



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

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

May 19, 2023

File: W2020L8-0001

The Honourable Shane Thompson
Minister of Environment and Climate Change
Government of the Northwest Territories
P.O. Box 1320
Yellowknife, NT X1A 2L9

Sent by email

Dear Minister Thompson,

RE: Recommendation for Approval of Water Licence Amendment – Government of Northwest Territories – Department of Infrastructure (GNWT-INF) – Tł̨chq̨ All Season Road (TASR)

The Wek'èezhì Land and Water Board (Board) has completed its regulatory process for Government of Northwest Territories – Department of Infrastructure's (GNWT-INF's) Water Licence Amendment Application for increased Water use for dust suppression purposes on the Tł̨chq̨ All Season Road (TASR).

As this is a type A Water Licence, the Licence requires your approval and signature for issuance as per section 72.13 of the *Mackenzie Valley Resource Management Act (MVRMA)* and as delegated under Schedule A of the Delegation Instrument under the MVRMA. The Board recommends your approval and signature of Water Licence W2020L8-0001.

The Board looks forward to receiving your response on or before July 3, 2023.

Yours sincerely,

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

Mason Mantla
Chair, Wek'èezhìi Land and Water Board

BCC'd to: TASR Distribution List
 Ziaur Rahman, GNWT-INF
 Benjamin Bey, GNWT-INF
 Nathen Richea – Assistant Deputy Minister, GNWT-ECC

Attached: Reasons for Decision
 Water Licence W2020L8-0001



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

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

Reasons for Decision

Issued pursuant to section 72.25 of the *Mackenzie Valley Resource Management Act* (MVRMA) and section 36 of the *Waters Act*.

Water Licence Amendment Application	
File Number	W2020L8-0001
Company	Government of Northwest Territories – Department of Infrastructure (GNWT-INF)
Project	Tłıchq All Season Road (TASR)
Location	Tłıchq All Season Road (TASR), NT
Activity	Miscellaneous – Road Maintenance and Operations
Date of Decision	May 18, 2023

Table of Contents

1.0	List of Defined Terms and Abbreviations.....	3
2.0	Summary of Application.....	4
3.0	Regulatory Process.....	4
4.0	Legislative Requirements Related to Licence Issuance.....	6
4.1	Consultation, Engagement, and Public Notice.....	7
4.2	Land Use Plan Conformity.....	8
4.3	Water Use Fees.....	8
4.4	Existing Licences.....	8
4.5	Compensation to Existing Water Users.....	8
4.6	Water Quality Standards.....	8
4.7	Effluent Quality Standards.....	9
4.8	Financial Responsibility.....	9
4.9	Minimization of Adverse Effects.....	9
4.10	Time Limit.....	10
4.11	Environmental Review (Part 5 of the MVRMA).....	10
4.11.1	Preliminary Screening.....	10
4.11.2	Environmental Assessment.....	10
5.0	Decision – Water Licence W2020L8-0001.....	11
5.1	Part A: Scope and Defined Terms.....	12
5.1.1	Scope.....	12
5.2	Part B: General Conditions, Schedule 1, and Surveillance Network Program.....	12
5.3	Part C: Conditions Applying to Water Use.....	13
5.4	Part D: Conditions Applying to Stream Crossings.....	15
5.5	Part E: Conditions Applying to Construction and Schedule 2.....	15
5.6	Part F: Conditions Applying to Modifications.....	15
5.7	Part G: Conditions Applying to Water and Waste Management and Schedule 3.....	15
5.8	Part H: Conditions Applying to Aquatic Effects Monitoring and Schedule 4.....	15
5.9	Part I: Conditions Applying to Spill Contingency Planning.....	15
5.10	Part J: Conditions Applying to Closure and Reclamation and Schedule 5.....	16
5.11	Attachment A: Concordance Table of Submissions.....	16
5.12	Attachment B: Revision History Table.....	16
6.0	Conclusion.....	16

On May 18, 2023, the Wek'èezhì Land and Water Board (WLWB or Board) met and considered the Type A Water Licence Amendment Application (the Application) made by the Government of the Northwest Territories – Department of Infrastructure (GNWT-INF) (the Applicant) to the Board on March 29, 2023, for Water Licence (Licence) W2020L8-0001 for the use of water for the Tłjchq All Season Road (the Project). After reviewing the Application and the evidence gathered during the regulatory proceeding, the Board has made the following decisions:

- 1) To amend Water Licence W2020L8-0001; and
- 2) To require revisions to Version 1.2 of the Engagement Plan, which the Applicant must submit as Version 2.0 of the Plan within 30 days of the issuance date of the amended Licence for a conformity confirmation.

These Reasons for Decision set out the Board’s regulatory process for the Application and rationale for decisions regarding the amended Licence. A summary of the Application is provided in sections [2.0](#) below, followed by an outline of the regulatory process for the Application in [section 3.0](#). [Section 4.0](#) describes how the applicable legislative requirements have been met. The Board’s decisions and supporting rationale are set out in [section 5.0](#) for the Licence.

1.0 **List of Defined Terms and Abbreviations**

Applicant/Licensee	Government of the Northwest Territories – Department of Infrastructure
Application	The complete Increased Water Use amendment application package submitted by the Applicant for Water Licence W2020L8-0001
CRP	Closure and Reclamation Plan
DFO	Fisheries and Oceans Canada
Distribution List	The list of individuals and organizations to whom materials from the regulatory proceeding were circulated. ¹
EA	Environmental Assessment
ECCC	Environment and Climate Change Canada
GNWT	Government of the Northwest Territories
GNWT-ECC	Government of the Northwest Territories – Environment and Climate Change
GNWT-INF	Government of the Northwest Territories – Department of Infrastructure
IR	Information Request
Inspector	An Inspector designated under subsection 65(1) of the Waters Act
Intervener	As per the LWB Rules of Procedures , any person or organization that has submitted an intervention in the public hearing phase of the regulatory proceeding, as outlined in the Rules.
Licence	Water Licence W2020L8-0001

¹ To access the Distribution List, see the LWBs’ Online Review System for [GNWT-INF - Tłjchq All Season Road - Type A Water Licence Amendment Application – Mar 31 23](#).

LWBs	Land and Water Boards of the Mackenzie Valley
MVLWB or Board	Mackenzie Valley Land and Water Board
MVRMA	Mackenzie Valley Resource Management Act
Minister	Minister of the Government of the Northwest Territories – Environment and Climate Change
ORS	Online Review System (www.new.onlinereviewssystem.ca)
Party	As per the LWB Rules of Procedures , an applicant, a person, or an organization participating in this regulatory process.
Project	Tłıchq All Season Road, the undertaking as described in Part A of the Licence
Review Board	Mackenzie Valley Review Board
Standard Licence Conditions	LWB Standard Water Licence Conditions Template
Standard Permit Conditions	LWB Standard Land Use Permit Conditions Template
TG	Tłıchq Government
WLWB or Board	Wek'èezhìi Land and Water Board
WMP	Waste Management Plan

2.0 Summary of Application

On March 29, 2023, the Applicant submitted an application to amend Licence W2020L8-0001 (the Application).² The Application is to increase the daily allowable water withdrawal from four of previously authorized Water Sources. The Project is located within a non-federal area of the Wek'èezhìi Resource Management Area.

In making its decision and preparing these Reasons for Decision, the Board has reviewed and considered:

- 1) The Application as submitted by the Applicant for the Project;
- 2) The evidence and submissions received by the Board from the Applicant in relation to the proposed amendment; and
- 3) The comments and recommendations, evidence, and submissions received by the Board from Parties during the regulatory proceeding.

3.0 Regulatory Process

On February 24, 2023, the Applicant submitted the Application, however, additional information related to engagement was required. On March 29, 2023, the additional information was received.³ On March 31, 2023, the Application was subsequently deemed complete and circulated to the Distribution List for

² See WLWB Online Registry (www.wlwb.ca/) for [GNWT-INF - TASR - WL Amendment Application - Water Use - Mar 29 23](#).

³ See WLWB Online Registry for [GNWT-INF - TASR - WL Amendment Application - Water Use - Mar 29 23](#).

public review on the Online Review System (ORS).⁴ As part of the public review, Board staff requested comments and recommendations to assist with the Board’s preliminary screening determination.

On March 31, 2023, Board staff distributed a draft work plan for public review.⁵ This included scheduling a public hearing as per paragraph 41(2)(b) of the [Waters Act](#). Given the public safety concerns related to decreased visibility due to dust, an expedited work plan was prepared. Tłıchq̓ Government and the Wek’èezhìi Renewable Resources Board (WRRB) commented on the draft work plan by deadline of April 6, 2023, and both parties stated they supported the work plan; no other comments were received from Parties. Subsequently, no changes were made to the work plan dates and a finalized copy of the work plan was circulated to the Distribution List on April 11, 2023.⁶

Public notices of the Application and the public hearing were published in *News North* from April 5 to 10, 2023, to fulfill paragraphs 43(1)(a) and 43(2)(a) of the [Waters Act](#).⁷

By April 13, 2023, the Board received comments and recommendations regarding the Application from the following Parties: Tłıchq̓ Government and the GNWT Department of Environment and Natural Resources (GNWT-ENR).⁸ Fisheries and Oceans Canada provided a comment recognizing that GNWT-INF had used DFO’s recommendations for calculating volumes but provided no recommendation (DFO comment 1). WRRB and Environment and Climate Change Canada (ECCC) indicated they also had no comments. Board staff also submitted comments and questions for the purposes of clarification. On April 14, 2023, the Applicant responded to the Parties’ comments and recommendations.⁹

The pre-hearing conference was held on April 17, 2023, in Yellowknife, NT to discuss the hearing process, the next steps of the proceeding, notices of intent to appear at the hearing, and to briefly outline the LWB [Rules of Procedures](#).¹⁰ Representatives from the Applicant and Tłıchq̓ Government participated in the pre-hearing conference.

⁴ See WLWB Online Review System for [GNWT-INF – Tlıcho All-Season Road – Type A Water Licence Amendment Application – Mar 31 23](#).

⁵ See WLWB Online Registry for [GNWT-INF - TASR - WL Amendment - Water Use - Draft Work Plan - Mar 30 23](#).

⁶ See WLWB Online Registry for [GNWT-INF - TASR - WL Amendment - Water Use - Work Plan - Apr 11 23](#).

⁷ See WLWB Online Registry for [GNWT-INF - TASR - WL Amendment - Water Use - Notice of Application and Public Hearing - Apr 5 23](#).

⁸ The GNWT Departments of Lands, and Department of Environment and Natural Resources were amalgamated into the Department of Environment and Climate Change on April 1, 2023. For cohesion with the wording on the Online Review System (ORS), Government of the Northwest Territories – Environment and Natural Resources – Environmental Assessment and Monitoring (GNWT-ENR) is used throughout this Reasons for Decision named GNWT Department of Environment and Natural Resources

⁹ See Online Review System for [GNWT-INF – Tlıcho All-Season Road – Type A Water Licence Amendment Application – Mar 31 23](#).

¹⁰ See WLWB Online Registry for [GNWT-INF - TASR - WL Amendment - Water Use - Pre-Hearing Conference - Agenda - Apr 11 23](#).

On April 19, 2023, the Board met and made its preliminary screening determination for the proposed change to the Project.¹¹

Written interventions were due on April 27, 2023; however, no interventions were received from Parties. None of the Parties to this proceeding indicated they wished to appear in person before the Board, and on April 28, 2023, the Applicant agreed that no public hearing was required.¹² By May 1, 2023, ten days prior to the scheduled hearing, the Board had not received notification that any person intended to appear at the hearing. On May 1, 2023, the public hearing was cancelled as per paragraph 41(3)(a) of the [Waters Act](#), and an updated work plan (Version 2) was distributed.¹³ A public notice of the cancellation was published in *News North* during the week of May 1, 2023.¹⁴

On May 2, 2023, Board staff circulated a draft amended Licence for review to allow all Parties the opportunity to comment on the specific wording of the draft changes and consider the draft amended conditions. The Tłıchq Government responded by May 9, 2023; the GNWT-INF also provided a comment and recommendation on the draft amended Licence on May 9, 2023. The Applicant responded to all the Tłıchq Government's comments by the deadline of May 10, 2023.¹⁵

Closing statements were due with comments and responses on the draft amended Licence. No Parties submitted written closing statements to the Board, nor did the Applicant. Parties and the Applicant had an opportunity, in their closing statements, to update their position on issues raised during the regulatory proceeding, and to summarize their final recommendations to the Board.

On May 18, 2023, the Board met to make decisions regarding the Application. These decisions and related reasons are described in sections [4.0](#) and [5.0](#) below.

4.0 Legislative Requirements Related to Licence Issuance

This Project is subject to the [MVRMA](#), the [Waters Act](#), and the [Waters Regulations](#) with respect to licensing, because it is located in a non-federal area. The Board has jurisdiction to amend the Licence as per subsection 60(1.1) and section 102 of the [MVRMA](#).

In conducting its regulatory process for the Application (as described in sections [3.0](#) above), the Board has ensured that section 62 of the [MVRMA](#) and all applicable legislative requirements have been satisfied as outlined in the subsections below. The Board has considered the people and users of the land and water

¹¹ See WLWB Online Registry for [GNWT-INF - TASR - WL Amendment - Water Use - Notification and Determination Preliminary Screening - Apr 19 23](#).

¹² See WLWB Online Registry for [GNWT-INF - TASR - WL Amendment - Water Use - GNWT-INF Letter Re. Public Hearing - Apr 28 23](#).

¹³ See WLWB Online Registry for [GNWT-INF - TASR - WL Amendment - Water Use - Work Plan - Version 2 - May 1 23.pdf \(mvlwb.ca\)](#).

¹⁴ See WLWB Online Registry for [GNWT-INF - TASR - WL Amendment - Water Use - Notice Hearing Cancelled - May 8 23.pdf](#)

¹⁵ See WLWB Online Review System for [Tłıchq All Season Road \(TASR\) - Draft Water Licence - May 2 23](#)

in the Mackenzie Valley, and any Traditional Knowledge and scientific information that was made available to the Board during the regulatory proceeding, as per section 60.1 of the [MVRMA](#). The consideration of information provided to the Board is discussed in detail below and in sections [5.0](#).

4.1 Consultation, Engagement, and Public Notice

As per paragraph 60.1(a) of the [MVRMA](#), in exercising its authority, the Board must consider the importance of conservation to the well-being and way of life of Indigenous peoples of Canada to whom section 35 of the *Constitution Act*, 1982, applies and who use an area of the Mackenzie Valley. Accordingly, the Board works with applicants, affected parties (including Indigenous governments and organizations), and other parties (such as other boards and regulators) to ensure that potential impacts of proposed projects, including impacts on rights under section 35, are understood and carefully considered before decisions are made with respect to the issuance of permits and licences.

The Board's requirements for engagement are set out in the LWB [Engagement and Consultation Policy](#) and [Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits](#). The Policy and Guidelines were developed to ensure that the Board's obligations for achieving meaningful consultation (as set out by land claims and applicable legislation) with all affected parties, including Indigenous groups in the Mackenzie Valley, are met and engagement and consultation results are clearly articulated. In accordance with the Policy and Guidelines, the Applicant's engagement efforts with respect to the Application are detailed in the Engagement Record submitted with the Application.¹⁶ The Applicant also has an approved Engagement Plan, Version 1.2¹⁷ that applies to this Licence. The Applicant did not propose changes to the Engagement Plan. The Applicant must continue engagement efforts as outlined in the approved Plan and as required in the amended Licence.

The Application was posted to the Board's Public Registry and distributed through the ORS. As the Project is located in the Wek'èezhì Resource Management Area, the appropriate organizations, governments, First Nations, and Indigenous organizations were included in the Distribution List.¹⁸ The Distribution List was used throughout this proceeding to circulate submissions, information, and updates relevant to the proceeding; the List was updated if needed, and (if requested) individuals with specific interests in the Project were added. More information about the proceeding for the Application is provided above in [section 3.0](#).

In accordance with sections 63 and 64 of the [MVRMA](#), the Board is satisfied that notice of and access to copies of the Application was provided, and that a reasonable amount of time was given to communities, First Nations, and the public to participate in this proceeding and make submissions to the Board.

¹⁶ See WLWB Online Registry for [GNWT-INF - TASR - WL Amendment Application - Water Use - Mar 29 23.pdf](#).

¹⁷ See WLWB Online Registry for [W2016L8-0001 - TASR - Engagement Plan - Version 1.2 - Oct 2 19](#).

¹⁸ To access the Distribution List, see the LWBs' Online Review System for

¹⁸ See Online Review System for [GNWT-INF – Tlicho All-Season Road – Type A Water Licence Amendment Application – Mar 31 23](#).

4.2 Land Use Plan Conformity

As per section 61 of the [MVRMA](#), where an approved Land Use Plan applies, the Board must confirm conformity with the Land Use Plan before issuing an amended permit or licence.

The Tłıchq Land Use Plan¹⁹ applies to portions of the Project area. The Review Board stated in the Report of EA that “the Project appears to be consistent with the Tłıchq Land Use Plan”.²⁰ During this proceeding, no evidence was received to contradict the findings of the Review Board; therefore, the Board has confirmed that the Project is still in accordance with the Tłıchq Wenek’e (Tłıchq Land Use Plan).

4.3 Water Use Fees

The Applicant is exempt from paying fees for the right to use water as per section 3 of the [Waters Act](#).

4.4 Existing Licences

During the time period established in the Notice of Application, no licensees or applicants contacted the Board to identify potential effects from the proposed changes to the Project on other projects, and there are no other applicants with precedence. Accordingly, with respect to paragraph 26(5)(a) of the [Waters Act](#), the Board is satisfied that issuing the amended Licence to the Applicant will not adversely affect, in any significant way, any existing licensee or any other applicant, provided the Applicant complies with the conditions of the Licence.

4.5 Compensation to Existing Water Users

Paragraph 26(5)(b) of the [Waters Act](#) prohibits the issuance of the amended Licence unless the Board is satisfied that appropriate compensation has been or will be paid by the Applicant to persons who would be adversely affected by the use of waters proposed by the Applicant, at the time when the Applicant filed the Application with the Board.

The Board received no claims for compensation related to the proposed amendment either during the time period established in the Notice of Application, or during the remainder of the proceeding. Provided the Applicant complies with the Licence conditions, the Board is satisfied there are no water users or persons listed in paragraph 26(5)(b) of the [Waters Act](#) who will be adversely affected by the proposed use of waters.

4.6 Water Quality Standards

With regards to subparagraph 26(5)(c)(i) of the [Waters Act](#), no water quality standards have been prescribed in the [Waters Regulations](#); however, the LWB [Waste and Wastewater Management Policy](#) applies to the Licence, and the primary objective of the Policy is “protection of water quality in the

¹⁹ See MVLWB Acts and Regulations webpage to access the [Tłıchq Wenek’e: Tłıchq Land Use Plan](#).

²⁰ See Mackenzie Valley Review Board (<https://reviewboard.ca/>) for [Final TASR REA April 03](#)

receiving environment.” In accordance with the Policy and this objective, the Board has maintained the in-water, Construction-specific water quality objectives for the Project as described in the Board’s May 30, 2019, Reasons for Decision²¹ and has also maintained conditions in the Licence regarding waste and wastewater management, and management plan requirements. The Board is satisfied that the conditions set out in the amended Licence are consistent with the Policy and compliance with these conditions will ensure that waste will be managed and disposed of in a manner that will be protective of water quality in the receiving environment.

4.7 Effluent Quality Standards

The Project does not entail the disposal of effluent, so subparagraph 26(5)(c)(ii) of the [Waters Act](#) does not apply.

4.8 Financial Responsibility

Under paragraph 26(5)(d) of the [Waters Act](#), before the Board can issue the Licence, it must be satisfied that the Applicant’s financial responsibility is adequate to complete the Project (including the proposed changes) any required mitigation measures, and the closure and reclamation of the site.

The Applicant is a public government, and the Board is confident that the Applicant is capable of meeting any financial obligations set out in the [Waters Act](#) and Licence .

As a result, the Board is satisfied that the legislated requirement to establish the financial responsibility of the Applicant for the Project has been met.

4.9 Minimization of Adverse Effects

With regards to subsection 27(2) of the [Waters Act](#), the Board must ensure that the Licence conditions minimize potential adverse effects on other water and land users from the proposed use of water. As discussed above in [section 4.1](#), the Applicant conducted pre-application engagement, and the Board also provided opportunities for potentially affected parties to make submissions to the Board during the regulatory proceeding. The Board did not receive notice of potentially adverse effects from the proposed amendment on other users of the water and lands in the Project area. The Board has also confirmed that the amendment conforms with the Tłı̨chq Land Use Plan.

Regardless, as detailed in the Board’s May 30, 2019, Reasons for Decision,²² the Board has set conditions in the Licence to regulate waste management for the purpose of protecting the receiving environment. Additionally, as described in [section 5.3](#), based on the evidence, the Board has set conditions regarding

²¹ See WLWB Online Registry for [W2016L8-0001 - TASR - Land Use Permit and Water Licence Applications - Reasons for Decision - May 30 19](#)

²² See WLWB Online Registry for [W2016L8-0001 - TASR - Land Use Permit and Water Licence Applications - Reasons for Decision - May 30 19](#)

the use of water for the Project, including limitations on the sources and volumes of water the Licensee can use. It is the opinion of the Board that compliance with the Licence conditions that have been set to protect the water sources and the receiving environment will also minimize any potential adverse effects on other water and land users in the Project area.

4.10 Time Limit

As required under subsection 47(1) of the [Waters Act](#), the Board made its decision on the Licence within nine months after receiving the complete Application.

4.11 Environmental Review (Part 5 of the MVRMA)

4.11.1 Preliminary Screening

On April 19, 2023, the Board met to make a preliminary screening determination on the Application.²³ The Board decided not to refer the new Project activity to the Mackenzie Valley Environmental Impact Review Board (the Review Board) for Environmental Assessment because, based on the evidence, it is the Board's opinion that the proposed changes to the Project will not have a significant adverse impact on the environment or be a cause of public concern.

In accordance with section 125 of the [MVRMA](#), the Board notified the Review Board of its preliminary screening determination,²⁴ and in the ten days following the Board's preliminary screening determination notification to the Review Board, the Board did not receive notice of referral to EA. Subsequently, the Board continued with the regulatory proceeding.

The Board is satisfied that the requirements of Part 5 of the [MVRMA](#) have been met for the Project.

4.11.2 Environmental Assessment

The Project has been the subject of an EA conducted by the Review Board: EA1617-01.²⁵ Section 62 and subsection 130(5) of the [MVRMA](#) require that measures within the jurisdiction of the Board must be incorporated in conditions set out in any licence and permit or authorization issued by the Board.

In the Board's May 30, 2019, in the Reasons for Decision on issuance of the Licence after the EA (W2016L8-0001), the Board noted it carefully reviewed the approved measures, and each suggestion and commitment from the EA. The Board noted that EA measures are sometimes written in broad terms that are not appropriate for direct inclusion in a regulatory instrument. In addition, some measures are not within the Board's jurisdiction. In the Reasons for Decision for the issuance of Water Licence W2016L8-

²³ See WLWB Online Registry for [GNWT-INF - TASR - WL Amendment - Water Use - Notification and Determination Preliminary Screening - Apr 19 23](#).

²⁴ See WLWB Online Registry for [GNWT-INF - TASR - WL Amendment - Water Use - Notification and Determination Preliminary Screening - Apr 19 23](#).

²⁵ See the Review Board Online Registry for [GNWT - TASR - Report of EA and Reasons for Decision - Mar 29 18](#).

0001, the Board identified those Licence conditions that, in the Board's view, satisfy the intent of the Report of EA Measures relevant to the Board's jurisdiction.²⁶ The Board has maintained those conditions in the amended Licence and therefore, the Board is satisfied that it has met the requirements of section 62 of the [MVRMA](#) in developing the amended Licence, and that the requirements of subsection 130(5) will be met through compliance with the amended Licence conditions.

5.0 Decision – Water Licence W2020L8-0001

Having due regard to the facts, circumstances, and the merits of the submissions made to it, and to the purpose, and provisions of the [MVRMA](#) and the [Waters Act](#), the Board has determined that the amended Licence W2020L8-0001 should be issued, subject to the scope, defined terms, conditions, and term contained therein. The Board's determinations and reasons for this decision are set out below.

The amended Licence has been developed to address the Board's statutory responsibilities; to protect the receiving environment and minimize potential adverse effects on other water users; and to address issues within the Board's jurisdiction that were identified and investigated during the regulatory proceeding.

In amending the Licence, the Board kept the Licence format and layout unchanged. Where applicable, the Board considered the Standard Licence Conditions in developing new conditions or amending existing conditions to reflect the changes to the Project. As noted in [section 3.0](#) above, Board staff circulated a draft amended Licence for review to allow Parties to provide specific input to the Board on the possible amendment and updates to the conditions, and the Board considered these review comments and recommendations in making its determination on the amended Licence conditions. Conditions that were not changed are generally not discussed in these Reasons unless they were the subject of concerns raised during the proceeding.

The Standard Licence Conditions have been established by the Land and Water Boards (LWBs) based on information from LWB policies and guidelines, other applicable guidelines and best practices, meetings with Inspectors, input from LWB staff, and feedback from a public review. Each standard condition has been evaluated against the following characteristics of an ideal condition:

- Clearly part of LWBs' authority;
- Has a clear purpose and rationale;
- Is practical and enforceable; and
- Does not conflict with existing legislation (i.e., is not less stringent).

The Standard Licence Conditions include general rationale for each standard condition, and as such, the standard conditions are only discussed in detail in these Reasons for Decision when the updates specifically relate to concerns or recommendations raised during the regulatory proceeding. The Board's

²⁶ Ibid.

reasons for developing new and amending existing Project-specific conditions, including discussion of any concerns and recommendations raised regarding these conditions, are detailed in the relevant sections below.

5.1 Part A: Scope and Defined Terms

Part A of the Licence contains the scope and the defined terms used throughout the Licence.

5.1.1 Scope

The scope of the Licence is written to ensure the Licensee is entitled to conduct activities which have been applied for and have been subject to Part 5 of the [MVRMA](#). The scope of the Licence was updated to include reference to the most recent preliminary screening determination conducted as part of this Application. Condition 1(a)i was also updated to reference the correct condition that identifies the Water Sources. The Board did not receive any comments on this change. No other changes were made to the scope given the changes to the Project are within the existing scope of the Licence

5.2 Part B: General Conditions, Schedule 1, and Surveillance Network Program

Part B and Schedule 1 of the Licence primarily contains general administrative conditions regarding implementation of the Licence, and compliance with the Licence conditions, Board directives, and LWB policies and procedures. This section also details compliance requirements (e.g., Surveillance Network Program) and review and revision procedures for submissions required under the Licence.

The Board maintained all of the conditions in this section of the Licence and no conditions were added.

Part B: ENGAGEMENT PLAN

The Board assesses engagement adequacy through the LWB [Engagement and Consultation Policy](#) and [Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits](#). As required, the Licensee included an Engagement Record for the amendment in the Application,²⁷ and the Licensee has an approved Engagement Plan, Version 1.2²⁸. The Licensee did not propose changes to the Engagement Plan with the Application. During the public review of the Application, the Tłıcho Government recommended that prior to increased water use of the Whatıdee, GNWT-INF engage with the Tłıcho Government (TG comment 3). The Tłıcho Government clarified that this recommendation did not need to be in the Licence, and therefore it was not included in the draft amended Licence. GNWT-INF did not respond to this specific recommendation in response to comments on the Application; however, based on the comments and responses received during review of the draft amended Licence, it is clear that discussions surrounding the use of water from the Whatıdee have been ongoing between the two parties (see section 5.3 of this Reasons for Decision). In review of the draft amended Licence, the Tłıcho

²⁷ See WLWB Online Registry for [GNWT-INF - TASR - WL Amendment Application - Water Use - Mar 29 23](#).

²⁸ See WLWB Online Registry for [W2016L8-0001 - TASR - Engagement Plan - Version 1.2 - Oct 2 19](#)

Government stated that it recommended that GNWT-INF and its contractor continue to engage with the Tłıcho Government and that the Engagement Plan be updated to ensure GNWT-INF engages with Tłıcho Government on water use from the Whatıdee (comment 5). GNWT-INF responded that it commits to ongoing engagement with the Tłıcho Government and will update the Engagement Plan accordingly. Given this is a new engagement trigger (i.e., prior to increased water use of the Whatıdee), GNWT-INF is to reflect this in an update to the Engagement Plan.

The Board requires that the Licensee revise the Engagement Plan to reflect the new engagement trigger and submit Version 2.0, within 30 days of the effective date of the Licence proceedings. The Plan will be considered approved when the Licensee receives written confirmation of conformity from Board staff, and until that time the Board requires GNWT-INF to notify and engage with the Tłıcho Government accordingly.

5.3 Part C: Conditions Applying to Water Use

Part C of the Licence contains conditions related to water use for the Project. Consistent with the Application, Condition 2 of the Licence has been amended to authorize water withdrawal of up to 900 m³ per day for the purpose of calcium chloride application for dust suppression.

In the draft amended Licence, Part C, Condition 1 was revised to remove parts of the condition that no longer apply. These included: reference to Water Licence W2016L8-0001, given it is no longer active; reference to the time limit applied to the daily withdrawal of 900 m³ of Water, given this time line has passed (i.e., August 30, 2022); and reference to when the limit of 299 m³ of water would start again (i.e., from August 31, 2022), given this context was no longer necessary. The Board did not receive any comments on this Condition, and therefore Condition 1 was included in the Amended Licence.

In the draft amended Licence, Part C, Condition 2 limits the increased water use to a maximum of 14 consecutive days. Parties were asked to provide recommendations related to this time limit (i.e., number of days) because GNWT-INF indicated it may need some operational flexibility (response to Board staff comment 1 during the public review of the Application). No comments were received during the public review of the draft amended Licence, and therefore Condition 2 in the Amended Licence authorizes GNWT-INF to withdraw 900 m³/day over 14 consecutive days.

In the draft amended Licence, Part C, Condition 2 included the following text “The Licensee may withdraw up to 900 m³/day of Water once each year for the purpose of calcium chloride application for dust suppression, up to a maximum of 14 consecutive days per year”. In review of the draft Licence, GNWT-INF indicated that it found the term “once” contradictory, given the Condition states “up to a maximum of 14 consecutive days per year” (comment 1); the Tłıchq Government acknowledged GNWT-INF’s comment and understood it to mean each year for one period of up to 14 days (comment 3). For clarity, the Board has not included “once each year” in Condition 2 of the Amended Licence because the

Condition already limits the increased Water use to one event per year given the Condition says “...for up to a maximum of 14 consecutive days *per year*” (emphasis added).

In review of the draft amended Licence, the Tłıchq Government recommended that the Water sources used for dust suppression not be specified in the Licence condition to allow operational flexibility so that the GNWT-INF’s contractors can use any of the approved Water sources (TG comment 2). In response, the GNWT-INF agreed with the Tłıchq Government’s recommendation to revise this condition. Given the Application was specific to the four authorized Water Sources (i.e., James River, Whatıdee (i.e., La Marte River), Duport River, and Peanut Lake), these are the four sources that were considered as part of the preliminary screening and GNWT-INF made no request to change this earlier in the proceeding. As other sources were not considered during the screening, the Board cannot be certain that potential impacts associated with increased water use from these sources have been identified and/or are mitigated by the Licence. For these reasons, the Board has maintained the four Water sources in Condition 2 in the Amended Licence. The Board notes that the traditional name for the La Marte River, Whatıdee, was added to Condition 6, in Table 1.

During the public review of the Application, the Tłıchq Government indicated that while it supports the dust suppression application, it also “would be concerned with the long-term use of larger volumes of water from Whatıdee, especially for low water years, and its potential impact to an important nearby ecosystem for the Tłıchq” (TG comment 3). In the draft amended Licence, Condition 3 was added to reflect the Tłıchq Government’s recommendation to limit the amount of water withdrawn from Whatıdee to 2,000 m³ annually for the purposes of the calcium chloride application. In review of the draft amended Licence, the Tłıchq Government commented that after discussions with GNWT-INF and its contractor, the Tłıchq Government believes that a 4,000 m³ limit is reasonable to allow flexibility, and the Licence would already allow for greater than 4,000 m³ over a 14-day period if only the standard withdrawal rate (299 m³/day) was used (TG comment 4). GNWT-INF responded it agrees with the Tłıchq Government’s recommendation based on the Tłıchq Government’s calculation. Based on this information, the Board has included an annual limit of 4,000m³ for withdrawal from the Whatıdee. This amount will allow for operational flexibility while mitigating potential impacts to the Whatıdee.

Condition 4 was added to the draft amended Licence and requires the Inspector be notified in writing 10 days before the application of calcium chloride. This condition reflects the standard condition for NOTIFICATION and the Tłıchq Government’s recommendation during the review of the Application that the Inspector be notified prior to the application of the calcium chloride for dust suppression. The Board did not receive any comments on this Condition; therefore, Condition 4 was included in the Amended Licence.

In response to comments made during the public review of the Application, GNWT-INF indicated that it expects to ask the Inspector for annual permission for withdrawals from the authorized Water sources listed in Table 1 of Condition 6 (response to Board staff comments 5 and 6). Conditions 11 and 12 were

updated in the draft amended Licence to reflect this. The Board did not receive any comments on these changes; therefore, Conditions 11 and 12 were updated in the Amended Licence.

Condition 14 is a new condition that requires fish screens be used on the water intake hose. This is one of the Board's standard conditions and it was included in the draft amended Licence because GNWT-INF indicated in its Application that this is something it already implements. The Board did not receive any comments on this Condition; therefore, Condition 14 was included in the Amended Licence.

5.4 Part D: Conditions Applying to Stream Crossings

Part D of the Licence contains conditions applying to Stream Crossings for the Project. The Licensee did not propose any changes that affect the conditions in this section, so the Board maintained all of the existing conditions and no new conditions were added.

5.5 Part E: Conditions Applying to Construction and Schedule 2

Part E and Schedule 2 of the Licence contain conditions applying to Construction activities for the Project. The Licensee did not propose any changes that affect the conditions in this section, so the Board maintained all of the existing conditions and no new conditions were added.

5.6 Part F: Conditions Applying to Modifications

Part F of the Licence contains conditions applying to Modifications to Engineered Structures for the Project. The Licensee did not propose any changes that affect the conditions in this section, so the Board maintained all of the existing conditions and no new conditions were added.

5.7 Part G: Conditions Applying to Water and Waste Management and Schedule 3

Part G and Schedule 3 of the Licence contain conditions applying to water and waste management activities for the Project. The Licensee did not propose any changes that affect the conditions in this section, so the Board maintained all of the existing conditions and no new conditions were added.

5.8 Part H: Conditions Applying to Aquatic Effects Monitoring and Schedule 4

Part H and Schedule 4 of the Licence contain conditions applying to Aquatic Effects Monitoring for the Project. The Licensee did not propose any changes that affect the conditions in this section, so the Board maintained all of the existing conditions and no new conditions were added.

5.9 Part I: Conditions Applying to Spill Contingency Planning

Part I of the Licence contains conditions related to spill contingency planning and reporting, reclamation of spills and unauthorized discharges, and emergency response for the Project. The Licensee did not propose any changes that affect the conditions in this section, so the Board maintained all of the existing conditions and no new conditions were added.

5.10 Part J: Conditions Applying to Closure and Reclamation and Schedule 5

Part J and Schedule 5 of the Licence contain conditions applying to closure and reclamation, including progressive reclamation of the Project. The Licensee did not propose any changes that affect the conditions in this section, so the Board maintained all of the existing conditions and no new conditions were added.

5.11 Attachment A: Concordance Table of Submissions

Attachment A to the Licence contains a table that summarizes the submissions required by the Licence conditions. No updates to this table were needed because there were no changes to the required submissions.

5.12 Attachment B: Revision History Table

Attachment B to the Licence contains a table which identifies updates and tracks changes made to the Licence. This table has been updated to reflect the amended Licence.

6.0 Conclusion

Subject to the scope, definitions, conditions, and term set out in the amended Licence, and for the reasons expressed herein, the WLWB is of the opinion that the activities, and water use, and waste disposal associated with the Project can be completed by GNWT-INF while providing for the conservation, development, and utilization of waters in a manner that will provide the optimum benefit for all Canadians and in particular for the residents of the Mackenzie Valley.

Water Licence W2020L8-0001 contains provisions that the Board deems necessary to ensure and monitor compliance with the MVRMA, *Waters Act*, and the Regulations made thereunder, and to provide appropriate safeguards in respect of GNWT-INF's use of the water as authorized by the Licence.

SIGNATURE



Mason Mantla, Chair
Wek'èezhìi Land and Water Board

May 19, 2023

Date



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

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

Pursuant to the *Mackenzie Valley Resource Management Act* and Regulations, the Wek'èezhii Land and Water Board, hereinafter referred to as the Board, hereby grants to:

Government of the Northwest Territories – Department of Infrastructure (GNWT-INF)

(Licensee)

of

**P.O. Box 1320
Yellowknife, NT X1A 2L9**

(Mailing Address)

Hereinafter called the Licensee, the right to alter, divert or otherwise use water subject to the restrictions and conditions contained in the *Waters Act* and Regulations made there under and subject to and in accordance with the conditions specified in this Licence.

Licence Number: W2020L8-0001

Licence Type: A

Water Management Area: NORTHWEST TERRITORIES 01

Location: KM 196 AT HIGHWAY 3 TO WHATÌ, NT

Purpose: WATER USE FOR THE CONSTRUCTION OF THE TLICHO ALL-SEASON ROAD

Quantity of water not to be exceeded: SEE PART C, CONDITION 1, 2, 3, AND 5

Effective Date of Licence: November 19, 2020

Amendment Date: XX XX, 2023 (INCREASED WATER USE)

Expiry Date of Licence: MAY 29, 2026

This Licence issued and recorded at Yellowknife, NT includes and is subject to the annexed conditions.

Wek'èezhii Land and Water Board:

Witness

Chair

APPROVED BY:

Minister of Environment and Climate Change

W2020L8-0001

Table of Contents

Part A: Scope and Definitions

Part B: General Conditions

Part C: Conditions Applying to Water Use

Part D: Conditions Applying to Stream Crossings

Part E: Conditions Applying to Construction

Part F: Conditions Applying to Modifications

Part G: Conditions Applying to Water and Waste Management

Part H: Conditions Applying to the Aquatic Effects Monitoring

Part I: Conditions Applying to Contingency Planning

Part J: Conditions Applying to Closure and Reclamation

Annex A: Surveillance Network Program (SNP)**Attachment A: Concordance Table of Submissions****Attachment B: Revision History Table**

DRAFT

Part A: Scope and Definitions

1. Scope

- a) This Licence entitles the Government of the Northwest Territories Department of Infrastructure to use Water and to deposit Waste for the purpose of the Construction of the Tłı̄chq All-Season Road in the Northwest Territories. This undertaking is described in Report of Environmental Assessment (EA-1617-01), and Preliminary Screenings for W2016L8-0001 and W2020L8-0001, dated May 30, 2019, June 18, 2020, September 23, 2020, and April 19, 2023, and includes the following:
- i. withdrawal and use of Water from the Water Sources identified in Part C, Condition 6;
 - ii. Construction, operation, and maintenance of road and Water crossings;
 - iii. operation of camps;
 - iv. quarrying;
 - v. Construction, operation, and decommissioning of a Sewage Disposal Facility;
 - vi. Construction, operation, and maintenance of groundwater well (Water Source ID 16);
 - vii. depositing of Waste; and
 - viii. progressive Reclamation and associated Closure and Reclamation activities.
- b) This Licence is issued subject to the conditions contained herein with respect to the taking of Water and the depositing of Waste of any type in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposit of such Waste may enter any Waters. Whenever new Regulations are made or existing Regulations are amended by the Commissioner in Executive Council under the *Waters Act*, or other statutes imposing more stringent conditions relating to the quantity or type of Waste that may be so deposited or under which any such Waste may be so deposited, this Licence shall be deemed, upon promulgation of such Regulations, to be automatically amended to conform with such Regulations.

2. Definitions

Act means the *Waters Act*.

Board means the Wek'èezhìi Land and Water Board established under section 57.1 of the *Mackenzie Valley Resource Management Act*.

Construction means any activities undertaken to construct or build any components of, or associated with, the development of the Project.

Discharge means the direct or indirect deposit or release of any Waters or Waste to the receiving environment.

Engineered Structure means any constructed facility which was designed and approved by a Professional Engineer registered with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists.

Freeboard means 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 means all liquid wastes from showers, baths, sinks, kitchens, and domestic washing facilities but not including toilet wastes.

Hazardous Waste means a Waste which is a dangerous substance or material that is no longer used for its original purpose and is intended for recycling, treatment, disposal or storage.

Inspector means an Inspector designated by the Minister under Section 35(1) of the Act.

Licensee means the holder of this Licence.

Management Plans means the specific plans required by the Board under this Water Licence.

Minister means the Minister of the Government of the Northwest Territories – Department of Environment and Climate Change.

Modification means a change, other than an expansion, that does not alter the purpose or function of a structure.

Ordinary High-Water Mark means the usual or average level to which a body of Water rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing Waters (rivers, streams) this refers to the “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 predominately aquatic vegetation to terrestrial vegetation (excepting water tolerant species). For reservoirs, this refers to normal high operation levels (full supply level).

Project means the undertaking as described in Part A, Condition 1 (a) of this licence.

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

Regulations means Regulations proclaimed pursuant to Section 63 of the *Waters Act*.

Sewage means all toilet Wastes and Greywater.

Sewage Disposal Facility means the area and structure designated to contain Sewage as approved by the Board.

Surveillance Network Program (SNP) means a monitoring program required by this Licence and detailed in Annex A.

Traditional Knowledge means 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 means a release or Discharge of any Water or Waste not authorized under this Licence.

Waste means Waste as defined by 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 the 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 prescribed in respect of that substance or class of substances by regulations made under subparagraph 63(1)(b)(ii), and water that has been subjected to a treatment, process or change prescribed by regulations made under subparagraph 63(1)(b)(iii).

Waste Management Plan (WMP) means 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.

Water means Water as defined by 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 Source comprises the Water bodies listed in Table 1.

Part B: General Conditions

1. The Licensee shall take every reasonable precaution to protect the environment.
2. Compliance with the terms and conditions of this Licence does not excuse the Licensee from its obligation to comply with the requirements of any other applicable federal, territorial, Tlicho, or municipal laws.
3. The Licensee shall ensure a copy of this Licence is maintained at each Project camp or office at all times.
4. All information submitted to the Board, as required by this Licence, shall:
 - a) be in a form that is acceptable to the Board;
 - b) be in accordance with the Mackenzie Valley Land and Water Board's *Document Submission Standards*; and
 - c) include a conformity table which identifies wherein the pertinent requirements of the Licence are addressed.
5. The Licensee shall ensure that all Project activities are confined to locations as described in the Water Licence application.
6. The Licensee shall make effort to ensure that no historical or archaeological site will be affected by this operation.
7. The Licensee shall operate in accordance with any plans approved pursuant to the conditions of this Licence and with any revisions to the plans as may be made from time to time pursuant to the conditions of this Licence and as approved by the Board. If any plan is not approved by the Board, the Licensee shall revise the plan according to the Board's direction and re-submit it to the Board for approval.
8. The Licensee shall annually review the plans referred to in: Part B, Condition 15; Part B, Condition 16; Part B, Condition 17; Part B, Condition 18; Part E, Condition 9; Part G, Condition 1; Part G, Condition 2; Part G, Condition 7; Part H, Condition 1; Part H, Condition 3; Part I, Condition 1; and Part J, Condition 1; and shall revise the plans as necessary to reflect changes in operations or technology, or as requested by the Board. All revised plans shall be submitted to the Board for approval.
9. Any revised plan submitted to the Board under this Licence shall include a list of notable revisions to the plan.
10. The plans referred to in: Part B, Condition 15; Part B, Condition 16; Part B, Condition 17; Part B, Condition 18; Part E, Condition 9; Part G, Condition 1; Part G, Condition 2; Part G, Condition 7; Part G, Condition 16; Part H, Condition 1; Part H, Condition 2; Part I, Condition 1; and Part J, Condition 1, shall be presented in a format consistent with the Mackenzie Valley Land and Water Boards' *Standard Outline for Management Plans*, unless otherwise approved by the Board.
11. The Licensee shall comply with the **Schedules**, which are annexed to, and form part of this Licence, and any changes to the as may be made by the Board.
12. The Schedules and any compliance dates specified in this Licence may be updated at the discretion of the Board.
13. Meters, devices or other such methods used for measuring the volumes of Water used and Waste Discharged shall be installed, operated and maintained by the Licensee to the satisfaction of an Inspector.

14. The Licensee shall submit an **Annual Report** to the Board no later than March 31st of the year following the calendar year reported. The Report shall contain the information listed in Schedule 1, Condition 1.
15. In each management and/or monitoring plan submitted to the Board, the Licensee is to identify how it has incorporated adaptive management as outlined in Appendix B of the Report of EA or provide a rationale for why an adaptive management framework was not adopted.
16. In each management and/or monitoring plan submitted to the Board that includes monitoring activities, the Licensee is to identify how it has incorporated monitoring requirements as outlined in Appendix C of the Report of EA or provide a rationale for why monitoring requirements were not adopted.
17. A minimum of 90 days prior to commencement of Construction, the Licensee shall submit to the Board, for approval, a revised **Engagement Plan**. The Licensee shall comply with the **Engagement Plan**, once approved.
18. A minimum of 90 days prior to commencement of Construction, the Licensee shall submit to the Board, for approval, a revised **Wildlife Management and Monitoring Plan** in accordance with Schedule 1, Condition 2. The Licensee shall comply with the **Wildlife Management and Monitoring Plan**, once approved.
19. A minimum of 90 days prior to commencement of Construction, the Licensee shall submit to the Board, for approval, a revised **Permafrost Management Plan**. The Licensee shall comply with the **Permafrost Management Plan**, once approved.
20. The Licensee shall comply with the approved **Archaeological Site Chance Find Protocol**.
21. Any reference to an Act, Regulation, plan, or guideline in this Licence is a reference to the most current version unless otherwise explicitly stated.
22. In conducting its activities under this Licence, the Licensee shall make best efforts to consider and incorporate any scientific information and Traditional Knowledge that is made available to the Licensee.
23. In each submission required by the Licence or a directive from the Board, the Licensee is to identify all recommendations based on Traditional Knowledge received, describe how the recommendations were incorporated into the submission and provide justification for any recommendation not adopted.
24. The Licensee shall notify the Inspector and the Board immediately of any non-compliance with the conditions of this Licence or any direction provided by the Board.
25. The Licensee shall comply with all directives issued by the Board in respect of the implementation of the conditions of this Licence.
26. The Licensee shall comply with the **Surveillance Network Program**, which is annexed to and forms part of this Licence, and any updates to the Surveillance Network Program as may be made by the Board.
27. The Licensee shall ensure that a copy of any written authorization issued to the Licensee by an Inspector is provided to the Board.

Part C: Conditions Applying to Water Use

1. The Licensee may withdraw up to 299 m³/day of Water from the sources outlined in Part C, Condition 6, with the exception of the Water use outlined in Part C, Condition 2.
2. The Licensee may withdraw up to 900 m³/day of Water for the purpose of calcium chloride application for dust suppression, up to a maximum of 14 consecutive days per year. Water for this purpose may be withdrawn from the following sources: the James River, Whatideè (i.e., La Martre River), Duport River, and Peanut Lake.
3. During the application of calcium chloride for dust suppression as outlined in Part C, Condition 2, no more than a total of 4,000 m³ of Water per year may be withdrawn from Whatideè.
4. A minimum of ten days prior to the application of calcium chloride for dust suppression, the Licensee shall provide written notification to the Board and an Inspector. Written notification shall be provided if any changes occur.
5. The Licensee may only withdraw up to 33 m³/day of Water from the groundwater well (Water Source ID 16).
6. The Licensee shall only obtain Water from the Water Sources described in Table 1.

Table 1: Authorized Water Sources for the Project

Water Source	Water Source ID	Type	Location	
			Latitude	Longitude
James River (Crossing 14)	1	River	62°58'26.16"N	116°54'43.16"W
Whatideè (La Martre River) (Crossing 15)	2	River	63° 6'33.69"N	116°58'31.90"W
Duport River (Crossing 8)	3	River	62°43'47.28"N	116°50'21.69"W
Crossing 9	4	stream	62°46'12.54"N	116°48'51.2"W
Crossing 12	5	stream/lake	62°51'56.49"N	116°51'29.84"W
Unnamed Lake 1	6	Lake	62°50'31.18"N	116°51'20.34"W
Unnamed Lake 2	7	lake	62°49'24.41"N	116°51'29.15"W
Unnamed Lake 3 (Shallow Lake)	8	lake	62°29'53.70"N	116°30'33.52"W
Unnamed Lake 4 (Peanut Lake)	9	lake	62°29'28.84"N	116°32'35.49"W
Unnamed Lake 5	10	lake	62°39'31.71"N	116°51'33.03"W
Unnamed Lake 6	11	lake	62°39'38.65"N	116°50'50.60"W
Unnamed Lake 7	12	lake	62°46'41.42"N	116°49'17.26"W
Unnamed Lake 9	14	lake	63°08'41.22"N	116°59'5.78"W
Unnamed Lake 10	15	lake	62°55'29.62"N	116°51'58.34"W
Water Well near Main Camp	16	Groundwater	62°32'59.63"N	116°48'52.17"W

Note: Location indicates approximate center for lakes and approximate crossing point for rivers and streams

7. In any single year, the Licensee shall not withdraw greater than 10% of the available Water volume of any Water Source, with the exception for Water Source ID 16.
8. In any single ice-covered season, the Licensee shall not withdraw greater than 10% of the available Water volume of any Water Source with the exception for Water Source ID 16, as calculated using the appropriate maximum expected ice thickness.
9. For Source IDs 1-5 identified in Table 1, the Licensee shall not withdraw greater than 10% of instantaneous flow.
10. Prior to locating a Water intake in a fish-bearing Watercourse, the Licensee shall obtain written authorization for the location from an Inspector.
11. Prior to the commencement of withdrawal from Water Source IDs 1-5, the Licensee shall submit

hydraulic assessments to the Inspector, DFO, and the Board. Withdrawal shall not commence until authorized in writing by an Inspector.

12. Prior to the commencement of withdrawal from for Water Source ID 6-15, the Licensee shall submit maximum Water volumes with supporting documentation (e.g., bathymetry data) to the Inspector, DFO, and the Board. Withdrawal shall not commence until authorized in writing by an Inspector.
13. If supporting documentation referenced in Part C, Condition 12 for Water use of lakes is not based on bathymetry, then approval by the Board is required prior to use.
14. The Licensee shall construct and maintain the Water intake(s) with a screen designed to prevent impingement or entrainment of fish. The screen shall be in accordance with the best practices outlined in Fisheries and Oceans Canada's *Interim Code of Practice: End-of-Pipe Fish Protection Screens for Small Water Intakes in Freshwater* and *Fish Screen Design Criteria for Flood and Water Truck Pumps*.

DRAFT

Part D: Conditions Applying to Stream Crossings

1. The Licensee shall not remove naturally occurring material from the bed or banks of any Watercourse below the Ordinary High-Water Mark, except as described in the application.
2. The Licensee shall not cut or modify any stream banks while constructing ice bridges, unless approved by the Board. Construction of winter ice bridges or snow fills shall be in accordance with the **Fish and Fish Habitat Protection Plan** referred to in Part H, Condition 3.
3. The Licensee shall not ford wet Watercourses or areas of overflow, unless authorized in writing by an Inspector.
4. The Licensee shall not destroy or damage beaver or muskrat dams or lodges without approval from the GNWT-ENR, and shall minimize disturbance to beaver and muskrat activities.
5. Every effort shall be made to retain riparian vegetation, as it is critical for the protection of littoral and riparian fish habitats as well as for providing cover and enhancing bank stability.

DRAFT

Part E: Conditions Applying to Construction

1. The Licensee shall provide the Board with the names and contact addresses for all Construction contractors prior to Construction.
2. The Licensee shall ensure that all contractors and sub-contractors are aware of, and shall conform to, all Terms and Conditions of this Licence.
3. A minimum of 90 days prior to the commencement of Construction of any Engineered Structures, with the exception of the Sewage Lagoon, the Licensee shall submit to the Board for approval a Detailed Design Report. The Report shall be signed and stamped by a Professional Engineer and shall include: construction drawings, construction specifications, and construction quality control/quality assurance plan.
4. A minimum of 90 days prior to the commencement of Construction of any Engineered Structures, with the exception of the Sewage Lagoon, the Licensee shall submit to the Board for approval, a **Construction Plan** in accordance with Schedule 2, Condition 1. The Licensee shall comply with the **Construction Plan**, once approved.
5. Within 30 days of the effective date of the Licence, the Licensee shall submit to the Board an updated schedule of Construction activities for the first year of Construction, and thereafter updated annually in the **Annual Report**.
6. A minimum of 10 days prior to commencement of Construction, the Licensee shall provide written notification to an Inspector.
7. Within 90 days of completion of the Construction of Engineered Structures related to Water use and Waste disposal for the Project, excluding the Construction of sumps, the Licensee shall submit an as-built report to the Board. The report shall be prepared by a Professional Engineer and shall include: as-built drawings, documentation of field decisions that deviate from original plans, and any data used to support these decisions.
8. The Licensee shall ensure that Construction of Engineered Structures is supervised by a Professional Engineer.
9. A minimum of 90 days prior to the commencement of Construction, the Licensee shall submit to the Board for approval a **Quarry Operations Plan** in accordance with Schedule 1, Condition 3. The Licensee shall comply with the **Quarry Operations Plan**, once approved.
10. The Licensee shall ensure that there is no obstruction of Water flow in Watercourses as a result of Engineered Structures being placed in, or about, a Watercourse.
11. The Licensee shall undertake necessary corrective measures to mitigate negative impacts on surface drainage resulting from the Licensee's activities. Camp or work facilities shall be located so as to minimize negative impacts to surface drainage.
12. The Licensee shall construct and operate all infrastructure and facilities designed to contain, withhold, divert or retain Water or Waste in accordance with all applicable Federal or Territorial legislation and industry standards.
13. The Licensee shall construct and operate any Bulk Fuel Storage Facilities in accordance with all applicable Federal and Territorial legislation and industry standards, including: Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products (2003), and the National Fire Code of Canada (2010).
14. All materials used for Construction or materials used for bank restoration, including riprap and infill gravel materials, must be obtained from an approved source, and be clean and free of contaminants. Such material shall not be removed or gathered from below the Ordinary High-Water Mark of any

waterbody, or from any other Watercourse.

15. Prior to Construction of the Sewage Disposal Facility, the Licensee shall conduct a Site Investigation and submit a **Design and Construction Report for the Sewage Disposal Facility** based on the results and analysis of the investigation for Board approval. The requirements of the Site Investigation and the **Design and Construction Report for the Sewage Disposal Facility** are outlined in Schedule 2, Conditions 2 and 3, respectively. The Licensee shall not commence Construction of the Sewage Disposal Facility prior to Board approval of the Report.

DRAFT

Part F: Conditions Applying to Modifications

1. The Licensee may, without written approval from the Board, carry out Modifications to Engineered Structures provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - a) the Licensee has notified the Board in writing of the proposed Modifications at least 60 days prior to beginning the Modifications;
 - b) the proposed Modifications do not place the Licensee in contravention of either the Licence, the Act, or Federal, Territorial or Municipal Legislation;
 - c) the Board has not, during the 60 days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than 60 days;
 - d) An Inspector has authorized the proposed Modifications and provided a letter of notification to the Board; and
 - e) the Board has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part F, Condition 1, have not been met, may be carried out only with written approval from the Board.
3. Within 90 days of completion of the Modifications, the Licensee shall provide to the Board as-built plans and drawings of the Modifications referred to in this Licence.

DRAFT

Part G: Conditions Applying to Water and Waste Management

1. A minimum of 90 days prior to the commencement of Construction, the Licensee shall submit to the Board for approval a **Waste Management Plan** in accordance with the Mackenzie Valley Land and Water Board's *Guidelines for the Development of a Waste Management Plan*. The Plan shall describe how all Waste streams associated with the Project are managed, including references to other plans as necessary.
2. The Licensee shall manage all Sewage, Greywater, solid Waste, and Hazardous Waste in accordance with the approved **Waste Management Plan** or as otherwise approved by the Board.
3. No materials cleared from the site shall be disposed of in any Watercourse. All materials shall, if necessary, be disposed of above one hundred (100) metres from the Ordinary High-Water Mark of the Watercourse, and in such a manner to prevent entry into the Watercourse.
4. The Licensee shall ensure that any unauthorized Wastes associated with the Project do not enter any Watercourse.
5. The Licensee shall not store Waste on the surface of frozen streams or lakes except what is required for immediate use.
6. The Licensee shall comply with the approved **Erosion and Sediment Control Plan**. This Plan shall be in accordance with Schedule 3, Condition 1.
 7. The Licensee shall minimize erosion by installing and maintaining erosion control structures where necessary to prevent the deposition of sediment into any streams.
8. A silt curtain, constructed of woven geotextile, or another appropriate erosion control structure will be used when working in waterways. It will be maintained in any manner at the request of an Inspector.
9. All sites affected by construction or removal activities shall be stabilized in accordance with the approved **Closure and Reclamation Plan**, and suitable erosion control measures implemented to minimize sediment deposition into any Watercourse.
10. Topsoil, any other material removed from the stream bank, or un-used fill material shall be stockpiled at a minimum 100 metres from the Watercourse or any drainage if possible and be sufficiently bermed. Topsoil stockpile will be covered to prevent erosion.
11. Erosion Mitigation:
 - a) erosion prevention structures that are satisfactory to an Inspector shall be used at all points where Water or Waste is Discharged; and
 - b) daily erosion inspections of Discharge points shall be carried out and records of these inspections shall be kept for review upon the request of an Inspector. If any erosion is observed, the Licensee shall notify an Inspector and take necessary corrective action to mitigate the erosion problem to the satisfaction of an Inspector.
12. During Construction the Licensee shall collect Water samples upstream and downstream of each monitored Watercourse crossing, as described in the approved **Water Monitoring Plan** referred to in Part H, Condition 1.

13. The Licensee shall ensure that in-water Construction activities meet the following criteria:
 - a) if background TSS is ≤ 250 mg/L, the maximum concentration for Total Suspended Solids shall not exceed 25 mg/L above background concentration TSS in any daily sample, or 5 mg/L above background TSS averaged over any 30-day period;
 - b) if background TSS is > 250 mg/L, TSS shall not exceed 10% of background levels; and
 - c) all TSS samples are to be measured in accordance with the approved Water Monitoring Plan referred to in Part H, Condition 1.
14. The Licensee shall notify the Inspector on any day when weather, or other circumstances, do not permit the collection of a TSS sample.
15. The Licensee shall maintain a minimum Freeboard limit of one metre at the Sewage Disposal Facility, or as recommended by a Professional Engineer and approved by the Board.
16. The Licensee shall operate and maintain the Sewage Disposal Facility to prevent structural failure and to the satisfaction of an Inspector.
17. The Licensee must cease operation of the Sewage Disposal Facility at the following instances:
 - a) Freeboard limit is exceeded;
 - b) Monitoring exceeds approved thresholds as outlined in the approved Design and Construction Report for the Sewage Disposal Facility; and/or
 - c) Structural failure occurs.
18. Within seven (7) days of ceasing operation of the Sewage Disposal Facility in accordance with Part G, Condition 17 (b) and/or (c), the Licensee shall provide the Board groundwater monitoring results and propose corrective action.

Part H: Conditions Applying to the Aquatic Effects Monitoring

1. A minimum of 90 days prior to the commencement of Construction, the Licensee shall submit to the Board for approval a **Water Monitoring Plan**. The Plan shall be in accordance with Schedule 4, Condition 1. The Licensee shall comply with the **Water Monitoring Plan**, once approved.
2. The Licensee shall consult the Tłıchǫ Government in the assessment of aquatic effects within the Project area.
3. A minimum of 90 days prior to the commencement of Construction, the Licensee shall submit to the Board for approval a **Fish and Fish Habitat Protection Plan**. The Plan shall be in accordance with Schedule 4, Condition 2. The Licensee shall comply with the **Fish and Fish Habitat Protection Plan**, once approved.

DRAFT

Part I: Conditions Applying to Contingency Planning

1. The Licensee shall comply with the **Spill Contingency Plan**, developed in accordance with *Indian and Northern Affairs Canada's Guidelines for Spill Contingency Planning*, once approved. The **Spill Contingency Plan** shall include a description of proper work practices for fueling equipment and handling petroleum.
2. The Licensee shall ensure that petroleum products, hazardous material and other Wastes associated with the Project do not enter any Waters.
3. The Licensee shall ensure all refueling, and storage of fuels, chemicals or deleterious substances are located a minimum of 30 metres from the Ordinary High-Water Mark of any Waters.
4. If, during the period of this Licence, a spill or Unauthorized Discharge occurs or is foreseeable, the Licensee shall:
 - a) implement the approved **Spill Contingency Plan**;
 - b) report the incident immediately via the 24-Hour Spill Reporting Line (867) 920-8130 in accordance with the instructions contained in the Spill Report Form NWT;
 - c) report each spill and Unauthorized Discharge of Waste to the Board and an Inspector, within 24 hours; and
 - d) within 30 days of a spill or Unauthorized Discharge reported under Part I, Condition 4(b), the Licensee shall submit a detailed report to the Board and an Inspector.
5. All spills and Unauthorized Discharges of Water or Waste shall be cleaned up and the affected area reclaimed to the satisfaction of an Inspector.

Part J: Conditions Applying to Closure and Reclamation

1. The Licensee shall comply with the approved **Closure and Reclamation Plan** developed in accordance with Schedule 5, Condition 1.
2. The Licensee shall carry out progressive Reclamation of areas that are abandoned prior to the end of the Construction of the Project.

DRAFT

Schedule 1
Part B: General Conditions

1. The **Annual Report** referred to in Part B, Condition 14, shall include, but not be limited to, the following:

Measuring and Reporting on Water and Waste:

- a) A summary of the calibration and status of the meters and devices referred to in Part B of this Licence;
- b) Monthly and annual quantities in cubic metres of Water obtained from each water source;
- c) Monthly and annual quantities and types of solid Waste, Hazardous Waste and Sewage generated;
- d) Management methods and disposal locations for solid Waste, Hazardous Waste and Sewage;
- e) Monthly and annual quantities in cubic metres of solid Waste accepted by the communities of Whatì and Behchokò;
- f) Monthly and annual quantities in cubic metres of Sewage accepted by the communities of Whatì and Behchokò; and
- g) Water quality monitoring results and acid rock drainage/metal leaching (ARD/ML) testing results.
- h) Tabular summaries of all data and information generated under the Surveillance Network Program for SNP station 2020-1 in a format acceptable to the Board. The Licensee shall provide raw data in electronic form upon request by the Board;

Management Plans and Activities:

- i) A summary of engagement activities conducted in accordance with the approved Engagement Plan, referred to in Part B, Condition 17 of this Licence;
- j) Details of work completed, including restoration;
- k) A summary of Construction activities in accordance with Part E of this Licence;
- l) A summary of Modifications and/or major maintenance work in accordance with Part F of this Licence;
- m) A summary of any Closure and Reclamation work completed during the year;
- n) A summary of activities conducted in accordance with the approved **Erosion and Sedimentation Plan**, required in Part G, Condition 7 of this Licence, including:
 - i. A summary of approved updates or changes to the process or facilities required for the management of erosion and sedimentation;
 - ii. A description of any erosion susceptible areas encountered;
 - iii. A summary of activities undertaken to prevent or mitigate erosion;
 - iv. A report of the performance of mitigations applied to each area;
 - v. A summary and interpretation of monitoring results, including any Action Level exceedances; and
 - vi. A description of actions taken in response to any Action Level exceedances;
- o) A report of activities/studies conducted in accordance with the approved **Wildlife Management and Monitoring Plan**, required in Part B, Condition 18 of this Licence, including but not limited to:

- i. Updates on progress specific to the management and protection of boreal and barren ground caribou and caribou habitat according to measures 6-1, 6-2, and 6-3 of the REA; and Measures 7-1 and 7-2 of the REA, respectively;
 - ii. include results of available surveys and monitoring, such as caribou, bird (Measure 10-1), and moose surveys;
 - iii. include Traditional Knowledge as a source of information;
 - iv. include a summary of training sessions related to quarry operations conducted; and
 - v. traffic monitoring results.
- p) A description of any updates or revisions to any of the following plans:
- i. **Erosion and Sedimentation Plan;**
 - ii. **Waste Management Plan;**
 - iii. **Incineration Management Plan;**
 - iv. **Spill Contingency Plan;**
 - v. **Water Monitoring Plan;**
 - vi. **Quarry Operations Plan;**
 - vii. **Permafrost Management Plan;**
 - viii. **Fish and Fish Habitat Protection Plan;**
 - ix. **Wildlife Management and Monitoring Plan;**
 - x. **Archaeological Site Chance Find Protocol;** and
 - xi. **Closure and Reclamation Plan.**

Spills and Unauthorized Discharges:

- q) A list and description, including volumes, of all Unauthorized Discharges and summaries of follow-up action taken; and
- r) An outline of any spill training and communications exercises carried out;

Other Reporting Requirements:

- s) Results and findings from the annual inspection;
- t) A report on any studies required by the Board that relate to the Licence;
- u) Updated schedule of Construction activities, as required by Part E, Condition 5;
- v) A report of activities/studies conducted in accordance with the approved Water Monitoring Plan, required in Part H, Condition 1 of this Licence, including but not limited to:
 - i. Summary of water quality monitoring data collected;
 - ii. Summary of calibration and status of the meters and devices;
 - iii. Summary of the annual quantity in cubic metres of water obtained from each water source;
 - iv. Any actions taken under the response framework of the Water Monitoring Plan;
 - v. Rationale where measurements or samples were not collected;
 - vi. Any changes to procedures; and
 - vii. Interpretation of QA/QC procedures.

2. The **Wildlife Management and Monitoring Plan (WMMP)** referred to in Part B, Condition 18, shall

include but not be limited to the following:

- a) Findings of the of the program that uses Tłıchq harvesters' traditional knowledge and methods to monitor the state of barren-ground caribou (ᐃᓃᓂᓄ) winter habitat, during and after the construction of the Project while the WMMP is in place, as per Measure 7-1(c) of the Report of EA;
 - b) a description of how the WMMP has been updated based on results of available surveys and monitoring, such as caribou, bird (Measure 10-1), and moose surveys, as per Measure 10-2, Part 2;
 - c) a description of the management and protection of migratory birds and bird species at risk, providing a description of potential habitat (e.g., borrow sources, nesting areas etc.) and its protection;
 - d) include Traditional Knowledge from all Aboriginal groups that harvest in the area on ways to mitigate, monitor, and adaptively manage impacts from the Project to wildlife;
 - e) Construction activities, including clearing, consider sensitive wildlife periods, for example nesting periods of migratory birds; and
 - f) references to any relevant monitoring plans.
3. The **Quarry Operations Plan** referred to in Part E, Condition 9, shall include, but not be limited, to the following:
- a) details regarding the design of the quarry sites;
 - b) hydrogeological considerations contemplated in the design of the quarry;
 - c) geochemical analysis of each quarry site that includes:
 - i. potential acid-rock drainage and metal-leaching issues associated with road Construction and operation;
 - ii. a description of how the Licensee will ensure that materials used within the proposed TASR corridor are not susceptible to acid-rock drainage and/or metal leaching; and
 - iii. a description of the characterization, testing, monitoring, and management of rock with acid rock drainage and/or metal leaching potential to prevent impacts associated with quarrying and road Construction on Water quality.
 - d) details of any camps that will be located at quarry sites, as well as the details pertaining to explosives management; and
 - e) proposed sequence and timing of quarry development.

Schedule 2
Part E: Conditions Applying to Construction

1. A **Construction Plan** referred to in Part E, Condition 4, will include, but not be limited to, the following information:
 - a) a description of the facilities to be constructed;
 - b) the proposed location for the structures;
 - c) any potential impacts to the aquatic environment;
 - d) a description of any monitoring including, but not limited to, sampling locations, parameters measured, and frequencies of sampling to be carried out to determine impacts to the aquatic environment, with rationale;
 - e) a detailed description of any measures used to prevent or mitigate impacts to the aquatic environment;
 - f) a schedule for the Construction;
 - g) drawings of Engineered Structures stamped by a Professional Engineer; and
 - h) description of adaptive management processes that systematically link monitoring results to management activities and allow management activities to be developed adaptively, in response to changes in the environment.
2. The Site Investigation referred to in Part E, Condition 15, shall include, but not be limited to:
 - a) in-situ soil percolation testing;
 - b) soil sampling and laboratory testing to validate the values and assumptions in the design report; and
 - c) Definition of the sub-surface soil thickness and hydraulic conductivity.
3. The **Design and Construction Report for the Sewage Disposal Facility** referred to in Part E, Condition 15, will include, but not be limited to, the following information:
 - a) a detailed description, with appropriate maps or diagrams, of the location and design of the Sewage Disposal Facility;
 - b) details regarding the total volume of wastewater that will be in the lagoon, the elevation of the wastewater from the base of the lagoon, and the freeboard level at the end of 6-month storage;
 - c) relevant background information used to inform the design;
 - d) design drawings signed and stamped by an Engineer which note “issued for construction” or similar phrase clearly shown;
 - e) construction and materials specifications;
 - f) construction quality assurance and quality control plan, including but not limited to:
 - i. A copy of the lagoon-specific inspection and testing plan, quality control inspection checklist.
 - g) a schedule for the Construction;
 - h) a copy of the report for the site investigation (as required by Part E, Condition 15 and Schedule 2, Condition 2) that details the work conducted and the results;

- i) a summary of the stability analysis model inputs and provide the output figures for the scenarios considered in the design;
- j) a report on a stand-alone hydrogeologic evaluation (model of groundwater flow and containment transport), including all inputs, assumptions, methods, results, and interpretation of results; the hydrogeologic evaluation should include:
 - i. a comprehensive list of receptors. Receptors should include but not be limited to the proposed water well for the camp, areas where groundwater may discharge to surface, and discharge to surface water;
 - ii. A plan view map that identifies receptors and their location(s) in comparison to the plume and lagoon;
 - iii. A cross-section map through the plume centreline to depict the sub-surface soil types and the horizontal and vertical extents of the plume.
- k) a description of any potential impacts to the aquatic environment, including but not limited to:
 - i. an assessment of potential impacts to receptors including but not limited to impacts resulting from a change in groundwater;
- l) a detailed description of any measures used to prevent or mitigate impacts to the aquatic environment;
- m) details of monitoring, with rationale, including but not limited to:
 - i. sampling frequency and parameters for monitoring at the inflow to the Sewage Disposal Facility (last point of control at Surveillance Network Program Station 2020-1); and
 - ii. a proposed location, sampling frequency, and parameters, for a groundwater monitoring well (Surveillance Network Program Station 2020-2) downstream of the Sewage Disposal Facility.
- n) a description of adaptive management processes that systematically link monitoring results to management activities and allow management activities to be developed adaptively, in response to changes in the environment; including but not limited to:
 - i. a threshold for the cessation of operations of the Sewage Disposal Facility as outlined in Part G, Condition 17 (b).
- o) operations and maintenance requirements, including but not limited to:
 - i. sludge management;
 - ii. frequency of inspection and monitoring; and
 - iii. emergency storage.

Schedule 3

Part G: Conditions Applying to Water and Waste Management

1. An **Erosion and Sediment Control Plan** referred to in Part G, Condition 7, will include but not be limited to, the following information:
 - a) plans for implementing erosion and sediment control measures for road construction and operation;
 - b) measures for potential thermal erosion events; and
 - c) relevant lessons learned from other northern road projects (e.g., Inuvik to Tuktoyaktuk Highway) with respect to sediment and erosion control.

DRAFT

Schedule 4
Part H: Applying to the Aquatic Effects Monitoring

1. A **Water Monitoring Plan** referred to in Part H, Condition 1, will include, but not be limited to, the following information:
 - a) identification of monitoring locations and parameters;
 - b) sampling frequency and duration;
 - c) analytical requirements (e.g., proposed levels of TSS);
 - d) quality assurance and quality control;
 - e) reporting requirements; and
 - f) specific frequency by which TSS monitoring will occur.

2. A **Fish and Fish Habitat Protection Plan** referred to in Part H, Condition 3, will include, but not be limited to, the following information:
 - a) a description of how fish and fish habitat (i.e., Watercourses) will be managed regarding Water quality for the Project, and specifically at the proposed Water crossings;
 - b) a description of the potential pathways of fish habitat degradation (e.g., use of explosives, blasting residue, sediment release, spills);
 - c) the plans for mitigation of fish habitat degradation and protection;
 - d) the maximum volume of Water intended for withdrawal (i.e. annual and under-ice limits) from each Water Source, to ensure no impacts to fish and fish habitat;
 - e) the baseline data (e.g., fish species swim speeds) and calculations used to inform the sizing of the culverts that will be constructed in fish-bearing streams to ensure that they provide passage for all fish that are subject to commercial, recreational, and Aboriginal fisheries; and
 - f) intended screen size(s) that will be used, and the design criteria that were used to inform the design.

Schedule 5
Part J: Applying to the Closure and Reclamation

1. A **Closure and Reclamation Plan** referred to in Part J, Condition 1, including but not limited to, the following information:
 - a) A description of each Project component, including, but not limited to:
 - i. temporary access roads, and work camps;
 - ii. quarries;
 - iii. areas affected by spills or Unauthorized Discharges; and
 - iv. other areas affected by Project activities.
 - b) A description of closure and reclamation of borrow sources, focusing on the restoration of natural drainage patterns, slope grading, capping with organics/vegetation (from pre-stripping stockpiles), and revegetation with native plant species;
 - c) A description of any planned Progressive Reclamation; and
 - d) An implementation schedule that includes Progressive Reclamation and final Closure and Reclamation activities.

DRAFT

Annex A: Surveillance Network Program (SNP)
Annexed to Water Licence W2020L8-0001, Part B, Condition 26

Table of Contents:

Part A: Reporting Requirements

Part B: Sampling and Analysis Requirements

Part C: Surveillance Network Program Station Descriptions

Part A: Reporting Requirements

1. The effective date of this Surveillance Network Program is July 15, 2020.
2. The Licensee shall include all of the data and information required in Part C of this Annex in the Annual Report, as specified in Schedule 1, Condition 1(h) of this Licence.
3. The Licensee shall also provide SNP data at other times, if requested by an Inspector or the Board.

Part B: Sampling and Analysis Requirements

1. More frequent sample collection or provision of data may be required at the request of an Inspector.
2. The location of sampling sites is subject to the approval of an Inspector. The Licensee shall work with an Inspector to determine suitable locations for sampling sites.
3. All sample collection, sample handling, and analyses shall be conducted in accordance with methods prescribed in the current edition of American Public Health Association's (APHA) *Standard Methods for the Examination of Water and Wastewater* at the time of analysis, or by other such methods approved by an Analyst.
4. All analyses shall be performed in a laboratory accredited by the Canadian Association for Laboratory Accreditation (CALA) for the specific analyses to be performed or as approved by an Analyst.

Part C: SNP Station Descriptions and Monitoring Requirements

SNP Station	Location	Sampling Frequency	Sampling Parameters	Rationale:
2020-1 (not yet active)	Inflow to the Sewage Disposal Facility	To be determined	To be determined	To monitor water quality from the Sewage Disposal Facility at the last point of control. The details of this station will be determined after the submission of the Design and Construction Report of the Sewage Disposal Facility.
2020-2 (not yet active)	Ground Water Monitoring well at a location to be determined	To be determined	To be determined	To monitor water quality from the Sewage Disposal Facility. The details of this station will be determined after the submission of the Design and Construction Report of the Sewage Disposal Facility.

Attachment A: Concordance Table of Submissions

The table below summarizes the items the Licensee is required to submit as per the Licence conditions. In the event of a discrepancy between this table and the Licence conditions, the Licence conditions shall prevail.

Condition Location	Item	Date
Part B, Condition 17	Engagement Plan	A minimum of 90 days prior to commencement of Construction
Part B, Condition 18	Wildlife Management and Monitoring Plan	A minimum of 90 days prior to commencement of Construction
Part B, Condition 19	Permafrost Management Plan	A minimum of 90 days prior to commencement of Construction
Part C, Condition 11	Hydraulic Assessments for Water Source IDs 1-5	Prior to the commencement of withdrawal
Part C Condition 12	Maximum Water Volumes for Water Source IDs 6-15	Prior to the commencement of withdrawal
Part E, Condition 9	Quarry Operations Plan	A minimum of 90 days prior to commencement of Construction
Part E, Condition 15	Design and Construction Report for the Sewage Disposal Facility	Prior to Construction of the Sewage Disposal Facility
Part G, Condition 1	Waste Management Plan	A minimum of 90 days prior to commencement of Construction
Part G, Condition 6	Erosion and Sediment Control Plan	See the May 30, 2019 Reasons for Decision
Part H, Condition 1	Water Monitoring Plan	A minimum of 90 days prior to commencement of Construction
Part H, Condition 3	Fish and Fish Habitat Protection Plan	A minimum of 90 days prior to commencement of Construction
Part I, Condition 1	Spill Contingency Plan	See the May 30, 2019 Reasons for Decision
Part J, Condition 1	Closure and Reclamation Plan	See the May 30, 2019 Reasons for Decision

Attachment B: Revision History Table

The table below summarizes revisions made to the Licence since its effective date (as set out on the Cover Page).

Date	Location of Change	Description of Change
XX XX, 2023	Part A, Condition 1; Part C, Conditions 1-4, 11, 12, and 14	Updated to reflect GNWT-INF's Application for Increased Water Use and as described in the Board's May 18, 2023 Reasons for Decision.

DRAFT