

# **DRAFT Type B Water Licence G23L8-002**

## **Inuvik Airport Drainage Upgrades**

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## Part A: Scope and Defined Terms

### Scope:

		Condition Title
1.	<p>This Licence entitles the Licensee to carry out Water Use and Deposit of Waste for miscellaneous activities at the Mike Zubko Airport, Inuvik NT.</p> <p>The scope of this Licence includes the following:</p> <ul style="list-style-type: none"><li>a) Construction, operation, and maintenance of stormwater drainage system upgrades;</li><li>b) Progressive Reclamation and associated Closure and Reclamation activities.</li></ul>	SCOPE
2.	<p>This Licence is issued subject to the conditions contained herein with respect to the use of Water and the deposit of Waste in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposits of such Waste may enter any Waters. Any change made to the <i>Waters Act</i> and/or the Waters Regulations that affects licence conditions and defined terms will be deemed to have amended this Licence.</p>	LEGISLATION SUBJECT TO CHANGE
3.	<p>Compliance with this Licence does not relieve the Licensee from responsibility for compliance with the requirements of any applicable federal, territorial, or municipal legislation.</p>	LEGISLATIVE COMPLIANCE

## Defined Terms

**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*

	<b>Condition</b>	<b>Condition Title</b>
	<b>Part B: General Conditions</b>	
1.	The Licensee shall ensure a copy of this Licence is maintained on site at all times.	<b>COPY OF LICENCE</b>
2.	The Licensee shall take every reasonable precaution to protect the environment.	<b>PRECAUTION TO PROTECT ENVIRONMENT</b>
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.	<b>INCORPORATE SCIENTIFIC INFORMATION AND TRADITIONAL KNOWLEDGE</b>
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.	<b>IDENTIFY TRADITIONAL KNOWLEDGE</b>
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.	<b>REFERENCES</b>
6.	The Licensee shall ensure all submissions to the Board: <ul style="list-style-type: none"> <li>a) Are in accordance with the MVLWB <i>Document Submission Standards</i>;</li> <li>b) Include a conformity statement or table which identifies where the requirements of this Licence, or other directives from the Board, are addressed; and</li> <li>c) Include any additional information requested by the Board.</li> </ul>	<b>SUBMISSION FORMAT AND</b>
7.	The Licensee shall ensure management plans are submitted to the Board in a format consistent with the MVLWB <i>Standard Outline for Management Plans</i> , unless otherwise specified.	<b>MANAGEMENT PLAN FORMAT</b>

8.	The Licensee shall comply with all plans - including revisions, approved pursuant to the conditions of this Licence.	<b>COMPLY WITH SUBMISSIONS AND REVISIONS</b>
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.	<b>ANNUAL REVIEW</b>
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.	<b>REVISIONS</b>
11.	The Licensee shall revise any submission and submit it as per the Board's directive.	<b>REVISE AND SUBMIT</b>
12.	If any date for any submission falls on a weekend or holiday, the Licensee may submit the item on the following business day.	<b>SUBMISSION DATE</b>
13.	The Licensee shall comply with the <b>Schedules</b> , which are annexed to and form part of this Licence, and any updates to the Schedules as may be made by the Board.	<b>COMPLY WITH SCHEDULE(S)</b>
14.	The Licensee shall comply with the <b>Surveillance Network Program</b> set out in Schedule 1, and any updates to the Surveillance Network Program as may be made by the Board.	<b>COMPLY WITH SURVEILLANCE NETWORK PROGRAM</b>
14.	The Schedules, the Surveillance Network Program, and any compliance dates specified in this Licence may be updated at the discretion of the Board.	<b>UPDATES TO COMPLIANCE DATE(S)</b>
15.	The Licensee shall comply with all directives issued by the Board in respect of the implementation of the conditions of this Licence.	<b>COMPLY WITH BOARD DIRECTIVES</b>

17.	Beginning March 31, 2023 and no later than every March 31 thereafter, the Licensee shall submit an <b>Annual Water Licence Report</b> to the Board and an Inspector. The Report shall be in accordance with the requirements of Schedule 1, Condition 1.	<b>ANNUAL WATER LICENCE REPORT</b>
18.	The Licensee shall comply with the <b>Engagement Plan</b> , once approved.	<b>ENGAGEMENT PLAN</b>
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.	<b>NOTIFICATION – COMMENCEMENT</b>
20.	The Licensee shall immediately provide written notification to the Board and an Inspector of any non-compliance with the conditions of this Licence.	<b>NOTIFICATION – NON-COMPLIANCE</b>
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.	<b>NOTIFICATION – NON-COMPLIANCE WITH DIRECTIVES</b>
22.	The Licensee shall ensure that a copy of any written authorization issued to the Licensee by an Inspector is provided to the Board.	<b>COPY – WRITTEN AUTHORIZATION</b>
	<b>Part C: Security</b>	
	<i>Section Left Intentionally Blank</i>	
	<b>Part D: Water Use</b>	
	<i>Section Left Intentionally Blank</i>	
	<b>Part E: Construction</b>	
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.	<b>OBJECTIVE – CONSTRUCTION</b>

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.	<b>CONSTRUCTION MATERIAL – SOURCE(S)</b>
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.	
<b>Part F: Waste and Water Management</b>		
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.	<b>OBJECTIVE – WASTE AND WATER MANAGEMENT</b>
2.	The Licensee shall deposit all Waste as described in the approved <b>Waste Management Plan</b> .	<b>WASTE MANAGEMENT PLAN</b>
3.	The Licensee shall comply with the <b>Sediment and Erosion Control Plan</b> , once approved.	<b>SEDIMENT CONTROL</b>
4.	The Licensee shall comply with the <b>Environmental Monitoring Plan</b> , once approved.	<b>ENVIRONMENTAL MONITORING PLAN</b>
<b>Part G: Aquatic Effects Monitoring</b>		
<i>Section Left Intentionally Blank</i>		
<b>Part H: Spill Contingency Planning</b>		
1.	The Licensee shall ensure that Unauthorized Discharges associated with the Project do not enter any Waters.	<b>OBJECTIVE – PREVENT WASTE INTO WATER</b>



2.	The Licensee shall comply with the <b>Spill Contingency Plan</b> , once approved.	<b>SPILL CONTINGENCY PLAN</b>
4.	<p>If a spill or an Unauthorized Discharge occurs or is foreseeable, the Licensee shall:</p> <p>a) Implement the approved Spill Contingency Plan referred to in Part H, Condition x;</p> <p>b) Report it immediately using the NU-NT Spill Report Form by one of the following methods:</p> <ul style="list-style-type: none"> <li>• Telephone: (867) 920-8130</li> <li>• E-mail: spills@gov.nt.ca</li> <li>• Online: Spill Reporting and Tracking Database</li> </ul> <p>c) Notify the Board and an Inspector immediately; and</p> <p>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.</p>	<b>REPORT SPILLS</b>
5.	The Licensee shall ensure that spill prevention infrastructure and spill response equipment is in place prior to commencement of the Project.	<b>SPILL PREVENTION AND RESPONSE EQUIPMENT</b>
6.	The Licensee shall restore all areas affected by spills and Unauthorized Discharges to the satisfaction of an Inspector.	<b>CLEAN UP SPILLS</b>
<b>Part I: Closure and Reclamation</b>		
1.	The Licensee shall endeavor to carry out approved Progressive Reclamation as soon as is reasonably practicable.	<b>PROGRESSIVE RECLAMATION</b>

## 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 **DATE**.
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	<b>TBD</b>	Three times per year: <ul style="list-style-type: none"> <li>• Freshet Melt</li> <li>• Summer rain event</li> <li>• Fall rain event</li> </ul>	<ul style="list-style-type: none"> <li>• pH</li> <li>• Conductivity</li> <li>• Turbidity</li> <li>• Total Suspended Solids</li> <li>• CBOD<sub>5</sub></li> </ul>

				<ul style="list-style-type: none"> <li>• Total Arsenic</li> <li>• Total Cadmium</li> <li>• Total Chromium</li> <li>• Total Cobalt</li> <li>• Total Copper</li> <li>• Total Manganese</li> <li>• Total Mercury</li> <li>• Total Nickel</li> <li>• Total Lead</li> <li>• Total Iron</li> <li>• Total Zinc</li> <li>• Total Petroleum Hydrocarbons (F1 F2, F3, F4 CCME Fractions)</li> <li>• Benzene, Toluene, Ethylbenzene, and Xylene (BTEX)</li> <li>• Ethylene glycol</li> </ul>
SNP 2	Outfall 2.5	TBD	<p>Three times per year:</p> <ul style="list-style-type: none"> <li>• Freshet Melt</li> <li>• Summer rain event</li> <li>• Fall rain event</li> </ul>	<ul style="list-style-type: none"> <li>• pH</li> <li>• Conductivity</li> <li>• Turbidity</li> <li>• Total Suspended Solids</li> <li>• CBOD<sub>5</sub></li> <li>• Total Arsenic</li> <li>• Total Cadmium</li> <li>• Total Chromium</li> <li>• Total Cobalt</li> <li>• Total Copper</li> <li>• Total Manganese</li> <li>• Total Mercury</li> <li>• Total Nickel</li> <li>• Total Lead</li> <li>• Total Iron</li> <li>• Total Zinc</li> <li>• Total Petroleum Hydrocarbons (F1 F2, F3, F4 CCME Fractions)</li> </ul>

				<ul style="list-style-type: none"> <li>• Benzene, Toluene, Ethylbenzene, and Xylene (BTEX)</li> <li>• Ethylene glycol</li> </ul>
SNP 3	Outfall 3	TBD	<p>Three times per year:</p> <ul style="list-style-type: none"> <li>• Freshet Melt</li> <li>• Summer rain event</li> <li>• Fall rain event</li> </ul>	<ul style="list-style-type: none"> <li>• pH</li> <li>• Conductivity</li> <li>• Turbidity</li> <li>• Total Suspended Solids</li> <li>• CBOD<sub>5</sub></li> <li>• Total Arsenic</li> <li>• Total Cadmium</li> <li>• Total Chromium</li> <li>• Total Cobalt</li> <li>• Total Copper</li> <li>• Total Manganese</li> <li>• Total Mercury</li> <li>• Total Nickel</li> <li>• Total Lead</li> <li>• Total Iron</li> <li>• Total Zinc</li> <li>• Total Petroleum Hydrocarbons (F1 F2, F3, F4 CCME Fractions)</li> <li>• Benzene, Toluene, Ethylbenzene, and Xylene (BTEX)</li> <li>• Ethylene glycol</li> </ul>
SNP 4	Outfall 4	TBD	<p>Three times per year:</p> <ul style="list-style-type: none"> <li>• Freshet Melt</li> <li>• Summer rain event</li> <li>• Fall rain event</li> </ul>	<ul style="list-style-type: none"> <li>• pH</li> <li>• Conductivity</li> <li>• Turbidity</li> <li>• Total Suspended Solids</li> <li>• CBOD<sub>5</sub></li> <li>• Total Arsenic</li> <li>• Total Cadmium</li> <li>• Total Chromium</li> <li>• Total Cobalt</li> <li>• Total Copper</li> </ul>

				<ul style="list-style-type: none"> <li>• Total Manganese</li> <li>• Total Mercury</li> <li>• Total Nickel</li> <li>• Total Lead</li> <li>• Total Iron</li> <li>• Total Zinc</li> <li>• Total Petroleum Hydrocarbons (F1 F2, F3, F4 CCME Fractions)</li> <li>• Benzene, Toluene, Ethylbenzene, and Xylene (BTEX)</li> </ul> <p>Ethylene glycol</p>
SNP 5	Reference – DL	TBD	<p>Three times per year:</p> <ul style="list-style-type: none"> <li>• Freshet Melt</li> <li>• Summer rain event</li> <li>• Fall rain event</li> </ul>	<ul style="list-style-type: none"> <li>• pH</li> <li>• Conductivity</li> <li>• Turbidity</li> <li>• Total Suspended Solids</li> <li>• CBOD<sub>5</sub></li> <li>• Total Arsenic</li> <li>• Total Cadmium</li> <li>• Total Chromium</li> <li>• Total Cobalt</li> <li>• Total Copper</li> <li>• Total Manganese</li> <li>• Total Mercury</li> <li>• Total Nickel</li> <li>• Total Lead</li> <li>• Total Iron</li> <li>• Total Zinc</li> <li>• Total Petroleum Hydrocarbons (F1 F2, F3, F4 CCME Fractions)</li> <li>• Benzene, Toluene, Ethylbenzene, and Xylene (BTEX)</li> <li>• Ethylene glycol</li> </ul>

SNP 6	Reference – EL	TBD	<p>Three times per year:</p> <ul style="list-style-type: none"> <li>• Freshet Melt</li> <li>• Summer rain event</li> <li>• Fall rain event</li> </ul>	<ul style="list-style-type: none"> <li>• pH</li> <li>• Conductivity</li> <li>• Turbidity</li> <li>• Total Suspended Solids</li> <li>• CBOD<sub>5</sub></li> <li>• Total Arsenic</li> <li>• Total Cadmium</li> <li>• Total Chromium</li> <li>• Total Cobalt</li> <li>• Total Copper</li> <li>• Total Manganese</li> <li>• Total Mercury</li> <li>• Total Nickel</li> <li>• Total Lead</li> <li>• Total Iron</li> <li>• Total Zinc</li> <li>• Total Petroleum Hydrocarbons (F1 F2, F3, F4 CCME Fractions)</li> <li>• Benzene, Toluene, Ethylbenzene, and Xylene (BTEX)</li> <li>• Ethylene glycol</li> </ul>
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## Schedule 2 Annual Water Licence Report

	<b>Condition</b>
1.	The <b>Annual Water Licence Report</b> 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 <b>Engagement Plan</b> , referred to in Part B, Condition 18 of this Licence;
	d) A summary of activities conducted in accordance with the approved <b>Spill Contingency Plan</b> , referred to in Part H, Condition 2 of this Licence, including: <ul style="list-style-type: none"> <li>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</li> <li>b. An outline of any spill training carried out.</li> </ul>
	e) A summary of activities conducted in accordance with the approved <b>Waste Management Plan</b> , referred to in Part F, Condition 2 of this Licence.
	f) A summary of activities conducted in accordance with the approved <b>Erosion and Sedimentation Management Plan</b> , referred to in Part F, Condition 3 of this Licence.
	g) A summary of activities conducted in accordance with the approved <b>Environmental Monitoring Plan</b> , referred to in Part F, Condition 4 of this Licence.
	h) A summary of any updates or revisions to the Spill Contingency Plan, Engagement Plan, Waste Management Plan, <b>Erosion and Sedimentation Management Plan</b> , and/or <b>Environmental Monitoring Plan</b> 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;
	l) 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.

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## 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

## 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

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