

7th Floor - 4922 48th Street
PO Box 2130, Yellowknife NT X1A 2P6

Tel: 867-669-0506 Fax: 867-873-6610
www.mvlwb.com

July 26, 2022

File: MV2021L1-0009

Esther Choi
Imperial Oil Limited
Box 2480, Station M
505 Quarry Park Blvd SE
Calgary AB T2C 5N1

Sent by email

Dear Esther Choi,

Re: Imperial Oil Limited– Security Requirement – Water Licence MV2021L1-0009 – Re-Abandonment of Well – Jean Marie River, NT

The Mackenzie Valley Land and Water Board (Board) met on July 21, 2022 and considered the Request submitted by the Government of the Northwest Territories – Department of Environment and Natural Resources (GNWT-ENR/ENR)¹ as well as the responses submitted by Imperial Oil Limited (Imperial)² for Water Licence (Licence) MV2021L1-0009 for the Well Re-Abandonment (Project).

The main concern brought forward by GNWT – ENR relates to the security deposit condition language and submission requirements (timing and activity triggers) which has resulted in unsecured liabilities to the Government of the Northwest Territories. Due to the current Licence conditions, ENR cannot compel the proponent to submit the security deposits to cover existing liabilities.

The Board has updated Schedule 2, condition 1 of the timing of security submission reflect the existing onsite liability.

¹ See MLWB Online Registry for Imperial Oil Limited. – [Request from GNWT – ENR – Security – Mar10 22](#)

² See MLWB Online Registry for Imperial Oil Limited. – [Response from Imperial – May4 22](#)

Security Deposit

A security deposit is required within 90 days of the date of this letter and as per Part C, Condition 1, POST SECURITY DEPOSIT and Schedule 2 of the Licence. The security deposit is **payable to the Government of the Northwest Territories (GNWT)** and should be submitted to the following individual, to whom questions regarding security should also be directed:

Nathen Richea, Director, Water Resources
GNWT-Environment and Natural Resources (ENR)
Box 1320
Yellowknife NT X1A 2L4

Full cooperation of Imperial is anticipated and appreciated. Please contact [Tyree Mullaney](#) at (867) 766-7464 with any questions or concerns regarding this letter.

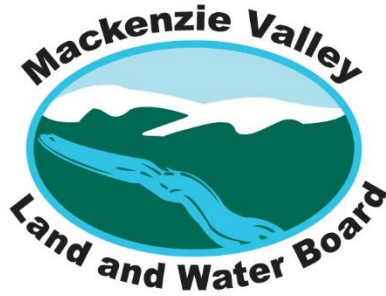
Yours sincerely,



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

BCC'd to: Dehcho Distribution List
Nathen Richea – Director, Water Resources, GNWT-ENR

Attached: Water Licence MV2021L1-0009



7th Floor - 4922 48th Street
PO Box 2130, Yellowknife NT X1A 2P6

Tel: 867-669-0506 Fax: 867-873-6610
www.mvlwb.com

Imperial Oil Limited

Water Licence MV2021L1-0009

Pursuant to the *Waters Act* and the Waters Regulations,
the Mackenzie Valley Land and Water Board grants this Water Licence to:

Imperial Oil Limited

(Licensee)

of Box 2480, Station M, 505 Quarry Park Blvd SE Calgary AB T2C 5N1

(Mailing Address)

hereinafter called the Licensee, to proceed with the following undertaking, subject to the annexed definitions and conditions contained therein:

Location:	Jean Marie River – Well Abandonment
Water Management Area:	WMA 3
Purpose:	Industrial – Well Abandonment
Type:	Type B
Quantity of Water not to be exceeded:	Up to 299 m ³ per day to a maximum of 3000m ³ /year
Effective Date:	November 12, 2021
Expiry Date:	November 11, 2028

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

Amanda Gauthier, Witness

Type B Water Licence MV2021L1-0009 Imperial Oil Limited – Jean Marie River

Table of Contents

Part A: [Scope](#) and [Defined Terms](#)

[Part B](#): General Conditions

[Part C](#): Security

[Part D](#): Water Use

[Part E](#): Construction

[Part F](#): Waste and Water Management

[Part G](#): Aquatic Effects Monitoring

[Part H](#): Spill Contingency Planning

[Part I](#): Closure and Reclamation

[Part J](#): Watercourse Crossings

Schedules

[Schedule 1](#): Annual Water Licence Report (Part B)

[Schedule 2](#): Security (Part C)

[Schedule 3](#): Closure and Reclamation (Part I)

Annex A: Concordance Table of Items Requiring Submission

Annex B: Table of Revision History

Part A: Scope and Defined Terms

Scope	Condition Title
<p>1. This Licence entitles the Licensee to use Water and deposit Waste for Industrial activities at the Jean Marie River wellsite B-48.</p> <p>The scope of this Licence includes the following:</p> <ul style="list-style-type: none">a) Withdrawal of Water for construction and abandonment purposes;b) Depositing of Waste;c) Construction, operation, and maintenance of Watercourse crossing(s);d) Construction, operation and maintenance of winter access roads; well site B-48, camps, and remote sumps; ande) Progressive Reclamation and associated Closure and Reclamation activities.	SCOPE
<p>2. The scope of this Licence is as described in the Preliminary Screening for MV2021L1-0009 and MV2021X0019, dated October 28, 2021.</p>	SCOPE – PRELIMINARY SCREENING
<p>3. This Licence is issued subject to the conditions contained herein with respect to the use of Water and the deposit of Waste in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposits of such Waste may enter any Waters. Any change made to the <i>Waters Act</i> and/or the Waters Regulations that affects licence conditions and defined terms will be deemed to have amended this Licence.</p>	LEGISLATION SUBJECT TO CHANGE
<p>4. Compliance with this Licence does not relieve the Licensee from responsibility for compliance with the requirements of any applicable federal, territorial, or municipal legislation.</p>	LEGISLATIVE COMPLIANCE

Defined Terms: ¹

Artesian Aquifer – a Water-bearing stratum which, when encountered during drilling operations, produces a pressurized flow of Groundwater that reaches an elevation above the Water table or above the ground surface.

Board – the Mackenzie Valley Land and Water Board established under subsection 99(1) of the *Mackenzie Valley Resource Management Act*.

Closure Cost Estimate - an estimate of the cost to close and reclaim the Project.

Closure Criteria - standards that measure the success of selected closure activities in meeting closure objectives. Closure criteria may have a temporal component (e.g., a standard may need to be met for a pre-defined number of years). Closure criteria can be site-specific or adopted from territorial/federal or other standards and can be narrative statements or numerical values.

Closure Objectives - statements that describe what the selected closure activities are aiming to achieve; they are guided by the closure principles. Closure objectives are typically specific to project components, are measurable and achievable, and allow for the development of closure criteria.

Closure and Reclamation – the process and activities that facilitate the return of areas affected by the Project to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment and human activities.

Closure and Reclamation Plan (CRP) – a document, developed in accordance with this Licence, that clearly describes the Closure and Reclamation for the Project.

Component-Specific Closure and Reclamation Plan (Component-Specific CRP) – a document, developed in accordance with this Licence and the MVLWB/AANDC *Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories*, that clearly describes the Closure and Reclamation for a component of the Project.

Construction – any activities undertaken during any phase of the Project to construct or build any structures, facilities or components of, or associated with, the development of the Project.

Discharge – a direct or indirect deposit or release of any Water or Waste to the Receiving Environment.

Drilling Fluid – any liquid or liquid mixture, including, but not limited to clay, Water, sediment, hydrocarbons, or additives, that is pumped down-hole while drilling.

Drilling Waste – Waste material specifically produced from drilling activity.

Effluent – a Wastewater Discharge.

Engagement Plan – a document, developed in accordance with the MVLWB *Engagement and Consultation Policy* and the *Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits*, that clearly describes how, when, and which engagement activities will occur with an affected party during the life of the Project.

Freeboard – the vertical distance between the Water or Wastewater line and the lowest elevation of the effective Water or Wastewater containment crest on the upstream slope of a containment structure.

Greywater – all liquid Waste from showers, baths, sinks, kitchens, and domestic washing facilities, but does not include Toilet Waste.

Groundwater – as defined in section 1 of the Waters Regulations: all water in a zone of saturation below the land surface, regardless of its origin.

Hazardous Waste - a Waste which, because of its quantity, concentration, or characteristics, may be harmful to human health or the environment when improperly treated, stored, transported, or discharged.

Inspector – an Inspector designated by the Minister under subsection 65(1) of the *Waters Act*.

Licensee – the holder of this Licence.

Minister – the Minister of the Government of the Northwest Territories (GNWT) – Environment and Natural Resources.

Ordinary High-Water Mark – the usual or average level to which a Watercourse rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing Watercourses (rivers, streams), this refers to an active channel/bank-full level, which is often the 1:2-year flood flow return level. In inland lakes, wetlands or marine environments, it refers to those parts of the Watercourse bed and banks that are frequently flooded by Water so as to leave a mark on the land and where the natural vegetation changes from predominantly aquatic vegetation to terrestrial vegetation (excepting Water tolerant species). For reservoirs, this refers to normal high operating levels (full supply level).

Progressive Reclamation – Closure and Reclamation activities conducted during the operating phase of the Project.

Project – the undertaking described in Part A, Conditions 1 and 2.

Receiving Environment – the natural environment that, directly or indirectly, receives any deposit of Waste from the Project.

RECLAIM – the Government of the Northwest Territories' model for estimating Closure and Reclamation costs.

Remediation – the removal, reduction, or neutralization of substances, Wastes, or hazardous materials from a site in order to prevent or minimize any adverse effects on the environment and public safety, now or in the future.

Runoff – the overland flow of Water or Wastewater that occurs when precipitation, meltwater, or other Water is not absorbed by the land.

Seepage – any Water or Waste that drains, passes through, or escapes from any structure designed to contain, withhold, divert, or retain Water or Waste.

Sewage – all Toilet Wastes and Greywater.

Sewage Disposal Facilities – the area(s) and structures designated to contain and treat Sewage.

Solid Waste Disposal Facilities – the area(s) and structures designated to contain solid Waste.

Spill Contingency Plan (SCP) – a document developed for the Project in accordance with INAC's *Guidelines for Spill Contingency Planning*.

Sump – a human-made excavation or a natural depression designated for depositing Water and/or Waste.

Toilet Wastes – all human excreta and associated products, not including Greywater.

Traditional Knowledge – the cumulative, collective body of knowledge, experience and values built up by a group of people through generations of living in close contact with nature. It builds upon the historic experiences of a people and adapts to social, economic, environmental, spiritual, and political change.

Unauthorized Discharge – a Discharge of any Water or Waste not authorized under this Licence

Waste – as defined in section 1 of the *Waters Act*:

- a) a substance that, if added to water, would degrade or alter or form part of a process of degradation or alteration of the quality of the water to an extent that is detrimental to its use by people or by an animal, fish or plant, or
- b) water that contains a substance in such a quantity or concentration, or that has been so treated, processed or changed, by heat or other means, that it would, if added to other water, degrade or alter or form part of a process of degradation or alteration of the quality of that water to the extent described in paragraph (a), and includes
- c) a substance or water that, for the purposes of the *Canada Water Act*, is deemed to be waste,
- d) a substance or class of substances prescribed by regulations made under subparagraph 63(1)(b)(i),
- e) water that contains a substance or class of substances in a quantity or concentration that is equal to or greater than a quantity or concentration prescribed in respect of that substance or class of substances by regulations made under subparagraph 63(1)(b)(ii), and
- f) water that has been subjected to a treatment, process or change prescribed by regulations made under subparagraph 63(1)(b)(iii).

Waste Disposal Facilities – the area(s) and structures designated for the disposal of Waste.

Waste Management Plan (WMP) – a document, developed in accordance with the MVLWB *Guidelines for Developing a Waste Management Plan*, that describes the methods of Waste management for the Project from Waste generation to final disposal.

Wastewater – any Water that is generated by Project activities or originates on-site, and which contains Waste, and may include, but is not limited to, Runoff, Seepage, Sewage, Minewater, and Effluent.

Water – as defined in section 1 of the *Waters Act*: water under the administration and control of the Commissioner, whether in a liquid or frozen state, on or below the surface of land.

Watercourse – as defined in section 1 of the *Waters Regulations*: a natural watercourse, body of Water or Water supply, whether usually containing Water or not, and includes Groundwater, springs, swamps, and gulches.

Water Management Area – a geographical area of the Northwest Territories established by section 2 and Schedule A of the *Waters Regulations*.

Waters Regulations – the regulations proclaimed pursuant to section 63 of the *Waters Act*.

Water Supply Facilities – the area(s) and structures designed to collect, and supply Water for the Project.

Water Use – as defined in section 1 of the *Waters Act*: a direct or indirect use of any kind, including, but not limited to,

- a) a diversion or obstruction of waters,
- b) an alteration of the flow of waters, and
- c) an alteration of the bed or banks of a river, stream, lake or other body of water, whether or not the body of water is seasonal, but does not include a use connected with shipping activities that are governed by the *Canada Shipping Act, 2001*.

Water Use Fee – the fee for use of Water as per the *Waters Regulations* pursuant to section 63 of the *Waters Act* and the MVLWB *Water Use Fee Policy*.

	Condition	Condition Title
Part B: General Conditions		
1.	The Licensee shall ensure a copy of this Licence is maintained on site at all times.	COPY OF LICENCE
2.	The Licensee shall take every reasonable precaution to protect the environment.	PRECAUTION TO PROTECT ENVIRONMENT
3.	In conducting its activities under this Licence, the Licensee shall make every reasonable effort to consider and incorporate any scientific information and Traditional Knowledge that is made available to the Licensee.	INCORPORATE SCIENTIFIC INFORMATION AND TRADITIONAL KNOWLEDGE
4.	In each submission required by this Licence or by any directive from the Board, the Licensee shall 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.	IDENTIFY TRADITIONAL KNOWLEDGE
5.	All references to policies, guidelines, codes of practice, statutes, regulations, or other authorities shall be read as a reference to the most recent versions, unless otherwise noted.	REFERENCES
6.	<p>The Licensee shall ensure all submissions to the Board:</p> <ul style="list-style-type: none"> a) Are in accordance with the MVLWB <i>Document Submission Standards</i>; b) Include a conformity statement or table which identifies where the requirements of this Licence, or other directives from the Board, are addressed; and c) Include any additional information requested by the Board. 	SUBMISSION FORMAT AND CONFORMITY
7.	The Licensee shall ensure management plans are submitted to the Board in a format consistent with the MVLWB <i>Standard Outline for Management Plans</i> , unless otherwise specified.	MANAGEMENT PLAN FORMAT
8.	The Licensee shall comply with all plans, programs, manuals, studies, including revisions, approved pursuant to the conditions of this Licence.	COMPLY WITH SUBMISSIONS AND REVISIONS
9.	The Licensee shall conduct an annual review of all plans, programs, manuals, studies and make any revisions necessary to reflect changes in operations, contact information, or other details. No later than March 31 each year, the Licensee shall send a notification letter to the Board, listing the documents that have been reviewed and do not require revisions.	ANNUAL REVIEW
10.	The Licensee may propose changes at any time by submitting revised plans, programs, manuals, or studies that require Board approval to the Board, for approval, a minimum of 30 days prior to the proposed implementation date for the changes. The Licensee shall not implement the changes until approved by the Board.	REVISIONS

11.	The Licensee shall revise any submission and submit it as per the Board’s directive.	REVISE AND SUBMIT
12.	If any date for any submission falls on a weekend or holiday, the Licensee may submit the item on the following business day.	SUBMISSION DATE
13.	The Licensee shall comply with the Schedules , which are annexed to and form part of this Licence, and any updates to the Schedules as may be made by the Board.	COMPLY WITH SCHEDULE(S)
14.	The Schedules and any compliance dates specified in this Licence may be updated at the discretion of the Board.	UPDATES TO COMPLIANCE DATE(S)
15.	The Licensee shall comply with all directives issued by the Board in respect of the implementation of the conditions of this Licence.	COMPLY WITH BOARD DIRECTIVES
16.	The Licensee shall install, operate, and maintain meters, devices, or other such methods for measuring the volumes of Water used and Waste discharged to the satisfaction of an Inspector.	MEASURE WATER USE AND WASTE DISCHARGED
17.	Beginning March 31, 2022 and no later than every March 31 thereafter, the Licensee shall submit an Annual Water Licence Report to the Board and an Inspector. The Report shall be in accordance with the requirements of Schedule 1, Condition 1.	ANNUAL WATER LICENCE REPORT
18.	The Licensee shall comply with the Engagement Plan , once approved.	ENGAGEMENT PLAN
19.	A minimum of ten days prior to the initial commencement of Project activities, the Licensee shall provide written notification to the Board and an Inspector. Notification shall include the commencement date, and the name and contact information for the individual responsible for overseeing the Project. Written notification shall be provided to the Board and an Inspector if any changes occur.	NOTIFICATION – COMMENCEMENT
20.	A minimum of ten days prior to re-commencement of Project activities following a temporary shut-down period, the Licensee shall provide written notification to the Board and an Inspector. Notification shall include the commencement date, and the name and contact information for the individual responsible for overseeing the Project. Written notification shall be provided to the Board and an Inspector if any changes occur.	NOTIFICATION – RE-COMMENCEMENT
21.	The Licensee shall immediately provide written notification to the Board and an Inspector of any non-compliance with the conditions of this Licence.	NOTIFICATION – NON-COMPLIANCE WITH CONDITIONS
22.	The Licensee shall immediately provide written notification to the Board of any non-compliance with a Board directive issued in respect of the implementation of the conditions of this Licence.	NOTIFICATION – NON-COMPLIANCE WITH DIRECTIVES
23.	The Licensee shall ensure that a copy of any written authorization issued to the Licensee by an Inspector is provided to the Board.	COPY – WRITTEN AUTHORIZATION

- | | | |
|-----|--|--|
| 24. | The Licensee shall submit a current Project schedule to the Board and an Inspector upon request. | SUBMIT CURRENT
PROJECT SCHEDULE |
|-----|--|--|

Part C: Security

- | | | |
|----|---|---|
| 1. | The Licensee shall post and maintain a security deposit with the Minister in accordance with Schedule 2. The Licensee shall not commence Project activities until the security deposit has been accepted by the Minister. | POST SECURITY
DEPOSIT |
| 2. | Upon request of the Board, the Licensee shall submit an updated Closure Cost Estimate using the current version of RECLAIM or another method acceptable to the Board. | UPDATE CLOSURE
COST ESTIMATE |
| 3. | <p>The amount of the security deposit required by Part C, Condition 1 may be adjusted by the Board:</p> <p>a) Based on an updated Closure Cost Estimate as per Part C, Condition 2; or
 b) Based on such other information as may become available to the Board.</p> | ADJUSTED SECURITY
AMOUNT |
| 4. | If the amount of the security deposit is adjusted by the Board as per Part C, Condition 3, the Licensee shall post the adjusted amount with the Minister within the timeframe set by the Board. The Licensee shall not commence any new activities associated with a security adjustment until the additional security deposit has been accepted by the Minister. | POST ADJUSTED
SECURITY AMOUNT |
| 5. | Unless otherwise approved by the Board, the Licensee may not submit security adjustment requests except with a revised Closure and Reclamation Plan. | SECURITY
ADJUSTMENT
REQUESTS |

Part D: Water Use

1. The Licence shall only obtain Water for the Project as set out in the following table.

**WATER SOURCE AND
MAXIMUM VOLUME**

Water Source Name	Location and Coordinates	Type of Watercourse (e.g., river, lake, etc.)	Purpose of Water Use	Maximum Quantity (m ³ per day or year)
Jean Marie River	61.452618 - 120.581236	River	Industrial – Construction and drilling	Total estimated water use 3000m ³ /year with a daily limit of 299m ³ .
Borrow pit (backup source)	61.521251 - 120.625614	Borrow pit	Industrial – Construction and drilling	
Borrow pit (backup source)	61.5116997 - 120.636932	Borrow pit	Industrial - Construction and drilling	
Borrow pit (backup source)	61.506199 - 120.628202	Borrow pit	Industrial - Construction and drilling	
Borrow pit (backup source)	61.468493 - 120.613585	Borrow pit	Construction, Industrial and drilling	
Mackenzie River (backup source)	61.52791 - 120.624954	River	Industrial – Construction and drilling	

2. The Licensee shall only withdraw Water using the Water Supply Facilities, unless otherwise authorized temporarily in writing by an Inspector.
3. Prior to withdrawing Water from an approved Water source, the Licensee shall post sign(s) to identify the intake for the Water Supply Facilities. All sign(s) shall be located and maintained to the satisfaction of an Inspector.
4. The Licensee shall construct and maintain the Water intake(s) with a screen designed to prevent impingement or entrapment of fish.
5. Prior to locating a Water intake in a fish-bearing Watercourse, the Licensee shall obtain written authorization for the location from an Inspector.
6. Each year, prior to November 12 and in advance of any Water use, the Licensee shall pay the Water Use Fee in accordance with the MVLWB *Water Use Fee Policy*.

**WATER
WITHDRAWAL –
FACILITIES**

**POST WATER INTAKE
SIGN(S)**

**WATER INTAKE
SCREEN**

**WATER INTAKE
LOCATION –
AUTHORIZATION**

WATER USE FEE

Part E: Construction

- | | | |
|----|---|--|
| 1. | The Licensee shall ensure that all structures intended to contain, withhold, divert, or retain Water or Waste are designed, constructed, and maintained to minimize the escape of Waste to the Receiving Environment. | OBJECTIVE –
CONSTRUCTION |
| 2. | The Licensee shall only use material that is clean and free of contaminants and is from a source that has been authorized in writing by an Inspector. | CONSTRUCTION
MATERIAL –
SOURCE(S) |
| 3. | The Licensee shall maintain records of Construction materials for all structures and make them available at the request of the Board or an Inspector. | CONSTRUCTION
RECORDS |

Part F: Waste and Water Management

- | | | |
|----|--|---|
| 1. | The Licensee shall manage Waste and Water with the objective of minimizing the impacts of the Project on the quantity and quality of Water in the Receiving Environment through the use of appropriate mitigation measures, monitoring, and follow-up actions. | OBJECTIVE – WASTE
AND WATER
MANAGEMENT |
| 2. | The Licensee shall minimize erosion by implementing suitable erosion control measures that shall be located and maintained to the satisfaction of an Inspector. | EROSION CONTROL |

Management and Monitoring Plans

- | | | |
|----|--|--|
| 3. | The Licensee shall comply with the Waste Management Plan , once approved. | WASTE
MANAGEMENT PLAN |
| 4. | A minimum of 30 days prior to commencement of activities, the Licensee shall submit to the Board, for approval, a revised Waste Management Plan . | WASTE
MANAGEMENT PLAN
– REVISED |

Discharge and Disposal Locations and Rates

- | | | |
|----|--|---|
| 5. | The Licensee shall deposit all Waste as described in the approved Waste Management Plan . | WASTE DISPOSAL |
| 6. | The Licensee shall discharge all Effluent from the sewage treatment plant as described in the approved Waste Management Plan . | EFFLUENT DISCHARGE
– SEWAGE
TREATMENT PLANT |
| 7. | A minimum of ten days prior to depositing any Waste into a licenced municipal facility, the Licensee shall provide written notification to the Board and an Inspector. | NOTIFICATION –
WASTE DEPOSIT |
| 8. | The Licensee shall not discharge Waste, including Wastewater, to any Watercourse, or to the ground surface within 100 metres of the Ordinary High-Water Mark of any Watercourse. | DISCHARGE
LOCATION –
ORDINARY HIGH-
WATER MARK |

Other

- | | | |
|----|--|------------------------------------|
| 9. | If an Artesian Aquifer is encountered and producing Water at the ground surface, the Licensee shall: | REPORT ARTESIAN
AQUIFER |
| | a) Within 48 hours, notify the Board and an Inspector, in writing, including the flow rate in cubic metres; | |
| | b) Deposit Artesian Aquifer Water to a snow-bermed or self-contained area, unless otherwise authorized by an Inspector; | |
| | c) Seal the borehole to permanently prevent any further outflow of water and to the satisfaction of an Inspector; and | |
| | d) Within 24 hours following cessation of the flow of Artesian Aquifer Water, submit a detailed report of the event to the Board and an Inspector, including the total amount of Water in cubic metres that has been released, and the total amount of Water in cubic metres stored in the snow-bermed, or otherwise approved, storage area. | |

Part G: Aquatic Effects Monitoring

Intentionally left blank.

Part H: Spill Contingency Planning

- | | | |
|----|--|--|
| 1. | The Licensee shall ensure that Unauthorized Discharges associated with the Project do not enter any Waters. | OBJECTIVE – PREVENT
WASTE INTO WATER |
| 2. | The Licensee shall comply with the Spill Contingency Plan , once approved. | SPILL CONTINGENCY
PLAN |
| 3. | If a spill or an Unauthorized Discharge occurs or is foreseeable, the Licensee shall: | REPORT SPILLS |
| | a) Implement the approved Spill Contingency Plan referred to in Part H, Condition 2; | |
| | b) Report it immediately using the NU-NT Spill Report Form by one of the following methods: | |
| | <ul style="list-style-type: none">• Telephone: (867) 920-8130• Fax: (867) 873-6924• E-mail: spills@gov.nt.ca• Online: Spill Reporting and Tracking Database | |
| | c) Notify the Board and an Inspector immediately; and | |
| | d) Within 30 days of initially reporting the incident, or within a timeframe authorized by an Inspector, submit a detailed report to the Board and an Inspector, including descriptions of causes, response actions, and any changes to procedures to prevent similar occurrences in the future. Written notification shall be provided to the Board and an Inspector if any changes occur | |
| 4. | The Licensee shall ensure that spill prevention infrastructure and spill response equipment is in place prior to commencement of the Project. | SPILL PREVENTION
AND RESPONSE
EQUIPMENT |

- | | | |
|----|--|---|
| 5. | The Licensee shall restore all areas affected by spills and Unauthorized Discharges to the satisfaction of an Inspector. | CLEAN UP SPILLS |
| 6. | The Licensee shall not establish any fuel storage facilities or refueling stations, or store chemicals or Wastes within 100 metres of the Ordinary High-Water Mark of any Watercourse. | MATERIAL STORAGE –
ORDINARY HIGH-
WATER MARK |

Part I: Closure and Reclamation

- | | | |
|----|---|--|
| 1. | The Licensee shall comply with the Closure and Reclamation Plan , once approved. | CLOSURE AND
RECLAMATION
PLAN |
| 2. | Three years prior to the expiry date of this Licence, or a minimum of two years prior to the end of operations, whichever occurs first, the Licensee shall submit to the Board, for approval, a final Closure and Reclamation Plan . | CLOSURE AND
RECLAMATION PLAN
– FINAL |
| 3. | The Licensee shall endeavor to carry out approved Progressive Reclamation as soon as is reasonably practicable. | PROGRESSIVE
RECLAMATION |
| 4. | The Licensee shall not conduct Progressive Reclamation except as approved by the Board. | PROGRESSIVE
RECLAMATION –
CARRY OUT AS
APPROVED |

Part J: Watercourse Crossings

- | | | |
|----|--|--|
| 1. | The Licensee shall minimize the disturbance of riparian vegetation within the immediate boundary of any Watercourse crossing to the extent practicable. | MINIMIZE
DISTURBANCE OF
RIPARIAN
VEGETATION |
| 2. | Ice and snow crossings should not impede the flow of any Watercourse. These crossings shall be v-notched or removed before spring break-up to facilitate natural flow. | DO NOT IMPEDE
WATERCOURSE |
| 3. | Any materials placed below the normal high Water mark used in the construction of Water crossings shall be free of any contaminants, debris, or fine materials. | FREE OF
CONTAMINANTS |
| 4. | Any materials placed below the normal high Water mark used in the construction of Water crossings shall be removed before spring break-up. | REMOVE BEFORE
SPRING BREAK-UP |

Signed on behalf of the Mackenzie Valley Land and Water Board

Mavis Cli-Michaud, Chair

Amanda Gauthier, Witness

Schedule 1: Annual Water Licence Report

Condition

1. The **Annual Water Licence Report** referred to in Part B, Condition 17 of this Licence shall include, but not be limited to, the following information about activities conducted during the previous calendar year:
 - a) A brief summary of Project activities;
 - b) An updated Project schedule;
 - c) The monthly and annual quantities in cubic metres of fresh Water obtained from all sources, as required in Part B, Condition 16 of this Licence;
 - d) A summary of the calibration and status of the meters and devices referred to in Part B, Condition 16 of this Licence;
 - e) A summary of engagement activities conducted in accordance with the approved **Engagement Plan**, referred to in Part B, Condition 18 of this Licence;
 - f) A summary of how Traditional Knowledge was incorporated into decision making;
 - g) A summary of Construction activities conducted in accordance with Part E of this Licence;
 - h) A summary of major maintenance activities conducted in accordance with this Licence;
 - i) A summary of activities conducted in accordance with the approved **Waste Management Plan**, referred to in Part F, Condition 3 of this Licence, including:
 - i. A summary of approved updates or changes to the process or facilities required for the management Waste;
 - ii. Monthly and annual quantities/volumes by location of Waste managed under the plan;
 - j) A summary of activities conducted in accordance with the approved **Waste Management Plan**, referred to in Part F, Condition 3 of this Licence, including:
 - i. A summary of approved updates or changes to the process or facilities required for the management of Waste; and
 - ii. Monthly and annual quantities/volumes by location of Sewage and associated Waste and other materials managed under the Plan.
 - k) A description of any erosion susceptible areas encountered and a summary of activities to prevent or mitigate erosion;
 - i. A report of the performance of erosion mitigation applied in previous years;
 - l) A summary of activities conducted in accordance with the approved **Spill Contingency Plan**, referred to in Part H, Condition 2 of this Licence, including:
 - i. A list and description for all Unauthorized Discharges, including the date, NWT spill number, volume, location, summary of the circumstances and follow-up actions taken, and status (i.e. open or closed), in accordance with the reporting requirements in Part H, Condition 2 of this Licence; and
 - ii. An outline of any spill training carried out.

- m) A summary of activities conducted in accordance with the **Closure and Reclamation Plan**, referred to in Part I, Condition 1 of this Licence, including:
 - i. Details of any Progressive Reclamation undertaken;
 - ii. A discussion on whether planning and implementation remains on schedule, and a summary of any new scheduling setbacks;
 - iii. A summary of Reclamation Research completed;
 - iv. A summary of engagement conducted regarding Closure and Reclamation;
 - v. A list of any factors that would increase or decrease the Closure Cost Estimate the next time the Estimate is updated; and
 - vi. Any other related information.

- n) A list of any non-compliance(s) with the conditions of this Licence or any directive from the Board pursuant to the conditions of this Licence;

- o) A summary of actions taken to address concerns, non-conformances, or deficiencies in any reports filed by an Inspector;

- p) A table detailing all commitments related to Water use and the deposit of Waste made during the Environmental Screening, with descriptions of how each commitment is being or has been met; and

- q) Any other details requested by the Board by November 30 of the year being reported.

Schedule 2: Security

Condition	
1.	No later than October 19, 2022, the Licensee shall deposit with the Minister a security deposit in the amount of \$2,512,462.00.

Schedule 3: Conditions Applying to Closure and Reclamation

Condition

1. The **Closure and Reclamation Plan** referred to in Part I, Condition 1 of this Licence shall include, but not be limited to the following information:
 - a) A plain language summary of the Plan;
 - b) A description of the overall goals for Closure and Reclamation of the Project, including expected future land use;
 - c) A description of the Closure and Reclamation planning team;
 - d) A description of engagement related to Closure and Reclamation planning, including a summary of completed and planned engagement, and links to the **Engagement Plan** referred to in Part B, Condition 18 for the Project;
 - e) A list of any other regulatory authorizations required for Closure and Reclamation of the Project;
 - f) A description of the pre-existing and current Project environment, including, but not limited to:
 - i. climatic conditions;
 - ii. physical conditions;
 - iii. chemical conditions;
 - iv. biological conditions;
 - v. any physical or chemical assessments of soil, water, and permafrost; and
 - vi. traditional uses.
 - g) A description of the Project, including, but not limited to:
 - i. site history;
 - ii. Project development;
 - iii. current status of the Project;
 - iv. maps delineating all disturbed areas, borrow material locations, site facilities, hydrological features, and elevation contours; and
 - v. photographs.
 - h) A description of each Project component, including, but not limited to:
 - i. areas affected by spills or Unauthorized Discharges; and
 - ii. other areas affected by Project activities.
 - i) For each Project component identified in condition (h) above, a description of Closure and Reclamation plans, including, but not limited to:
 - i. Closure Objectives and Criteria;
 - ii. preferred Closure and Reclamation option and method;
 - iii. Water management and restoration of natural drainage;
 - iv. predicted environmental effects during and after Closure and Reclamation activities;
 - v. post-closure monitoring, maintenance, and reporting;
 - vi. uncertainties and contingencies;
 - vii. climate change considerations; and
 - viii. Closure and Reclamation Research plans.

- j) A description of any planned Progressive Reclamation;
- k) A plan for Temporary Closure, including, but not limited to the following information:
 - i. Temporary Closure goals and objectives;
 - ii. a description of activities and methods;
 - iii. a description of monitoring, maintenance, and reporting;
 - iv. contingencies; and
 - v. an implementation schedule.
- l) An implementation schedule that includes Progressive Reclamation and final Closure and Reclamation activities; and
- m) A Closure Cost Estimate.

Annex A: MV2021L1-0009 – Concordance Table of Items Requiring Submission

Licence Condition	Report/Plan Title	Timeline for Submission
Part B, Condition 7	Annual Water Licence Report	Beginning March 31, 2022 and no later than every March 31 thereafter, the Licensee shall submit an Annual Water Licence Report to the Board and an Inspector. The Report shall be in accordance with the requirements of Schedule 1, Condition 1.
Part F, Condition 4	Waste Management Plan	A minimum of 30 days prior to commencement of activities, the Licensee shall submit to the Board, for approval, a revised Waste Management Plan .
Part I, Condition 1	Closure and Reclamation Plan	Three years prior to the expiry date of this Licence, or a minimum of two years prior to the end of operations, whichever occurs first, the Licensee shall submit to the Board, for approval, a final Closure and Reclamation Plan .

Annex B: MV2021L1-0009 – Table of Revision History

Date	Location of Change	Change
July 26, 2022	Schedule 2, Condition 1	Update to the Schedule to adjust the timing of the submission of security