

105 Veterans Way PO Box 2018, Inuvik NT X0E 0T0

Tel: 867-777-4954 Fax 867-777-2304 www.glwb.com

September 23, 2023

Jason MacNeil, Regional Airport Manager GNWT Department of Infrastructure Bag Service #1, PO BOX 3024 Inuvik, NT X0E 0T0 File: G23L8-002

Sent by email

Dear Jason,

Re: Inuvik Airport Drainage Upgrades – Type B Water Licence Issuance Package

The Gwich'in Land and Water Board (Board) met on September 12, 2023, and considered the Application Package submitted by the Government of the Northwest Territories Department of Infrastructure (GNWT INF), for miscellaneous water use and the deposit of waste for the Inuvik Airport surface drainage upgrades Project, in accordance with the *Waters Act*.

The Board has approved Water Licence (Licence) G23L8-002 (attached) for a term of five years effective September 23 2023, and expiring September 22, 2028. The Licence is supported by the Board's Reasons for Decision. These documents are posted to the Board's Public Registry.¹

Submission Requirements

Please refer to Annex B of the Licence for a complete summary and timetable of submissions required for this Licence. The Board's decisions on submissions that were considered in conjunction with the renewal Application Package are set out below.

The Board has approved the following Management Plans, which were submitted as part of the Application materials:

- Waste Management Plan V.1.0;
- Spill Contingency Plan V.1.0;
- Engagement Plan V.1.0; and

¹ See GLWB Online Registry www.glwb.com for file G232L8-002

• Erosion and Sediment Control Plan V.1.0.

The Board has approved Environmental Monitoring Plan (EMP) V.1.0 as an interim submission, and further requires that EMP V 1.1 be submitted to the Board for approval within 90 days of Licence issuance. EMP V.1.1 shall include the additional SNP parameters required by the Licence, and final sampling locations.

The Board acknowledges GNWT INF Hazardous Materials/ Airport Emergency Response Plan, however as it falls outside the scope of the Board's authority, no formal approval of this plan is required.

The Board requires GNWT INF to submit to the Board for approval a Traditional Knowledge/ Traditional use study to the Board for approval, within 6 months of Licence issuance.

Contact information for Inspectors and Analyst

Please note that the Inspectors referred to in the Licence can be contacted at the regional GNWT-ENR offices.² The Analyst referred to in the Surveillance Network Program annexed to the Licence can be contacted at the Taiga Environmental Laboratory.³

Licence Processes and Additional Information

Sections 5 and 6 of the Board's *Guide to the Water Licensing Process*⁴ (Guide) contain detailed information on licence enforcement and potential post-issuance processes, such as amendments to conditions, and assignment to another company. Please be familiar with these sections of the Guide and reach out to Board staff with any questions about Board processes related to the Licence.

Full cooperation of the Department of Infrastructure is anticipated and appreciated. Please contact GWB Regulatory Specialist AlecSandra Macdonald at (867) 777-4954 with any questions or concerns regarding this letter.

Yours sincerely,

Elizabeth Wright Chair, Gwich'in Land and Water Board

BCC'd to:GLWB Distribution ListAttached:Water Licence G23L8-002 and Reasons for Decision

² See GNWT-ENR Regional Offices webpage (<u>https://www.enr.gov.nt.ca/en/regional-offices</u>) for regional contact information.

³ See GNWT-ENR Taiga Environmental Laboratory webpage (<u>https://www.enr.gov.nt.ca/en/services/taiga-environmental-laboratory</u>) for contact information.

⁴ See GLWB Policies and Guidelines webpage for MVLWB <u>Guide to the Water Licensing Process</u>.



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Water Licence G23L8-002

Pursuant to the *Waters Act* and the Waters Regulations, the Gwich'in Land and Water Board grants this Water Licence to:

The Government of the Northwest Territories – Department of Infrastructure

(Licensee)

of

Bag Service #1, P.O. Box 3024, Inuvik NT, X0E 0T0

(Mailing Address)

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

Location:	Inuvik, NT
Water Management Area:	Northwest Territories 03
Purpose:	Miscellaneous Water Use and Deposit of Waste in association with the Inuvik Mike Zubko Airport drainage upgrades project.
Туре:	В
Quantity of Water not to be exceeded:	0 m ³ per year
Effective Date:	September 23, 2023
Expiry Date:	September 22, 2028

Elizabeth Wright, Chair Gwich'in Land and Water Board

AlecSandra Macdonald, Witness

DRAFT Type B Water Licence G23L8-002 Inuvik Airport Drainage Upgrades

Table of Contents

Part A:Scope and Defined TermsPart B:General ConditionsPart C:SecurityPart D:Water UsePart E:ConstructionPart F:Waste and Water ManagementPart G:Aquatic Effects MonitoringPart H:Spill Contingency PlanningPart I:Closure and Reclamation

Schedules

Schedule 1:Surveillance Network ProgramSchedule 2:Annual Water Licence Report (Part B)

Annex A: Concordance Table of Items Requiring Submission

Annex B: Table of Revision History

Part A: Scope and Defined Terms

Scope:

1. This Licence entitles the Licensee to carry out Water Use and Deposit of Waste for miscellaneous activities at the Mike Zubko SCOPE Airport, Inuvik NT.

The scope of this Licence includes the following:

- a) Construction, operation, and maintenance of stormwater drainage system upgrades;
- b) Progressive Reclamation and associated Closure and Reclamation activities.
- 2. This Licence is issued subject to the conditions contained herein with respect to the use of Water and the deposit of Waste In any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposits of SUBJECT TO CHANGE such Waste may enter any Waters. Any change made to the Waters Act and/or the Waters Regulations that affects licence conditions and defined terms will be deemed to have amended this Licence.
- 3. Compliance with this Licence does not relieve the Licensee from responsibility for compliance with the requirements of any applicable federal, territorial, or municipal legislation. **LEGISLATIVE**

Defined Terms

Board – Gwich'in Land and Water Board, established under Part 3 of the Mackenzie Valley Resource Management Act.

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

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

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

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

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

Licensee – the holder of this Licence.

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

Professional Engineer – a person registered with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists to practice as a Professional Engineer in the Northwest Territories as per the territorial *Engineering and Geoscience Professions Act* and whose professional field of specialization is appropriate to address the components of the Project at hand.

Project – the undertaking described in Part A, Condition 1.

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

Receiving Water – the Water in the Receiving Environment that receives any direct or indirect Deposit of Waste from the Project.

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

Traditional Knowledge – As defined by Gwich'in Tribal Council's Working with Gwich'in Traditional Knowledge In The Gwich'in Settlement Region, that

body of knowledge, values, beliefs and practices passed from one generation to another by oral means or through learned experience, observation and spiritual teachings, and pertains to the identity, culture and heritage of the Gwich'in. This body of knowledge reflects many millennia of living on the land. It is a system of classification, a set of empirical observations about the local environment, and a system of self-management that governs the use of resources and defines the relationship of living beings with one another and with their environment.

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

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

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

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

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

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

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

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

	Condition	Condition Title
	Part B: General Conditions	
1.	The Licensee shall ensure a copy of this Licence is maintained on site at all times.	COPY OF LICENCE
2.	The Licensee shall take every reasonable precaution to protect the environment.	PRECAUTION TO PROTECT ENVIRONMENT
3.	In conducting its activities under this Licence, the Licensee shall make every reasonable effort to consider and incorporate any scientific information and Traditional Knowledge that is made available to the Licensee.	INCORPORATE SCIENTIFIC INFORMATION AND TRADITIONAL KNOWLEDGE
4.	In each submission required by this Licence or by any directive from the Board, the Licensee shall identify all recommendations based on Traditional Knowledge received, describe how the recommendations were incorporated into the submission, and provide justification for any recommendation not adopted.	IDENTIFY TRADITIONAL KNOWLEDGE
5.	All references to policies, guidelines, codes of practice, statutes, regulations, or other authorities shall be read as a reference to the most recent versions, unless otherwise noted.	REFERENCES
6.	 The Licensee shall ensure all submissions to the Board: a) Are in accordance with the MVLWB <i>Document Submission Standards</i>; b) Include a conformity statement or table which identifies where the requirements of this Licence, or other directives from the Board, are addressed; and c) Include any additional information requested by the Board. 	SUBMISSION FORMAT AND
7.	The Licensee shall ensure management plans are submitted to the Board in a format consistent with the MVLWB Standard Outline for Management Plans, unless otherwise specified.	MANAGEMENT PLAN FORMAT

8.	The Licensee shall comply with all plans - including revisions, approved pursuant to the conditions of this Licence.	COMPLY WITH SUBMISSIONS AND REVISIONS
9.	The Licensee shall conduct an annual review of all approved plans and make any revisions necessary to reflect changes in operations, contact information, or other details.	ANNUAL REVIEW
10.	The Licensee may, at any time, propose changes to any plan by submitting revisions to the Board, for approval, a minimum of 90 days prior to the proposed implementation date for the changes. The Licensee shall not implement the changes until approved by the Board.	REVISIONS
11.	The Licensee shall revise any submission and submit it as per the Board's directive.	REVISE AND SUBMIT
12.	If any date for any submission falls on a weekend or holiday, the Licensee may submit the item on the following business day.	SUBMISSION DATE
13.	The Licensee shall comply with the Schedules , which are annexed to and form part of this Licence, and any updates to the Schedules as may be made by the Board.	COMPLY WITH SCHEDULE(S)
14.	The Licensee shall comply with the Surveillance Network Program set out in Schedule 1, and any updates to the Surveillance Network Program as may be made by the Board.	COMPLY WITH SURVEILLANCE NETWORK PROGRAM
14.	The Schedules, the Surveillance Network Program, and any compliance dates specified in this Licence may be updated at the discretion of the Board.	UPDATES TO COMPLIANCE DATE(S)
15.	The Licensee shall comply with all directives issued by the Board in respect of the implementation of the conditions of this Licence.	COMPLY WITH BOARD DIRECTIVES

17.	Beginning March 31, 2023 and no later than every March 31 thereafter, the Licensee shall submit an Annual Water Licence Report to the Board and an Inspector. The Report shall be in accordance with the requirements of Schedule 1, Condition 1.	ANNUAL WATER LICENCE REPORT
18.	The Licensee shall comply with the Engagement Plan , once approved.	ENGAGEMENT PLAN
19.	A minimum of ten days prior to the initial commencement of Project activities, the Licensee shall provide written notification to the Board and an Inspector. Notification shall include the commencement date, and the name and contact information for the individual responsible for overseeing the Project. Written notification shall be provided to the Board and an Inspector if any changes occur.	NOTIFICATION – COMMENCEMENT
20.	The Licensee shall immediately provide written notification to the Board and an Inspector of any non-compliance with the conditions of this Licence.	NOTIFICATION – NON-COMPLIANCE
21.	The Licensee shall immediately provide written notification to the Board of any non-compliance with a Board directive issued in respect of the implementation of the conditions of this Licence.	NOTIFICATION – NON- COMPLIANCE WITH DIRECTIVES
22.	The Licensee shall ensure that a copy of any written authorization issued to the Licensee by an Inspector is provided to the Board.	COPY – WRITTEN AUTHORIZATION
23	The Licensee shall, within 6 months of Licence Issuance, submit to the Board for approval, a Traditional Knowledge and Traditional Use study.	TRADITIONAL KNOWLEDGE STUDY
	Part C: Security	
	Section Left Intentionally Blank	
	Part D: Water Use	
	Section Left Intentionally Blank	
	Part E: Construction	

1.	The Licensee shall ensure that all structures intended to contain, withhold, divert, or retain Water or Waste are designed, constructed, and maintained to minimize the escape of Waste to the Receiving Environment.	OBJECTIVE – CONSTRUCTION
2.	The Licensee shall only use material that is clean and free of contaminants and is from a source that has been authorized in writing by an Inspector.	CONSTRUCTION MATERIAL – SOURCE(S)
3.	A minimum of ten days prior to the commencement of Construction of any structure(s) intended to contain, withhold, divert, or retain Water or Wastes, the Licensee shall provide written notification to the Board and an Inspector. Notification shall include the Construction commencement date, and the name and contact information for the individual responsible for overseeing the Construction. Written notification shall be provided to the Board and an Inspector if any changes occur.	
	Part F: Waste and Water Management	
1.	The Licensee shall manage Waste and Water with the objective of minimizing the impacts of the Project on the quantity and quality of Water in the Receiving Environment through the use of appropriate mitigation measures, monitoring, and follow-up actions.	OBJECTIVE – WASTE AND WATER MANAGEMENT
2.	The Licensee shall deposit all Waste as described in the approved Waste Management Plan .	WASTE MANAGEMENT PLAN
3.	The Licensee shall comply with the Sediment and Erosion Control Plan, once approved.	SEDIMENT CONTROL
4.	The Licensee shall comply with the Environmental Monitoring Plan, once approved.	ENVIRONMENTAL MONITORING PLAN
	Part G: Aquatic Effects Monitoring	
	Section Left Intentionally Blank	
	Part H: Spill Contingency Planning	

1.	The Licensee shall ensure that Unauthorized Discharges associated with the Project do not enter any Waters.	OBJECTIVE – PREVENT WASTE INTO WATER
2.	The Licensee shall comply with the Spill Contingency Plan , once approved.	SPILL CONTINGENCY PLAN
4.	 If a spill or an Unauthorized Discharge occurs or is foreseeable, the Licensee shall: a) Implement the approved Spill Contingency Plan referred to in Part H, Condition x; b) Report it immediately using the NU-NT Spill Report Form by one of the following methods: Telephone: (867) 920-8130 E-mail: spills@gov.nt.ca Online: Spill Reporting and Tracking Database c) Notify the Board and an Inspector immediately; and d) Within 30 days of initially reporting the incident, or within a timeframe authorized by an Inspector, submit a detailed report to the Board and an Inspector, including descriptions of causes, response actions, and any changes to procedures to prevent similar occurrences in the future. Written notification shall be provided to the Board and an Inspector if any changes occur. 	REPORT SPILLS
5.	The Licensee shall ensure that spill prevention infrastructure and spill response equipment is in place prior to commencement of the Project.	SPILL PREVENTION AND RESPONSE EQUIPMENT
6.	The Licensee shall restore all areas affected by spills and Unauthorized Discharges to the satisfaction of an Inspector.	CLEAN UP SPILLS
	Part I: Closure and Reclamation	
1.	The Licensee shall endeavor to carry out approved Progressive Reclamation as soon as is reasonably practicable.	PROGRESSIVE RECLAMATION

Schedule 1 Surveillance Network Program

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 (SNP) is September 12, 2023

2. The Licensee shall include all of the data and information required in Part C of this Annex in the Annual Water Licence Report, as specified in Condition ANNUAL WATER LICENCE REPORT 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 stations is subject to the approval of an Inspector. The Licensee shall work with an Inspector to determine suitable locations for sampling stations.

3. All sample collection, sample preservation, 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	Coordinates	Sampling Frequency	Sampling Parameters
SNP 1	Outfall 2	68.297628°, –133.532012°	 Three times per year: Freshet Melt Summer rain event Fall rain event 	 pH Conductivity Turbidity Dissolved Oxygen Total Suspended Solids

DRAFT G23L8-002– GNWT INF – Inuvik Airport Drainage Upgrades –Type B Water Licence

				 CBOD 5 Total Arsenic Total Cadmium Total Chromium Total Cobalt Total Copper Total Manganese Total Mercury Total Nickel Total Lead Total Iron Total Zinc Total Petroleum Hydrocarbons (F1 F2, F3, F4 CCME Fractions) Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) Ethylene glycol
SNP 2	Outfall 2.5	68.297661° <i>,</i> –133.527747°	Three times per year: • Freshet Melt • Summer rain event • Fall rain event	 pH Conductivity Turbidity Dissolved Oxygen Total Suspended Solids CBOD 5 Total Arsenic Total Cadmium Total Chromium Total Cobalt Total Copper Total Manganese Total Mercury Total Nickel Total Lead Total Iron Total Zinc

SNP 3	Outfall 3	68.296394°, -133.488948°	Three times per year: • Freshet Melt • Summer rain event • Fall rain event	 Total Petroleum Hydrocarbons (F1 F2, F3, F4 CCME Fractions) Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) Ethylene glycol pH Conductivity Turbidity Dissolved Oxygen Total Suspended Solids CBOD 5 Total Arsenic Total Cadmium Total Chromium Total Cobalt Total Manganese Total Mercury Total Nickel Total Iron Total Zinc Total Petroleum Hydrocarbons (F1 F2, F3, F4 CCME Fractions) Benzene, Toluene, Ethylbenzene, and Xylene (BTEX)
				Ethylene glycol
SNP 4	Outfall 4	68.304840°, –133.428771°	 Three times per year: Freshet Melt Summer rain event Fall rain event 	 pH Conductivity Turbidity Dissolved Oxygen Total Suspended Solids CBOD 5 Total Arsenic Total Cadmium

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				 Total Chromium Total Cobalt Total Copper Total Manganese Total Mercury Total Nickel Total Lead Total Iron Total Zinc Total Petroleum Hydrocarbons (F1 F2, F3, F4 CCME Fractions) Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) Ethylene glycol pH
SNP 5	Reference – DL	TBD	Three times per year: • Freshet Melt • Summer rain event • Fall rain event	 pri Conductivity Turbidity Dissolved Oxygen Total Suspended Solids CBOD 5 Total Arsenic Total Cadmium Total Chromium Total Cobalt Total Copper Total Manganese Total Mercury Total Lead Total Iron Total Zinc Total Petroleum Hydrocarbons (F1 F2, F3, F4 CCME Fractions) Benzene, Toluene, Ethylbenzene, and Xylene (BTEX)

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				Ethylene glycol
SNP 6	Reference – EL	TBD	Three times per year: • Freshet Melt • Summer rain event • Fall rain event	 pH Conductivity Turbidity Dissolved Oxygen Total Suspended Solids CBOD₅ Total Arsenic Total Cadmium Total Chromium Total Cobalt Total Copper Total Manganese Total Mercury Total Lead Total Iron Total Zinc Total Petroleum Hydrocarbons (F1 F2, F3, F4 CCME Fractions) Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) Ethylene glycol

Signed on behalf of the Gwich'in Land and Water Board

Shr

ASD

Elizabeth Wright, Chair

Witness

DRAFT G23L8-002– GNWT INF – Inuvik Airport Drainage Upgrades –Type B Water Licence

Schedule 2 Annual Water Licence Report

	Condition
1.	The Annual Water Licence Report referred to in Part B, Condition 19 of this Licence shall include, but not be limited to, the following information about activities conducted during the previous calendar year:
	a) A brief summary of Project activities;
	b) An updated Project schedule;
	c) A summary of engagement activities conducted in accordance with the approved Engagement Plan , referred to in Part B, Condition 18 of this Licence;
	d) A summary of activities conducted in accordance with the approved Spill Contingency Plan , referred to in Part H, Condition 2 of this Licence, including:
	a. A list and description for all Unauthorized Discharges, including the date, NWT spill number, volume, location, summary of the circumstances and follow-up actions taken, and status (i.e. open or closed), in accordance with the reporting requirements in Part H,
	Condition 4 of this Licence; and b. An outline of any spill training carried out.
	e) A summary of activities conducted in accordance with the approved Waste Management Plan , referred to in Part F, Condition 2 of this Licence.
	f) A summary of activities conducted in accordance with the approved Erosion and Sedimentation Management Plan , referred to in Part F, Condition 3 of this Licence.
	g) A summary of activities conducted in accordance with the approved Environmental Monitoring Plan , referred to in Part F, Condition 4 of this Licence.
	 A summary of any updates or revisions to the Spill Contingency Plan, Engagement Plan, Waste Management Plan, Erosion and Sedimentation Management Plan, and/or Environmental Monitoring Plan conducted under the Annual Review referred to in Part B Condition 9;
	i) A summary of how any Traditional Knowledge, referred to in Part B Condition 4, was incorporated into decision making;

j) A list of any non-compliance(s) with the conditions of this Licence or any directive from the Board pursuant to the conditions of this Licence;
k) A summary of actions taken to address concerns, noncompliance, or deficiencies in any reports filed by an Inspector;
I) A summary of any studies requested by the Board, and/or a brief description of any future studies planned; and
m) Any other details requested by the Board by December 31 of the year being reported.

Annex A: Concordance Table

Annexed to Water Licence G23L8-002- Items Requiring Submission

This table summarizes the information the Licensee is required to submit as per the Water Licence conditions. It supplements the Water Licence. If there are any discrepancies between this table and the body of the Water Licence, the Water Licence conditions prevail.

Table 1: Concordance Table of Items Requiring Submission

Condition	Requirement	Submission Timeline
ANNUAL REVIEW (B.9)	Conduct an annual review of all plans, programs, manuals, and studies and make any revisions necessary to reflect changes in operations, contact information, or other details.	No later than March 31 each year.
REVISIONS (B.10)	Submit revised plans, programs, manuals, and studies to the Board, for approval.	A minimum of 90 days prior to the proposed implementation date for the changes.
ANNUAL WATER LICENCE REPORT (B.17)	Submit an Annual Water Licence Report to the Board and an Inspector, in accordance with the requirements of Schedule 1, Condition 1.	Beginning March 31, 2024, and no later than every March 31 thereafter.
NOTIFICATION – NON-COMPLIANCE (B.20)	Notify Board and Inspector of any non-compliance with the Licence	Immediately
TRADTIONAL KNOWLEDGE STUDY (B.23)	Submit to the Board for approval, a Traditional Knowledge and Traditional Use study.	Within 6 months of Licence Issuance

Annex B: Revision History table

Table 1: Updates and changes that have been made to Licence G23L8-002 since issuance.

Date	Location of Change	Description of Change



105 Veterans Way PO Box 2018, Inuvik NT X0E 0T0

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Reasons for Decision

Issued pursuant to section 72.25 of the *Mackenzie Valley Resource Management Act* (MVRMA) and subsection 26(1) of the *Waters Act.*

Water Licence Application				
File Number	G23L8-002			
Company	GNWT Department of Infrastructure			
Project	Inuvik Airport Drainage Improvements			
Location	Inuvik, NT			
Activity	Type B Water Licence – Miscellaneous			
Date of Decision	September 12, 2023			

Table of Contents

1.0	DECISION	3
2.0	REGULTORY PROCESS	4
2.1	Summary of Application	
2.2	Timeline	
3.0	REASONS - Legislative Requirements Related to Licence Issuance	7
3.1	Consultation, Engagement, and Public Notice	
3.2	Land Use Plan Conformity	
3.3	Water Use Fees	
3.4	Existing Licences	
3.5	Compensation to Existing Water Users	
3.6	Water Quality Standards	
3.7	Effluent Quality Standards	
3.8	Financial Responsibility	
3.9	Minimization of Adverse Effects	
3.10	Time Limit	
3.11	Preliminary Screening	
4.0	REASONS - Licence Terms and Conditions	
4.1	Term of Licence	
4.2	Part A: Scope and Defined Terms	
	2.1 Scope	
4.	2.2 Defined Terms	
4.3	Part B: General Conditions and Schedule 1	
4.4	Part C: Conditions Applying to Security Requirements	
4.5	Part D: Conditions Applying to Water Use	
4.6	Part E: Conditions Applying to Construction and Schedule 2	
4.7	Part F: Conditions Applying to Waste and Water Management and Schedule 3	16
4.8	Part H: Conditions Applying to Contingency Planning	
4.9	Deut la Constitue de Anglaine te Cleanne and Declementien and Cabadula 2	10
4.9	Part I: Conditions Applying to Closure and Reclamation and Schedule 3	
4.9 4.10	Annex A: Surveillance Network Program	
4.10	Annex A: Surveillance Network Program Annex B: Table of Submissions	18 19

1.0 DECISION

On September 12, 2023, the Gwich'in, Land and Water Board (GLWB or Board) met and considered the Application made by the Government of the Northwest Territories Department of Infrastructure (Applicant or GNWT INF) to the Board for Water Licence G23L8-002 for the use of water and the deposit of waste in association with the construction of stormwater drainage upgrades at the Inuvik Airport. After reviewing the Application and the evidence gathered during the regulatory proceeding, the Board has made the following decisions:

- 1) To issue Water Licence G23L8-002 for a term of 5 years, and
 - a. To approve the associated Waste Management Plan V.1.0;
 - b. To approve the associated Spill Contingency Plan V.1.0;
 - c. To approve the associated Engagement Plan V.1.0;
 - d. To approve the associated Erosion and Sediment Control Plan V.1.0;
 - e. To approve the associated Environmental Monitoring Plan V.1.0 as an interim submission and to further require GNWT INF to submit Environmental Monitoring Plan V.1.1 to the Board for conformity determination within 90 days of Licence issuance; and
 - f. To require GNWT INF to submit to the Board for approval a Traditional Knowledge/ Traditional Use study to the Board for approval, within 6 months of Licence issuance.

These Reasons for Decision set out the Board's regulatory process for the Application and rationale for decisions regarding the Licence.

2.0 REGULTORY PROCESS

2.1 Summary of Application

On May 31, 2023, GNWT INF applied to the GLWB for Type B Water Licence G23L8-002 for a period of twenty-five years.¹ The purpose of this licence is to authorize the deposit of waste in association with the re-construction and subsequent operation and maintenance of the surface water drainage system at the Inuvik Mike Zubko Airport.

The project will change the flow paths and discharge locations for the water that runs off the Airport lands into Chii Zhìt Van (Dolomite Lake/Airport Lake) and East Lake. It will involve constructing new drainage ditches and culverts within the existing airport property, including the runway, taxiways, and the natural areas to the east and west of the airport. The purpose of the drainage design is to prevent surface water from ponding around the runway and minimize further permafrost degradation in order to stabilize the runway, embankments, and vertical infrastructure.

During construction, mitigation methods will be applied to prevent erosion and subsequent sediment loading onto the receiving waters. Suspended solids can impact fish and fish habitat and may be considered a Waste under the Waters Act. Because Project activities have the potential to increase sediment loading into parts of Chii Zhit Van and East Lake, a Licence Application for Waste deposit was made to the Board.

Description of Undertaking

The purpose of the drainage design is to prevent surface water from ponding around the runway and minimize further permafrost degradation in order to stabilize the runway, embankments, and vertical infrastructure (i.e., buildings). The proposed drainage paths and outfall locations are and described as follows:

• Stormwater that used to flow over the Public Quarry Road to OF_01 will be diverted southeast to design condition OF_02, thereby reducing surface flow through the active quarry area and increasing surface flow and runoff volume to OF_02.

¹ See GLWB online registry for <u>GNWT INF-Inuvik Airport Drainage-Cover Letter and Water License Application Form-May31_23.pdf</u>

G23L8-002 – GNWT INF Inuvik Airport Drainage Upgrades – Type B Water Licence - RFD

- The ditch on the east side of the Public Quarry Road will be realigned to drain approximately 175 m east of the Public Quarry Road to avoid blasting an existing rock formation to create the larger drainage channel if the existing OF_02 location was retained.
- Stormwater that flows along the southeast section of the runway will flow in a newly constructed ditch along the south side of the runway and be reconnected to the existing natural drainage path that flows to Chii Zhit Van (OF_03). The existing natural drainage path that flows from the southeast side of the runway to Chii Zhit Van (OF_03) will not be altered. There will be less flow and volume of runoff that enters Chii Zhit Van from this location because the stormwater from the east of Taxiway E will be diverted to East Lake (OF_04).
- Stormwater that used to flow from the existing Taxiway E ditch line will be diverted to East Lake by the newly constructed drainage channel to OF_04, thereby increasing the flow and volume to East Lake.

Construction of the drainage ditches will include the following activities:

- Clearing and grubbing of vegetation and soil (approximately 110 hectares [ha]);
- Using blast rock material from the quarries as embankment fill and screened rock in the drainage ditches;
- Excavating ground and grading ditches (side slopes at 4:1 slope);
- Installing gabion basket check dams (blast rock encased in wire mesh) in ditches where water velocity will be greater than 2 metres per second (m/s);
- Installing non-woven geotextile and screened rock in ditches where water velocity will be greater than 1 m/s;
- Hydroseeding ditches with a native grass seed mix;
- Installing culverts with screen rock aprons; and
- Installing gabion baskets and gabion mat splash pad at the two new outfall locations, above the ordinary high water mark of both lakes.

The following erosion and sediment control measures will be incorporated into the design:

- Gabion basket check dams, which are rocks typically encased in wire mesh, will be installed at intervals where water velocity will be greater than 2 m/s.
- Ditches will be armoured with screened rock over non-woven geotextile in sections where water velocity will be greater than 1 m/s.
- A screened rock apron will be installed around the culverts.
- Gabion baskets will be installed at the end of the two new outfall locations (OF_02 and OF_4), approximately 5 m above the ordinary high-water mark of Dolomite Lake and 18 m above the ordinary high-water mark of East Lake.
- Ditches will be hydroseeded with a native grass mix where screened rock is not required.

Contents of Application G23L8-002

- Water licence Application form
- Figures 3-1, 3-2, 3-3, and 3.4 (Attachment A)
- Design drawings (Attachment B)
- Drainage Design draft report (Attachment C)
- Environmental Monitoring Plan (Attachment D)
- Erosion and Sediment Control Plan (Attachment E)
- Spill Contingency Plan (Attachment F)
- Hazardous Material Response Plan (Attachment G)
- Engagement Plan and Record (Attachment H)
- Preliminary Environmental Screening Report (Attachment I)
- Phase II and Phase III Environmental Site Assessment, 2007 (Attachment J)
- Inuvik Airport Quarry Pit Expansion Archaeological Impact Assessment (Attachment K)
- Prince of Wales Northern Heritage Centre review (Attachment L)

2.2 Timeline

On May 31, 2023, the Applicant submitted Licence Application G23L8-002. The Application was deemed complete on June 9, 2023 and circulated to the Distribution List for public review, using the Online Review System (ORS).² As part of the public review, Board staff requested comments and recommendations to assist the Board in reaching its preliminary screening determination and developing appropriate terms and conditions for the licence.

Public notice of the Application was published in *the Inuvik Drum* during the weeks of June 22, 2023 and June 29, 2023 to fulfill paragraph 43(1)(a) of the <u>Waters Act</u>.³

By the comment deadline of June 30, 2023, the following Parties submitted comments and recommendations regarding the Application to the ORS:⁴

- Gwich'in Tribal Council Dept of Cultural Heritage (GTC DCH); and
- Environment and Climate Change Canada (ECCC).

The Applicant did not respond to reviewer comments by the response deadline of July 7, 2023.

² See GLWB Online Review System for Inuvik Airport Drainage Upgrades - Type B Water Licence Application (G23L8-002)

³ See GLWB Online Registry for <u>GNWT INF-Inuvik Airport Drainage- Notification of Application Inuvik Drum - Jun22 23</u>

⁴ See GLWB Online Registry for <u>GNWT INF-Inuvik Airport Drainage-Application Review Comments – Sep12_23.pdf</u>

On July 21, 2023, Board Staff circulated a draft Water Licence for Public Review on the ORS⁵. By the comment deadline of August 7, 2023 the following Parties submitted comments and recommendations regarding the Application to the ORS: ⁶

• Gwich'in Tribal Council – Dept of Lands and Resources

The Applicant responded to reviewer comments and recommendations on the draft water licence by the August 11, 2023 response deadline.

On September 12, 2023 the Board met and made its preliminary screening determination for the Project.⁷

On September 12, 2023 the Board met to make decisions regarding the Application. These decisions and related reasons are described in sections 3.0 and 4.0, below.

3.0 <u>REASONS - Legislative Requirements Related to Licence Issuance</u>

This Project is located on non-federal lands and is subject to the <u>MVRMA</u>, the <u>Waters Act</u>, and the <u>Waters</u> <u>Regulations</u>. As per the <u>Waters Regulations</u> the proposed use of water and the deposit of waste for this Project require a licence. Accordingly, the Board has jurisdiction to issue the Licence per subsection 60(1.1) and section 102 of the <u>MVRMA</u>.

In conducting its regulatory process for the Application (as described in section 2.0 above), the Board has ensured that section 62 of the <u>MVRMA</u> 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 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 <u>MVRMA</u>. The consideration of information provided to the Board is discussed in detail below and in section 4.0.

3.1 Consultation, Engagement, and Public Notice

As per paragraph 60.1(a) of the <u>MVRMA</u>, 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, specifically those 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

⁵ GLWB Online Review System for <u>Draft Water Licence - Inuvik Airport Drainage Upgrades - (G23L8-002)</u>

⁶ See GLWB Online Registry for <u>GNWT INF-Inuvik Airport Drainage-Draft WL Review Comments – Sep12 23.pdf</u>

⁷ See GLWB Online Registry for <u>Preliminary Screening Determination and RFD – Sep12_23</u>

G23L8-002 – GNWT INF Inuvik Airport Drainage Upgrades – Type B Water Licence - RFD

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 MVLWB <u>Engagement and Consultation Policy</u> and <u>Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits</u>. 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 clearly articulated.

The Application was posted to the Board's Public Registry and distributed through the ORS. As the Project is located in the Gwich'in Settlement Area, the appropriate organizations, governments, First Nations, and Indigenous organizations were included in the Distribution List.⁸ The Distribution List was used throughout this proceeding to circulate submissions, information, and updates relevant to the proceeding. More information about the proceeding for the Applications is provided above in section 4.0.

In accordance with the Policy and Guidelines, the Applicant's engagement efforts and proposed procedures are detailed in the Engagement Record and Plan respectively, submitted with the Application.

The Board is satisfied that the level of engagement undertaken by the Applicant is appropriate for the nature of the undertaking and confirm that it satisfies the requirements of the LWB Engagement Policy.

The Board has approved the Applicant's Engagement Plan, and the Board's reasons for this decision are described below in section 4.0 Following issuance, the Applicant must continue engagement efforts as outlined in the Engagement Plan, once approved, and as required in the Licence.

In accordance with sections 63 and 64 of the <u>MVRMA</u>, the Board is satisfied that notice of and access to copies of the Application were 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.

3.2 Land Use Plan Conformity

As per section 61 of the <u>MVRMA</u>, where an approved Land Use Plan (GLUP) applies, the Board must confirm conformity with the Land Use Plan before issuing a permit or licence.

⁸ See GLWB Online Review System for luvik Airport Drainage Upgrades - Type B Water Licence Application Distribution list

G23L8-002 – GNWT INF Inuvik Airport Drainage Upgrades – Type B Water Licence - RFD

The Gwich'in Land Use Plan (GLUP) considers all lands within the Gwich'in Settlement Area.⁹ However, in accordance with Section 3.3 of the Plan, the GLUP does not apply to lands within the boundaries of a municipal government. The Board is thus satisfied that its referral obligations to the GLUP have been satisfied.

3.3 Water Use Fees

There is no water use associated with this project, thus no water use fees are contemplated. This section is intentionally left blank.

3.4 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 Project on other projects, and there are no other applicants with precedence. Accordingly, with respect to paragraph 26(5)(a) of the <u>Waters Act</u>, Board is satisfied that issuing the 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.

3.5 Compensation to Existing Water Users

Paragraph 26(5)(b) of the <u>Waters Act</u> prohibits the issuance of the 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, or deposit of waste proposed by the Applicant, at the time when the Applicant filed the Applications with the Board.

The Board received no claims for compensation 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 or deposit of waste.

3.6 Water Quality Standards

With regards to subparagraph 26(5)(c)(i) of the <u>Waters Act</u> no effluent quality standards have been prescribed in the <u>Waters Regulations</u>; however, the MVLWB <u>Waste and Wastewater Management Policy</u> applies to the Licence, and the primary objective of the Policy is "protection of water quality in the receiving environment." This objective is directly reflected in the Licence Condition OBJECTIVE – WATER AND WASTE MANAGEMENT, and in accordance with the Policy and this objective, the Board has set out conditions in the Licence regarding water and waste management, and management plan requirements.

⁹ See.gwichinplanning.nt.ca for <u>Nanh' geenjit gwitr'it t'igwaa'in/Working for the Land - Gwich'in Land Use Plan</u>

G23L8-002 – GNWT INF Inuvik Airport Drainage Upgrades – Type B Water Licence - RFD

In the absence of prescribed standards, the Policy sets out when and how the Board will include EQC and/or other requirements in a licence to protect water quality in the receiving environment. As described in section 4.0 of these Reasons, based on the evidence gathered during this proceeding, the Board did not include EQC in the Licence. The Board has, however, set out other effluent management requirements in the Licence conditions and is nonetheless satisfied that these conditions are consistent with the LWB *Waste and Wastewater Management Policy*, and that compliance with these conditions will ensure that effluent is disposed of in a manner that will be protective of water quality in the receiving environment. These conditions and detailed rationale are described in

The Board is satisfied that the conditions set out in the Licence are consistent with the Policy and compliance with these conditions will ensure that waste will be collected and disposed of in a manner that will be protective of water quality in the receiving environment. These conditions and detailed rationale are described in Section 4.

3.7 Effluent Quality Standards

With regards to subparagraph 26(5)(c)(ii) of the <u>Waters Act</u> no effluent quality standards have been prescribed in the <u>Waters Regulations</u>; however, as noted in section 5.9 above, the MVLWB <u>Water and</u> <u>Effluent Quality Management Policy</u> applies to the Licence. In the absence of prescribed standards, the Policy sets out when and how the Board will include EQC in a licence to protect water quality in the receiving environment, and Appendix 2 of the MVLWB/GNWT <u>Guidelines for Mixing Zones</u> describes the general principles and standard process the Land and Water Boards (LWBs) will apply in setting EQC for a Licence. As described in <u>section 4</u> of these Reasons, based on the evidence gathered during this proceeding, the Board did not include EQC in the Licence. The Board has, however, set out other effluent management requirements in the Licence conditions and is nonetheless satisfied that these conditions are consistent with the LWB <u>Waste and Wastewater Management Policy</u>, and that compliance with these conditions will ensure that effluent is disposed of in a manner that will be protective of water quality in the receiving environment.

3.8 Financial Responsibility

As per paragraph 26(5)(d) of the <u>Waters Act</u>, before the Board can issue the Licence, it must be satisfied that the Applicant's financial responsibility is adequate to complete the Project, including 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 <u>Waters Act</u> and Licence.

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

3.9 Minimization of Adverse Effects

With regards to subsection 27(2) of the <u>Waters Act</u>, the Board must ensure that the Licence conditions minimize potential adverse effects on other water and land users from the proposed use of water and deposit of waste. As discussed above in section 3.1, 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 on other users of the water and lands in the Project area. The Board has also confirmed that the Project conforms with the *Gwich'in Land Use Plan*.

The Board has set conditions in the Licence to regulate waste management for the purpose of protecting the receiving environment, and it has also set conditions regarding 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.

3.10 Time Limit

As required under section 48(1) of the <u>Waters Act</u>, the Board made its decision on the Licence within nine months after receiving the complete Application.

3.11 Preliminary Screening

On September 12 2023 the Board met and undertook its preliminary screening decision. In accordance with section 125 of the <u>MVRMA</u>, the Board notified the Review Board of its preliminary screening determination,¹⁰ 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 environmental assessment (EA). Subsequently, the Board proceeded with issuing the Licence.

The Board is satisfied that the requirements of Part 5 of the MVRMA have been met for the Project.

¹⁰ See GLWB Online Registry for GNWT INF - Inuvik Airport Drainage Upgrades - Notice of Preliminary Screening Determination - Sep12_23

G23L8-002 – GNWT INF Inuvik Airport Drainage Upgrades – Type B Water Licence - RFD

4.0 <u>REASONS - Licence Terms and Conditions</u>

The Board's determinations and reasons for this decision are set out below.

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 Licence; and
- 3) The comments and recommendations, evidence, and submissions received by the Board from Parties during the regulatory proceeding.

Having due regard to the facts, circumstances, and the merits of the submissions made to it, and to the purpose, and provisions of the <u>MVRMA</u> and the <u>Waters Act</u>, the Board has determined that Licence G23L8-002 should be issued, subject to the scope, defined terms, conditions, and term contained therein.

The 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 developing the Licence, the Board considered the MVLWB <u>Standard Water Licence Conditions Template</u> (Standard Licence Conditions) and included a number of these standard conditions that are relevant to the Project. 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).

As noted in <u>section 3.0</u>, Board staff circulated a draft Licence for review. The Draft Licence was developed using the MVLWB Standard Water Licence Conditions Template, and comments and recommendations submitted to the Board during the public review process. The intent of the draft licence to allow Parties to provide specific input to the Board on possible conditions, and the Board considered these review comments and recommendations in making its determination on the Licence conditions. The Standard Licence Conditions include general rationale for each standard condition, and as such, the language of any standard condition included in the Licence is only discussed in detail in the following sections of these Reasons for Decision when it specifically relates to concerns or recommendations raised during the regulatory proceeding. The Board's reasons for developing and including Project-specific conditions,

including discussion of any concerns and recommendations raised regarding these conditions, are detailed in the relevant sections below.

4.1 Term of Licence

The Applicant has applied for a Licence term of twenty-five (25) years. Subsection 26(2) of the <u>Waters Act</u> allows for a licence term of not more than 25 years for a type B licence.

During the public review period, no comments or recommendations pertaining to the Licence term were submitted to the Board.

After reviewing the submissions made during this regulatory process, the Board has determined an appropriate term for the Licence is five years. A five-year Licence term is consistent with the term of other Type B Licences issued by the Boards and will allow the Board to revisit the Licence post-construction to ensure the conditions, monitoring program and management plans remain appropriate for the Project activities.

4.2 Part A: Scope and Defined Terms

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

4.2.1 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 <u>MVRMA</u>. In setting out the scope of the Licence, the Board endeavoured to provide enough detail to identify and describe the authorized activities, without being unduly restrictive or prescriptive, and to allow for project flexibility, as contemplated in the Application, throughout the term of the Licence.

Based on the activities described in the Licence Application and on the scope outlined in the Standard Licence Conditions, Board staff included a draft scope in the draft Licence that was circulated for public review. The Board did not receive any comments or recommendations regarding the draft scope during the proceeding, so the Board accepted it as the scope of the Licence.

The conditions in Part A are consistent with the Standard Licence Conditions. These conditions ensure that the scope of the authorization includes all water use and deposits of waste associated with the Project. They also clarify that the Licensee must comply with applicable legislation, including any changes to legislation that are deemed to automatically amend the Licence.

4.2.2 Defined Terms

The Board defined certain terms in the Licence to ensure a common understanding of the conditions, to avoid future differences in interpretation of the Licence, to reflect Project-specific evidence, and to support consistency across licences and permits issued by the LWBs. For the most part, the Board selected applicable defined terms relevant to the Project from the Standard Licence Conditions. Part B: General Conditions and Schedule 1.

4.3 Part B: General Conditions and Schedule 1

Part B 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 and review and revision procedures for submissions required under the Licence. These conditions are consistent with the Standard Licence Conditions and are applicable to all licences.

PART B: COMPLY WITH SURVEILLANCE NETWORK PROGRAM and Schedule 1

A Surveillance Network Program (SNP) is set out in Schedule 1 of the Licence. The SNP details the sampling and monitoring requirements related to compliance with several conditions in the Licence. Requirements for measuring flows, volumes, and meteorological data are based on standard licence conditions as are the reporting requirements. The Board can update the SNP in accordance with Condition UPDATES TO SCHEDULES AND COMPLIANCE DATE(S).

SNP locations and sampling parameters were proposed by GNWT INF in Environmental Monitoring Program V.1.0, which was submitted to the Board as part of the Application materials. During the Public review ECCC recommended that the SNP parameters be updated to include dissolved oxygen and biological oxygen demand. The Board subsequently updated the SNP program to reflect these recommendations.

Part B: UPDATES TO SCHEDULES AND COMPLIANCE DATES

Compliance dates are included in the Licence conditions for various submissions and other requirements, and Schedules are appended to the Licence to set out the detailed requirements associated with specific conditions in the main body of the Licence. The purpose of the Schedules is to provide greater clarity and to aid in interpretation of Licence conditions.

This standard Condition is included in the Licence to clarify that the Board may, at its discretion, update compliance dates, the Schedules, and the SNP, and that such updates are not considered amendments to the Licence, unless otherwise directed by the Board. Such updates may be requested by the Licence

in writing at least 90 days in advance or may be initiated by the Board based on the information available to it, and will undergo the Board's public review process before being considered by the Board.

Part B: ANNUAL WATER LICENCE REPORT

The requirements for the Annual Water Licence Report are outlined in Part B: ANNUAL LICENCE REPORT, and Schedule 2, Condition 1. The purpose of the Annual Water Licence Report is to provide the Board and all interested parties the opportunity to be annually updated on Project components and activities and compliance with Licence conditions, and to provide a platform for interested parties to submit comments, observations, feedback, and questions as necessary. The Report is also an important tool for evaluating the effectiveness of the Licence conditions.

In establishing the Annual Report requirements in the Licence, the Board primarily included requirements from the Standard Licence Conditions that are applicable to the Project and reflect the Licence conditions. All of these requirements are intended to provide clarity and summarize information already captured through existing submissions; they are not meant to be onerous. The Board organized these requirements to coincide with the layout of the Licence and to be consistent with the Standard Licence Conditions.

The Annual Water Licence Report is not subject to Board approval. The Annual Report is a submission of monitoring results and activities undertaken during the previous year. If Parties review and have concerns regarding the results reported or activities undertaken as reported in theAnnual Report, they can be discussed directly with the Town or addressed through the Board. Annual Reports are posted to the Board's registry, distributed for review and comment, and presented to the Board, even if it is not for approval. Any issues identified can be addressed through a similar process as that with other plans.

For clarity, Annual Water Licence Reports are required each year, regardless of whether the Licensee has conducted any activity during the reporting year.

Part B: ENGAGEMENT PLAN - APPROVED

As explained in section 3.1 above, the Board assesses engagement adequacy through the MVLWB <u>Engagement and Consultation Policy</u> and <u>Engagement Guidelines for Applicants and Holders of Water</u> <u>Licences and Land Use Permits</u>.

The Board has approved the Engagement Plan, Version 1 because it meets the requirements of the Policy and Guidelines and is appropriate for the Project activities.

4.4 Part C: Conditions Applying to Security Requirements

The Board did not include security requirements in the Licence. As per section 94 of the <u>MVRMA</u>, territorial and federal governments are not required to post security for permits; although this exemption does not apply to licences, it has been Board practice to not require security for municipal projects when the applicant is a community government. The Board is satisfied that the Licensee will be accountable for carrying out closure and reclamation even though a security deposit is not required.

4.5 Part D: Conditions Applying to Water Use

No water withdrawal is contemplated by this Project. This section is left intentionally blank.

4.6 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. These are consistent with the Standard Licence Conditions. These conditions ensure that Engineered Structures are built to appropriate standards and require the submission of design and engineering reports. The Board can ensure that monitoring requirements are in place prior to, during, and post-construction.

4.7 Part F: Conditions Applying to Waste and Water Management and Schedule 3

Part F of the Licence contain conditions applying to Waste and Water management activities for the Project. These are consistent with the Standard Licence Conditions.

Part F: WASTE MANAGEMENT PLAN - APPROVED

All applicants must submit detailed waste management information, identifying all types of waste that will be produced by the project (including quantity and quality) and describing the disposal methods that are proposed for each type of waste. For most applicants, this will be in the form of a Waste Management Plan, developed in accordance with the LWB <u>Guidelines for Developing a Waste Management Plan</u>, ¹¹ and licences and permits will include standard conditions regarding compliance with the Plan, as approved by the Board. The Guidelines can be applied to a wide range of projects and are intended to ensure that all waste management activities are carried out in a way that is consistent with best practices and applicable guidelines to minimize waste released from a project.

¹¹ See GLWB Policies and Guidelines webpage to access the LWB <u>Guidelines for Developing a Waste Management Plan</u>.

G23L8-002 – GNWT INF Inuvik Airport Drainage Upgrades – Type B Water Licence - RFD

In lieu of submitting a stand-alone Waste Management Plan, the Licensee described the proposed waste management activities in the Application Form. In this case, the Board considered this information equivalent to a Waste Management Plan.

During the public review of the Application, no concerns were raised regarding the Waste Management Plan.

The Board has approved the Waste Management Plan, Version 1.0 because it meets the requirements of the Guidelines and is appropriate for the Project activities.

Part F: ENVIRONMENTAL MONITORING PLAN – APPROVED, REVISIONS REQUIRED

GNWT - INF submitted an Environmental Monitoring Plan (EMP V.1.0) with the Application. The objective of the EMP V.1.0 is to provide guidance for surface water and sediment monitoring during both construction and regular operation of the airport. The monitoring plan is organized by monitoring requirements to be conducted during construction and during regular airport operations.

During the public review, ECCC recommended that the EMP be updated to include the Federal Environmental Quality guidelines in the list of guidelines to consider. ECCC recommended that the EMP be updated to include Dissolved oxygen and Biological Oxygen Demand, both of which can be indicators of glycols in the receiving waters. ECCC recommended that glycol monitoring take place within the discharge channel rather than the receiving environment.

Based on the Applicant's responses to public comments, and the additional information provided by GNWT-INF, the Board has chosen to approve the EMP V.1.0, but requires that the Licensee revise the Plan and submit Version 1.1 within 90 days of the effective date of the Licence, to reflect the updates that were recommended during the public review. This update shall include additional sampling parameters Dissolved Oxygen and Biological Oxygen demand, and a requirement to sample both at the point of discharge and where the waste enters the receiving waters.

Part F: EROSION AND SEDIMENT CONTROL PLAN – APPROVED

GNWT - INF submitted a Spill Contingency Plan (ESCP V.1.0) with the Application. The objective of ESCP V.1.0 is to . During the Public Review, no comments or recommendation on ESCP V.1.0 were submitted to the Board. The Board has approved SCP V.1.0 because it appropriate for the Project activities.

Part F: EFFLUENT QUALITY CRITERIA

The Board's approach to managing the deposit of waste to the receiving environment through water licence conditions is described in the MVLWB <u>Water and Effluent Quality Management Policy</u>.

G23L8-002 – GNWT INF Inuvik Airport Drainage Upgrades – Type B Water Licence - RFD

The Licence does not include Effluent Quality Criteria. This section is therefore intentionally left blank.

4.8 Part H: Conditions Applying to Contingency Planning

Part H of the Licence contains conditions related to spill contingency planning and reporting, reclamation of spills and unauthorized discharges, and emergency response for the Project. These conditions are consistent with the Standard Licence Conditions.

Part H: SPILL CONTINGENCY PLAN

All applicants must describe spill contingency planning. For most applicants, this will be in the form of a Spill Contingency Plan (SCP), developed in accordance with the INAC Guidelines for Spill Contingency Planning, and licences and permits will include standard conditions regarding compliance with the Plan, as approved by the Board.

The Licensee included SCP V.1.0 in the Application. The Board considered this Plan as part of the Application Package. During the public review, no comments or recommendations pertaining to SCP V.1.0 were submitted to the Board.

The Board has approved SCP V.1.0 because it meets the requirements of the Guidelines and is appropriate for the Project activities.

4.9 Part I: Conditions Applying to Closure and Reclamation and Schedule 3

Part I and Schedule 3 of the Licence contain conditions applying to closure and reclamation, including progressive reclamation of the Project. These are consistent with the Standard Licence Conditions

Part I: CLOSURE AND RECLAMATION PLAN

Closure and Reclamation was not contemplated by this Project, as the Inuvik Mike Zubko Airport is expected to continue operations indefinitely. This section is intentionally left blank.

4.10 Annex A: Surveillance Network Program

Annex A of the Licence contains conditions applying to the Surveillance Network Program (SNP). The SNP details the sampling and monitoring requirements related to compliance with several conditions in the Licence. Requirements for measuring flows, volumes, and other data are based on standard licence conditions as are the reporting requirements.

4.11 Annex B: Table of Submissions

Annex B of the Licence contains a table that summarizes the submissions required by the Licence conditions.

4.12 Annex C: Table of Revision History

Annex C of the Licence contains a table which identifies updates and tracks changes made to the Licence. This table is currently blank because this is a new Licence, but it will be updated throughout the life of the Licence.

4.13 Traditional Knowledge

During the public review of the Application materials, GTC DCH recommended that at traditional use/traditional knowledge/history project be undertaken. During the public review of the Draft Water Licence GTC DLR recommended that GNWT INF Complete a full and thorough Traditional Knowledge (TK) study before the completion of the drainage upgrades program. The Board has accepted this recommendation and has included the requirement to submit a TK study to the Board for approval with 6 months of licence issuance.

5.0 <u>Conclusion</u>

Subject to the scope, definitions, conditions, and terms set out in the Licence, and for the reasons expressed herein, the GLWB is of the opinion that 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 G23L8-002 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 use of water and deposit of waste as authorized by the Licence.

SIGNATURE

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September 12, 2023

Elizabeth Wright, Chair Gwich'in Land and Water Board

Date

G23L8-002 – GNWT INF Inuvik Airport Drainage Upgrades – Type B Water Licence - RFD