
10-15	Drilling rig
1	Fishing equipment
1	Flock tank
1	Camp garbage bin
1	Grader
1	Hi-boy of barite
2	Semi vac
2	Tri-drive vac truck
2	Tri-drive water truck
1	Mud van
1	Potable water/tank truck
1	Power tongs
1	Pressure tester
1	Sewage truck
1	Wellsite trailer
2	Wireline logging unit

Fuel List:

Type of Fuel	Number of Containers	Capacity of containers
Diesel	1	10,000L
Diesel	1	5,000L
Diesel	1	1,000L
Diesel	1	3,000L
Gasoline	1	3,000L
Propane	6	400L

Water source and Amount:

Purpose of Water Use	Name and Type of Water Source	Location	Proposed Water Use Volume/Rate, including units
Industrial – Construction, Drilling and Cement Prep	Jean Maire River	Jean Maire River	Estimated usage is 2600m ³ with a maximum diversion ration of 299m ³ /day.
	Borrow Pit (backup source)	Along Jean Maire River Road	
	Borrow Pit (backup source)	Along Jean Maire River Road	
	Borrow Pit (backup source)	Along Jean Maire River Road	
	Borrow Pit (backup source)	Along Jean Maire River Road	
	Mackenzie River (backup source)	Mackenzie River near Jean Maire River	

Potable – Wellsite trailer, camp rig boiler operation and cement prep	Mackenzie River (via community withdrawal)	Village of Fort Simpson	Estimate usage is 555m ³ This will be truck in so rate will vary with truck drivers.
	Great Slave Lake (via community withdrawal) (backup source)	Town of Hay River	

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

Dehcho First Nations
Ttsets'e'hke'deli First Nation (Jean Marie River)
Deh Gah Got'ie First Nation (Fort Providence)
Ka'a'gee Tu First Nation (Kakisa)
Liidlii Kue First Nation (Fort Simpson)
Pehdzeh Ki First Nation (Wrigley)
Sambaa K'e First Nation (Trout Lake)
West Point First Nation (West Point)
Fort Providence Metis Council (Fort Providence)
Fort Simpson Metis (Fort Simpson)

Through a review of the Engagement Record, emails, phone calls and virtual meetings were held in relation to the project on the following dates: July 8, 16, and 20; August 27 and 31; and September 2, 8, and 9, 2021.

On September 20, 2021, the Applications were deemed complete, and the review commenced, comments and recommendations were due and submitted on October 8, 2021 with responses due from Imperial on October 13, 2021. 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 3 below.

3.1 Scope of Screening:

Project Summary

During December 2021, an ice road of sufficient thickness to support the required loads will be constructed. The original access right-of-way and wellsite location will be re-opened to a sufficient size to support the drilling rig and associated equipment and materials. To minimize the size of the wellsite location, contingency equipment and materials will be stored offsite on an existing site in or near the community of Jean Marie River. A camp facility will be mobilized to house the workers associated with the operation.

In early January 2022, a drilling rig and supporting equipment and materials will be mobilized to the location. A casing bowl and extension will be installed onto the existing casing stub and well control equipment will be installed and tested. The surface cement plug will be drilled out and the integrity of the existing casing will be determined by way of casing logging and pressure testing. The remaining two cement plugs in the well will be drilled out. The condition of the wellbore will be assessed by open-hole logging. The well will then be cased with 139.7 mm outside diameter casing. The casing will be cemented full length with oil-well cement suitable for the well condition and temperature.

The wellhead will be secured, then the drill rig, associated equipment and materials will be demobilized. Appropriate heavy equipment will be mobilized to reclaim a portion of the site while leaving enough working space around the wellhead to allow a standalone cased hole logging unit to conduct a cement evaluation log (CEL). The CEL will be run approximately a week after cementing the new casing to collect baseline data of the cement quality. The well will be secured again after the CEL.

A dozer and excavator will be used to reclaim the remainder of the site and access while leaving space for possible future monitoring. Barricades will be placed around the well; it will be “cut and capped” at a future date. The cellar will be backfilled and the remaining area around the wellsite will be reclaimed by hand or with heli-portable equipment. All waste generated from the work site will be hauled to an approved landfill or disposal facility. Activities are intended to be completed in January 2022, followed by a period of monitoring, as necessary.

3.2 Public Record and Regulatory Proceeding

To assist the Board in its preliminary screening determination for the Project, the Board distributed the Applications and a draft Licence and Permit for public review on September 20, 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 October 8, 2021, with responses from the Applicant due October 13, 2021. The Board received comments and recommendations from the list reviewers and acronyms (attached).⁵

Since there were no requests to extend the reviewer comment deadlines, 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 the Northwest Territory Métis Nation (NWTMN) Interim Measures Agreement, 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 Applications.

Pursuant to section 27, paragraphs (a) and (b) of the Dehcho First Nations (DCFN) Interim Measures Agreement, the Board has determined that written notice was given to the DCFN, and that a reasonable period of time was allowed for DCFN to make representations with respect to the Applications.

⁵ See MLWB Online Registry for [Imperial Oil Limited – Review Comment Summary Table](#) – October 13, 2021.

4.0 Potential Impacts and Proposed Mitigations

For Board licences and permits in general, potential impacts can be mitigated through existing permit and licence conditions, standard Board permit and licence conditions, and/or project-specific conditions 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.

A draft Licence and Permit were 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.

Table 1 below summarizes:

- the potential impacts of the proposed Jean Marie River Well Re-Abandonment 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.

Table 1: Potential Impacts and Proposed Mitigations for the Proposed Jean Marie River Well Re-Abandonment Project

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
Soil Contamination	Use of Fuel	<p>The Applicant proposed the following mitigations in the Applications:</p> <ul style="list-style-type: none"> ○ Spill Contingency Plan in place. ○ Spill kits will be located on site. ○ Equipment will be properly maintained. ○ Drilling operation is planned to take place during frozen conditions in areas with site and roads frozen in. ○ Respond immediately to any releases. ○ All spills, regardless of volume, will be documented and reported as appropriate. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the sections identified below:⁶</p> <p>Permit 26(1)(m) – Fuel Storage</p> <p>Licence Part H – Spill Contingency Planning</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 or will not be a cause of public concern.
Soil Compaction	Camp construction and Operation completion	<p>The Applicant proposed the following mitigations in the Applications:</p> <ul style="list-style-type: none"> ○ Project activities are to take place on previously cleared locations, minimizing clearing where possible. ○ Work will be performed on frozen ground conditions (with additional ice layer frozen in on top) without soil horizons disturbance, to preserve soil conditions and the seed bed and 	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 or will not be a cause of public concern.

⁶ See the MVLWB Policies and Resources webpage to access the MVLWB [Standard Water Licence Conditions Template](#) and MVLWB [Standard Land Use Permit Conditions Template](#).

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
		<p>avoid compaction.</p> <ul style="list-style-type: none"> ○ Root mass is intended to be left intact to protect soil structure and reduce compaction <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the sections identified below:</p> <p>Permit 26(1)(a) – Location and Area</p> <p>Licence Part E - Construction</p>	
Destabilization/ Erosion	Camp, Access Road, Use of Site	<p>The Applicant proposed the following mitigations in the Applications.</p> <ul style="list-style-type: none"> ○ Non-salvageable material from clearing will be stored for use as rollback and reclamation material. ○ Site will be monitored in years after drilling work to monitor for vegetation regrowth and erosion during snow and ice-free conditions. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions include:</p> <p>Permit 26(1)(f) – Control or Prevention of Ponding of Water, Flooding, Erosion, Slides, and Subsidence of Land</p> <p>Licence Part F – Waste and Water Management</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 or will not be a cause of public concern.

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
Infiltration Changes	Access Road	<p>The Applicant proposed the following mitigations in the Applications.</p> <ul style="list-style-type: none"> ○ Water used to develop ice pads will be withdrawn from nearby sources. Amounts are expected to be small and will be spread over a larger area. This will add a small volume of water to the local soils during freshet, but no significant infiltration changes are expected. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below:</p> <p>Licence Part D – Water Use Part E – Construction</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 or will not be a cause of public concern.
Changes in Water Quality	Erosion, Access construction, camp construction,	<p>The Applicant proposed the following mitigation in the Applications.</p> <ul style="list-style-type: none"> ○ Water used to develop ice pads will be withdrawn from nearby sources. Amounts are expected to be small and will be spread over a larger area. This will add a small volume of water to the local soils during freshet, but no significant infiltration changes are expected. ○ Spill contingency plan in place. ○ Spill kits will be located on site. ○ Equipment will be properly maintained. ○ Drilling operation is planned to take place during frozen conditions in areas with site and roads frozen in. ○ Respond immediately to any releases. ○ All spills, regardless of volume, will be documented and reported as appropriate. 	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 or will not be a cause of public concern.

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
		<p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below:</p> <p>Permit 26(1)(f) – Control or Prevention of Ponding of Water, Flooding, Erosion, Slides, and Subsidence of Land 26(1)(m) – Fuel Storage</p> <p>Licence Part F – Waste and Water Management Part H – Spill Contingency Planning</p>	
Changes in aquatic habitat	Water withdrawal	<p>The Applicant proposed the following mitigation in the Applications.</p> <ul style="list-style-type: none"> ○ Follow all requirements of issued licences for water diversion (location, flow rates and volume). ○ Implement DFO Code of Practice requirements for small intakes and temporary crossings as approved during project review. ○ Project activities avoid restricted timing windows for aquatic species of concern (e.g. fall spawning) <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below:</p> <p>Permit 26(1)(h) – Wildlife and Fish Habitat</p> <p>Licence Part D – Water Use Part E – Construction</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 or will not be a cause of public concern.

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
Water flow or level changes (permanent, temporary, seasonal)	Access road construction, use of water for camp	<p>The Applicant proposed the following mitigation in the Applications.</p> <ul style="list-style-type: none"> ○ Potable water to be sourced from Town of Hay River or Village of Fort Simpson. ○ Water withdrawal will comply with project approvals for water diversion (flow rates and volume). ○ Estimates of water planned to be used are not expected to affect flow or levels significantly. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below:</p> <p>Permit 26(1)(a) – Location and Area</p> <p>Licence Part D – Water Use Part E – Construction</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 or will not be a cause of public concern.
Changes in air quality	Use of machines, access road construction	<p>The Applicant proposed the following mitigation in the Applications.</p> <ul style="list-style-type: none"> ○ Project work is relatively short duration with construction and drilling work estimated to take less than two months. ○ Ensure good functioning order and proper maintenance of any machine specifically, lubrication, mufflers on vents and air intakes. Emissions from equipment will be kept to a minimum when possible and use of combustion equipment will be optimized where possible. ○ No plans to burn timber. 	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 or will not be a cause of public concern.

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
		<p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below:</p> <p>Licence Part E - Construction</p>	
Direct loss of vegetation	Clearing access and camp location	<p>The Applicant proposed the following mitigation in the Applications.</p> <ul style="list-style-type: none"> ○ Clearing and access road construction will be limited to site boundaries and allowable limits. Most of clearing is regrowth on a previously disturbed area. ○ Reclamation Plan has been submitted ○ Revegetation via natural regeneration. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts These standard conditions are found in the section(s) identified below:</p> <p>Permit 26(1)(a) – Location and Area 26(1)(d) – Methods and Techniques 26(1)(e) – Type, Location, Capacity, and Operation of All Facilities 26(1)(o) – Restoration of the Lands</p> <p>Licence Part E – Construction Part I – Closure and Reclamation</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 or will not be a cause of public concern.

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
Loss of Species at Risk or may-be-at-risk plants	Clearing access and camp location	<p>The Applicant proposed the following mitigation in the Application.</p> <ul style="list-style-type: none"> ○ Work will be performed on frozen ground conditions (with additional ice layer frozen in on top) without soil horizons disturbance, to preserve soil conditions and the seed bed and avoid compaction. ○ Root mass is intended to be left intact to protect soil structure and reduce compaction. ○ Total project area is estimated to be just over 5.5 ha of area that has been previously cleared and on which regrowth has occurred. ○ Reclamation plan in place. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below:</p> <p>Permit 26(1)(a) – Location and Area 26(1)(d) – Methods and Techniques 26(1)(o) – Restoration of the Lands</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 or will not be a cause of public concern.
Change in species composition	Access roads and site disturbance	<p>The Applicant proposed the following mitigation in the Applications.</p> <ul style="list-style-type: none"> ○ Revegetation via natural regeneration which is expected to reflect surrounding vegetation. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below</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 or will not be a cause of public concern.

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
		Permit 26(1)(a) – Location and Area 26(1)(d) – Methods and Techniques 26(1)(o) – Restoration of Lands Licence Part E – Construction Part I – Closure and Reclamation	
Introduction of non-native (invasive) species	Access roads and site disturbance	<p>The Applicant proposed the following mitigation in the Applications.</p> <ul style="list-style-type: none"> ○ Invasive species can be spread or brought to site from machinery; however, due to winter conditions this is unlikely. ○ Equipment will arrive to site clean. ○ Site work (cutting, capping, and reclamation) will occur following drilling and sites will be monitored during that time for invasive species. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below</p> Permit 26(1)(d) – Methods and Techniques 26(1)(o) – Restoration of Lands Licence Part E - Construction Part I – Closure and Reclamation	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 or will not be a cause of public concern.

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
Effects on Plant Health (dust, metals, toxins)	Site disturbance	<p>The Applicant proposed the following mitigation in the Applications</p> <ul style="list-style-type: none"> ○ Project activities are planned during the winter conditions. Dust is expected to be limited as a result. 	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 or will not be a cause of public concern.
Increased risk of fire	Clearing	<p>The Applicant proposed the following mitigation in the Applications</p> <ul style="list-style-type: none"> ○ A fire management plan in place as part of the Emergency Response Plan. ○ The Project does not plan to burn timber. 	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 or will not be a cause of public concern.
Compaction of vegetation	Work on site (access, clearing,	<p>The Applicant proposed the following mitigation in the Applications.</p> <ul style="list-style-type: none"> ○ Work will be performed on frozen ground conditions (with additional ice layer frozen in on top) without soil horizons disturbance, to preserve soil conditions and the seed bed and avoid compaction. ○ Root mass is intended to be left intact to protect soil structure and reduce compaction ○ Use of coarse woody debris around location after sitework is done. ○ Site will be monitored in years after drilling work to monitor for vegetation regrowth. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below:</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 or will not be a cause of public concern.

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
		Permit 26(1)(d) – Methods and Techniques 26(1)(o) – Restoration of Lands Licence Part E – Construction Part I – Closure and Reclamation	
Direct loss or removal of habitat, dens, or nests	Access trail, camp location	The Applicant proposed the following mitigation in the Applications. <ul style="list-style-type: none"> ○ Scouting in fall to identify any potential bear dens, sensitive features and any other animal activity ○ Sensitive wildlife features will be avoided (dens) The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below: Permit 26(1)(d) – Methods and Techniques 26(1)(h) – Wildlife and Fish Habitat Licence Part E - Construction	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 or will not be a cause of public concern.
Direct injury or mortality	Access trail, camp, use of site	The Applicant proposed the following mitigation in the Applications. <ul style="list-style-type: none"> ○ Wildlife awareness and workplace housekeeping is covered in site-specific orientation package. ○ Keep distance from wildlife and adhere to speed limits. ○ Identify potential wildlife interactions that may occur prior to starting job and document on Job Safety Analysis. 	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 or will not be a cause of public concern.

Potential Impact	Activity	Proposed Mitigations <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"> ○ Have appropriate mitigation in place prior to starting job (such as bear horn). ○ Report wildlife strikes and sightings to Environment and Regulatory Advisor. ○ Follow speed limits when traveling on roads. 	
Disturbances to key lifecycle stages: breeding, feeding, nesting, staging	Use of the area	<p>The Applicant proposed the following mitigation in the Applications.</p> <ul style="list-style-type: none"> ○ Project activities avoid key life stage timing for species of concern (e.g. calving and breeding) with construction and drilling work to take place during winter. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below:</p> <p>Permit 26(1)(q) – Biological and Physical Protection of the Land</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 or will not be a cause of public concern.
Human-wildlife conflicts	Use of the area	<p>The Applicant proposed the following mitigation in the Applications.</p> <ul style="list-style-type: none"> ○ Wildlife awareness and workplace housekeeping is covered in site-specific orientation package. ○ Keep distance from wildlife and adhere to speed limits. ○ Identify potential wildlife interactions that may occur prior to starting job and document on Job Safety Analysis. ○ Have appropriate mitigation in place prior to starting job (such as bear horn). ○ Report wildlife strikes and sightings to Environment and Regulatory Advisor. ○ Follow speed limits when traveling on roads. 	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 or will not be a cause of public concern.

Potential Impact	Activity	Proposed Mitigations <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"> ○ Waste Management Plan in place. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below:</p> <p>Permit 26(1)(g) Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material</p> <p>Licence Part F – Waste and Water Management</p>	
Effects on health (toxins, metals, sediment, etc.)	Use of site with withdrawal of water	<p>The Applicant proposed the following mitigations in the Applications.</p> <ul style="list-style-type: none"> ○ Withdrawal points to have fish screen(s) in place to meet DFO requirements per project review. ○ Follow all requirements of issued licences for water diversion (location, flowrates and volume). ○ Implement DFO Code of Practice requirements for small intakes and temporary crossings as approved during project review. ○ Project activities avoid restricted timing windows for aquatic species of concern (e.g. fall spawning) ○ Spill Contingency Plan in place. ○ Drilling operation is planned to take place during frozen conditions in areas with site and roads frozen in. ○ Respond immediately to any releases. ○ All spills, regardless of volume, will be documented and reported as appropriate. 	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 or will not be a cause of public concern.

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
		<p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below:</p> <p>Permit 26(1)(f) – Control or Prevention of Ponding of Water, Flooding, Erosion, Slides, and Subsidence of Land 26(1)(m) – Fuel Storage</p> <p>Licence Part D – Water Use Part E – Construction Part H – Spill Contingency Planning</p>	
Effects on traditional land use, subsistence, and harvesting right	Use of site and withdrawal of water	<p>The Applicant proposed the following mitigations in the Applications.</p> <ul style="list-style-type: none"> ○ Pre-submission Engagement has included both community and indigenous groups. Camp locations have incorporated siting guidance from local First Nations. ○ Jean Marie First Nation will provide a guide to participate in the September scouting sessions to provide feedback. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below:</p> <p>Permit 26(1)(q) – Biological and Physical Protection of the Land</p> <p>Licence Part B – General Conditions</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 or will not be a cause of public concern.

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
Change to or loss of cultural integrity	Use of site and withdrawal of water	<p>The Applicant proposed the following mitigations in the Applications.</p> <ul style="list-style-type: none"> ○ Engagement has included both community and indigenous groups. ○ Engagement and consultation records were included. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below:</p> <p>Permit 26(1)(q) – Biological and Physical Protection of the Land</p> <p>Licence Part B – General Conditions</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 or will not be a cause of public concern.
Economic opportunities or losses (employment, training)	Use of site and withdrawal of water	<p>The Applicant proposed the following mitigations in the Applications.</p> <ul style="list-style-type: none"> ○ Imperial is actively working on confirming subcontracts that will feature strong representation from the local contracting community. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions are found in the section(s) identified below:</p> <p>Permit 26(1)(q) – Biological and Physical Protection of the Land</p> <p>Licence Part B – General Conditions Part D – Water 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 or will not be a cause of public concern.

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
Impairment of the recreational or traditional uses of the land or water	Use of site and withdrawal of water	<p>The Applicant proposed the following mitigations in the Applications.</p> <ul style="list-style-type: none"> ○ Potential short-term increase in local activity due to construction and drilling activity. ○ Camp locations have incorporated siting guidance from local First Nations. ○ Jean Marie First Nation will provide a guide to participate in the September scouting sessions to provide feedback. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts. These standard conditions include</p> <p>Permit 26(1)(a) – Location and Area 26(1)(d) – Methods and Techniques 26(1)(q) – Biological and Physical Protection of the Land</p> <p>Licence Part B – General Conditions Part D – Water Use Part E - Construction</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 or will not be a cause of public concern.
Changes to the use of the area by other non-Indigenous people (e.g., trappers, outfitters, residents, hunters, forest	Use of site and withdrawal of water	<p>The Applicant proposed the following mitigations in the Applications.</p> <ul style="list-style-type: none"> ○ Potential short-term increase in local activity due to construction and drilling activity. <p>The Board has standard permit and licence conditions that are typically used to mitigate the described impacts These standard conditions are found in the section(s) identified below</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 or will not be a cause of public concern.

Potential Impact	Activity	Proposed Mitigations <i>Description of measures to reduce potential impacts, including consideration of cumulative impacts and climate change.</i>	Board Analysis and Determination
harvesters, other authorized projects)		Permit 26(1)(a) – Location and Area 26(1)(q) – Biological and Physical Protection of the Land Licence Part B – General Conditions Part D – Water Use Part E – Construction	

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.

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 potentially significant impacts.

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 significant adverse impact on the environment or be of public concern, as set out in paragraph 125(1)(a) of the MVRMA. The Board has therefore decided not to refer the Project to Environmental Assessment.

If the Board does not receive a notice of referral to environmental assessment by Thursday November 11, 2021, the Board will issue the Permit and Licence on Friday November 12, 2021.

SIGNATURE



Mavis Cli-Michaud
Chair, Mackenzie Valley Land and Water Board

October 28, 2021

Date