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NUNAVUT WATER BOARD  
NUNAVUT IMALIRIYIN KATIMAYINGI  
OFFICE DES EAUX DU NUNAVUT

**File No: 8BW-PIM2122**

July 22, 2021

Olivier Bédard-Richard  
Tower Arctic Ltd.  
1502 Federal Road P.O Box 717  
Iqaluit, NU X0A 0H0  
E-mail: [info@towerarctic.ca](mailto:info@towerarctic.ca)

**RE: NWB Water Licence No: 8BW-PIM2122**

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Dear Olivier Bédard-Richard:

Please find attached Licence No: **8BW-PIM2122** issued to Arctic Tower Ltd. by the Nunavut Water Board (NWB), pursuant to its authority under Article 13 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada (Nunavut Agreement)*. The terms and conditions of the attached Licence related to water use and Waste disposal are an integral part of this approval.

If the Licensee contemplates the renewal of this Licence, it is the responsibility of the Licensee to apply to the NWB for its renewal. The past performance of the Licensee, new documentation and information, and issues raised during a public hearing, if the NWB is required to hold one, will be used to determine the terms and conditions of the Licence renewal. Note that if the Licence expires before the NWB issues a new one, then the use of Water and deposit of Waste must cease, or the Licensee may be in contravention of the *Nunavut Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*. However, the expiry or cancellation of a licence does not relieve the holder from any obligations imposed by the licence. The NWB recommends that an application for the renewal of this Licence be filed at least three (3) months prior to the Licence expiry date.

If the Licensee contemplates or requires an amendment to this Licence, the NWB may decide, in the public's interest, to hold a public hearing. The Licensee should submit applications for amendment as soon as possible to give the NWB sufficient time to go through the amendment process. The process and timing may vary depending on the scope of the amendment; however, a minimum of sixty (60) days is required from time of acceptance by the NWB. It is the responsibility of the Licensee to ensure that all application materials have been received and are acknowledged by the Manager of Licensing.

The NWB strongly recommends that the Licensee consult the comments received from interested

persons on issues identified. This information is attached for your consideration.<sup>1</sup>

Sincerely,

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Lootie Toomasie  
Nunavut Water Board, Chair

LT/ak/rqd

Enclosure: Licence No: **8BW-PIM2122**

Comments – CIRNA

Cc: Qikiqtani Distribution List

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<sup>1</sup> Crown-Indigenous Relations and Northern Affairs (CIRNA) June 28, 2021.

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## **DECISION**

### **LICENCE NUMBER: 8BW-PIM2122**

This is the decision of the Nunavut Water Board (NWB) with respect to an application dated April 28, 2021, for a renewal water licence made by:

#### **TOWER ARCTIC LTD.**

to allow for the use of water to support construction activities at the Pond Inlet Marine Infrastructure Project, and associated haul road construction and water crossings, located within the Qikiqtani Region, Nunavut, generally at the following geographical coordinates:

Project Extents:

NW:	Latitude: 72° 42' 02.7" N	Longitude: 77° 59' 27.6" W
NE:	Latitude: 72° 42' 08.3" N	Longitude: 77° 52' 12.0" W
SE:	Latitude: 72° 40' 53.9" N	Longitude: 77° 52' 12.0" W
SW:	Latitude: 72° 40' 54.7" N	Longitude: 77° 59' 58.0" W

## **DECISION**

After having been satisfied that the Application is for a proposal that was previously reviewed by the Nunavut Planning Commission (NPC) and for which the conformity determinations, dated June 27, 2016, January 10, 2017, February 22, 2017, and May 14, 2019 remain applicable and is exempt from the requirements for screening as described within s. 12.4.3 / Schedule 12-1 of the *Nunavut Agreement* as determined by NPC<sup>1</sup>, the NWB decided that the application could proceed through the regulatory process. In accordance with s. 55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA or *Act*) and Article 13 of the *Nunavut Agreement*, public notice of the Application was given and interested persons were invited to make representations to the NWB.

After reviewing the submission of the Applicant and considering the representations made by interested persons, the NWB, having given due regard to the facts and circumstances, the merits of the submissions made to it and to the purpose, scope and intent of the *Nunavut Agreement* and of the *Act*, waived the requirement to hold a public hearing, and determined that:

**Renewal Licence No: 8BW-PIM2122 be issued subject to the terms and conditions contained therein. (Motion #: 2021-B1-07)**

Signed this 22<sup>nd</sup> day of JULY, 2021 at Gjoa Haven, NU.

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Lootie Toomasie  
Nunavut Water Board,  
Chair

LT/ak/rqd

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<sup>1</sup> Nunavut Planning Commission, Conformity Determination, April 20, 2021.

## I. PROJECT OVERVIEW

The objective of the Application is to obtain the water licence required to cross water courses for the Pond Inlet Marine Infrastructure Haul Road Project. The hauling road will make the 6-kilometers link between the quarry and the new small craft harbour being constructed at Pond Inlet. There are 11 potential water crossings at which a culvert will be placed to ensure the continuous water flow.

All other aspects of the Pond Inlet Marine Infrastructure Project related to water use and waste deposit will be covered through the Hamlet of Pond Inlet under their municipal Licence.

The Applicant intends to construct a new small craft harbour and associated infrastructure in Pond Inlet to improve marine access and safety by providing a protected harbour for private, local, and recreational users, community re-supply, as well as cruise ships and associated vessels.

At the end of the Project construction, haul road will be barricaded by the proponent with an earth berm to avoid use by local vehicles, and handed over to the municipality in useful condition and without potholes.

## II. PROCEDURAL HISTORY

The Nunavut Water Board (NWB or Board) received the above-mentioned application and supporting information (the Application) from Arctic Tower Ltd. (Tower Arctic or Applicant) between April 28 and May 26, 2021. The Application consisted of the following documents:

- Cover email dated April 28, 2021;
- Executive summary in English and Inuktitut;
- 8BW-PIM1821 Water Crossing Monitoring – 2020 Summary;
- Water licence application dated April 28, 2021;
- Authorization letter dated April 26, 2021;
- Map of culvert locations;
- Pre-development permit from the hamlet of Pond Inlet dated July 27, 2018;
- NPC determination dated February 22, 2017;
- NIRB screening decision dated October 2, 2017, and
- Revised 8BW-PIM1821 Water Crossing Monitoring – 2020 Summary.

The NWB distributed the Application on May 20, 2021 with the deadline for comments set for June 21, 2021. On June 24, 2021, Crown-Indigenous Relations and Northern Affairs (CIRNA) requested an extension to June 25, 2021 with a subsequent extension requested to June 28, 2021. On June 28, 2021, CIRNA requested the following clarifications:

- Requested licence term;
- An updated spill contingency plan;
- If the licence is granted, the Applicant's commitment to submitting a closure and reclamation plan within ninety (90) days of Licence issuance; and
- Submission of a quarry management and monitoring plan.

The following information was received from the Applicant on July 5, 2021 to address

intervener's comments:

- The requested licence term is until December 31, 2021;
- The Applicant committed to providing the closure and reclamation plan within ninety (90) days of Licence issuance; and
- The quarry is not included in the licence scope.

In addition, Tower Arctic provided an updated *Spill Response Plan* dated May 14, 2021. On July 6, 2021, CIRNA requested further clarification on whether the operation of the quarry is the responsibility of the Applicant or the Hamlet of Pond Inlet. In addition, the Intervener recommended that the Applicant provide a monitoring plan, as there had been noted deficiencies in monitoring in the past. In response, on July 8, 2021, Tower Arctic provided the *Pond Inlet Marine Infrastructure Project Environmental Monitoring Plan* dated May 28, 2021 that listed Quarry Permit No: 04-15-2021-01 as assigned to the Hamlet of Pond Inlet. In addition, the Applicant resubmitted the monitoring results for 2020. On July 12, 2021, CIRNA informed the NWB that they are satisfied with the additional information.

### III. GENERAL CONSIDERATIONS

#### Term of Licence

In accordance with the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* s. 45, the NWB may issue a licence for a term not exceeding twenty-five (25) years. The Applicant requested December 31, 2021 as a licence expiry date to allow for the construction of water crossings associated with the Pond Inlet Marine Infrastructure Haul Road Project (Project). The Board views the term requested for the Project appropriate and has granted the term expiring on January 1, 2022. The Licensee should note that the Licence is granted solely for the construction and operation of water crossings along the Project haul road. Upon the expiry of this Licence, the Licensee intends to hand over the responsibility for the haul road and associated water crossings to the Hamlet of Pond Inlet.

#### Annual Report

As a requirement of section 14(1) of the *Nunavut Waters Regulations* and similar to the terms and conditions generally included in all licences issued by the Board, the NWB has included under Part B, Item 1 of this Licence, requirements for the Licensee to submit to the Board for review, prior to the 31<sup>st</sup> of March, annually, a report detailing Water use and/or Waste deposit activities for the undertaking for the preceding year. The submission of Annual Reports ensures that the NWB has on file accurate updates of all Water use and/or Waste deposit activities related to an undertaking for any particular year preceding one in which the report is filed.

#### Use of Water

No direct or consumptive water use was requested for the Project. Accordingly, the Licensee is prohibited from withdrawing any Water from nearby sources to carry out the Project.

#### Deposit of Waste

The Applicant indicated that personnel associated with the Project would reside within the community of Pond Inlet; therefore, there will be no consumptive use of Water or deposit of Waste at the Project site and no camp infrastructure will be established. With respect to

construction, waste generated by the Project will be backhauled to the hamlet's landfill facility for disposal.

### **Construction Drawings and Plans**

The Licensee submitted as part of its Application, design drawings for the structures to be constructed in connection with the Project. Following completion of construction activities, the Licensee is required to submit a construction summary report that includes as-built drawings of the facilities constructed under the licence.

### **Spill Contingency Planning**

The licensee submitted a Spill Contingency Plan as part of the Application, and updated it to address interveners' comments. The Board approves this Plan under the Part G, Item 1 of the Licence.

### **Closure and Reclamation**

As committed by the Applicant, Tower Arctic will submit a Closure and Reclamation Plan within ninety (90) days of the issuance of the Licence.

### **Monitoring**

To ensure effects of construction are detected in a timely fashion, the NWB has imposed appropriate terms and conditions under Part H of the Water Licence.



## NUNAVUT WATER BOARD WATER LICENCE

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Licence No: **8BW-PIM2122**

Pursuant to the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

**ARCTIC TOWER LTD**

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(Licensee)

**P.O. BOX 717, IQALUIT, NU, X0A 0H0**

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(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use Water or deposit of Waste for a period subject to restrictions and conditions contained within this Licence:

Licence Number/Type: **8BW-PIM2122 / TYPE "B"**

Water Management Area: **ECLIPSE SOUND WATERSHED (48)**

Project/Location: **POND INLET MARINE INFRASTRUCTURE HAUL ROAD PROJECT/ POND INLET, QIKIQTANI REGION, NUNAVUT**

Classification: **OTHER UNDERTAKING**

Purpose: **WATERCOURSE CROSSING**

Quantity of Water use not to Exceed: **NO DIRECT WATER USE IS AUTHORIZED**

Effective Date: **JULY 23, 2021**

Expiry of Licence: **JANUARY 1, 2022**

This Licence, issued and recorded at Gjoa Haven, Nunavut, includes and is subject to the annexed conditions.

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**Lootie Toomasie,  
Nunavut Water Board, Chair**

## **PART A: SCOPE, DEFINITIONS AND ENFORCEMENT**

### **1. Scope**

- a. This Licence allows for crossing of water courses, for the Pond Inlet Marine Infrastructure Haul Road Project, located within the municipal boundaries of the Hamlet of Pond Inlet, Qikiqtani Region, Nunavut, and classified as an “Other” undertaking under Schedule 1 of the Regulations.
- b. This Licence is issued subject to the conditions contained herein with respect to the using of Water and the depositing of Waste of any type in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposits of such Waste may enter any Waters. Whenever new Regulations are made or existing *Regulations* are amended by the Governor in Council under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, or other statutes imposing more stringent conditions relating to the quantity or type of Waste that may be so deposited or under which any such Waste may be so deposited, this Licence shall be deemed, upon promulgation of such Regulations, to be subject to such requirements; and
- c. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

### **2. Definitions**

In this Licence: **8BW-PIM2122**

**“Act”** means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

**“Abutment”** means the structure built to support the lateral pressure of an arch or span, e.g., at the ends of a bridge;

**“Addendum”** means the supplemental text that is added to a full plan, manual, or report, usually included at the end of the document and is not intended to require a full resubmission of the revised report. It may also be considered as an appendix or supplement;

**“Analyst”** means an Analyst designated by the Minister responsible for Northern Affairs under section 85 (1) of the *Act/NWNSRTA*;

**“Amendment”** means a change to any terms and conditions of this Licence through application to the NWB, requiring a change, addition, or deletion of specific terms and conditions of the Licence not considered as a modification;

**“Applicant”** means the Party who has filed an application with the NWB;

**“Appurtenant Undertaking”** means an undertaking in relation to which a use of waters or a

deposit of waste is permitted by a licence (NWNSRTA) issued by the NWB;

**“Armoring”** means the application of various materials to protect banks and shores of water bodies from erosion;

**“Bank stabilization”** means any works undertaken to protect or armour a bank or shore from erosion;

**“Best Management Practice (BMP)”** means techniques and procedures that have been proven through research, testing, and use to be the most effective and appropriate for use. Effectiveness and appropriateness are determined by a combination of: (1) the efficiency of resource use, (2) the availability and evaluation of practical alternatives, (3) the creation of social, economic, and environmental benefits, and (5) the reduction of social, economic, and environmental negative impacts;

**“Board”** means the Nunavut Water Board established under the *Nunavut Land Claims Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

**“Culvert”** means one or more pipes, pipe arches, or structures covered with soil and lying below the road surface, used to carry water, but does not include log structures;

**“Debris”** means an accumulation of loose, predominantly coarse grained soil and rock fragments, and sometimes with large organic material such as limbs and trunks of trees, that have become mixed together in an unsorted fashion. The term is sometimes used to refer solely to organic materials as in "logging debris";

**“Deleterious Substance”** means according to the Canadian *Fisheries Act*: 1. any substance that, if added to any water, would degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water, or 2. any water that contains a substance in such quantity or concentration, or that has been so treated, processed or changed, by heat or other means, from a natural state that it would, if added to any other water, degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water;

**“Divert”** means taking water from a stream and includes causing water to leave the channel of a stream and making a change in or about the channel that permits water to leave it;

**“Dredging”** means an excavation activity or operation usually carried out at least partly underwater, in shallow seas or freshwater areas with the purpose of gathering up bottom sediments and disposing of them in a different location;

**“Embankment”** means a bank of earth or rock constructed above the normal ground surface, usually referred to as a bank;

**“Embedded”** means enclosed firmly in a surrounding mass;

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**“Ecosystem”** means the dynamic and interrelated complex of plant and animal communities and their non-living environment. All parts of an ecosystem, including physical, chemical, and biological components, are interconnected; that is, they affect and are affected by all other parts;

**“Effluent”** means treated or untreated liquid waste material that is discharged into the environment from a structure such as a settling pond, landfarm or a treatment plant;

**“Endangered”** means a species designated by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as facing imminent extirpation or extinction if limiting factors are not reversed;

**“Engineer”** means a professional engineer registered to practice in Nunavut in accordance with the Consolidation of *Engineers and Geoscientists Act S. Nu 2008, c.2* and the *Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16* Amended by S.N.W.T. 2009, c.12;

**“Entrained”** means when a fish is drawn into a water intake and cannot escape;

**“Ephemeral”** means drainage that last a short time: not perennial;

**“Erosion”** means a process by which surface soil and rock is loosened, dissolved or worn away and moved from one place to another, usually by wind or water;

**“Fish”** includes parts of fish, shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals, and the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals;

**“Fish-bearing Waters”** means a stream having a fish population present at some time during the year;

**“Fish Habitat”** means spawning grounds and nursery, rearing, food supply and navigation areas on which fish depend directly or indirectly in order to carry out their life processes (Fisheries Act). Fish habitat comprises physical, chemical and biological attributes of the freshwater, estuarine, marine and terrestrial (riparian) environment that directly or indirectly supports fish populations, including streamside habitat;

**“Fish Passage”** means spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes;

**“Fish Salvage”** means the removal of imperiled fish populations by methods delineated in relevant regulation for their protection;

**“Fisheries Window”** means a time of reduced risk for important commercial, sport and resident fish species when instream construction is permitted;

**“Freshet”** means term commonly used to describe the spring thaw resulting from snow or ice that may yield a rise or overflowing of a stream;

**“Grade”** means the slope of road, channel, or natural ground;

**“High Water Mark”** means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities);

**“Inspector”** means Inspector designated by the Minister responsible for Northern Affairs under section 85 (1) of the *Act/NWNSRTA*;

**“Licensee”** means the holder of this Licence;

**“Metal Leaching”** means the mobilization of metals into solution under neutral, acidic or alkaline conditions;

**“Mitigation”** means actions taken during the planning, design, construction, and operation of a project to control, reduce or eliminate a potential adverse impact of a project;

**“Modification”** means an alteration to a physical work that may introduce a new structure or eliminates an existing structure and does not alter the purpose or function of the work but does not include an expansion;

**“Monitoring Program”** means a monitoring program established to collect data on surface water and groundwater quality to assess impacts to the freshwater aquatic environment of an appurtenant undertaking;

**“Nunavut Agreement”** means the *“Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada”*, including its preamble and schedules, and any amendments to that agreement made pursuant to it;

**“Permanent Stream”** means a stream that typically contains surface waters or flows for periods more than six months in duration, also known as perennial stream;

**“Permanent Structure”** means any building or structure that was lawfully constructed, placed or erected on a secure and long lasting foundation on land in accordance with any local government bylaw or approval condition in effect at the time of construction, placement or erection;

**“Regulations”** means the *Nunavut Waters Regulations SOR/2013-69* 18<sup>th</sup> April, 2013;

**“Riparian Area”** means the area of water-loving vegetation beside a stream, river, lake, or pond. Riparian areas are critical in reducing the negative effects of various land-uses on adjacent waters;

**“Riparian Vegetation”** means vegetation adjacent to a watercourse, lake, swamp, or spring, which is generally critical for wildlife cover, fish food organisms, stream nutrients and large organic debris, and for stream bank stability;

**“Secondary Containment”** means an impermeable structure, external to and separate from primary containment, which prevents unplanned spills of hazardous materials and provides a minimum capacity of 110% of the original vessel. Where multiple vessels are stored within the containment, it must provide a minimum capacity equal to the sum of the largest vessel and 10% of the aggregate volume of all other vessels located in the containment. This structure shall also provide containment and control of hoses and nozzles

**“Sediment”** means the material carried in suspension by a flowing body of water and which will ultimately settle to the bottom as water velocity decreases. Fine silt particles suspended in water are extremely difficult to remove;

**“Sediment Control Plan”** means a plan developed by a qualified professional to control sediment, and implemented prior to site preparation and construction;

**“Spill Contingency Plan”** means a Plan developed to deal with unforeseen petroleum and hazardous materials events that may occur during the operations conducted under a water Licence;

**“Sump”** means a structure or depression that collects, controls, and filters liquid waste before it is released to the environment. This structure should be designed to prevent erosion while allowing percolation of liquid waste;

**“Timing Window”** means a period of reduced risk during which a particular type of works are permitted. It is referred to by various terms including "reduced risk window" and "window of least risk". Timing windows vary depending on a site-specific basis, depending on which species may be present and the sensitivity of habitat.

**“Waste”** means, as defined in s.4 of the *Act*, any substance that, by itself or in combination with other substances found in water, would have the effect of altering the quality of any water to which the substance is added to an extent that is detrimental to its use by people or by any animal, fish or plant, or any water that would have that effect because of the quantity or concentration of the substances contained in it or because it has been treated or changed, by heat or other means.

**“Water” or “Waters”** means waters as defined in section 4 of the *Act*.

### 3. **Enforcement**

- a. Failure to comply with this Licence will be a violation of the *Act*, subjecting the Licensee to the enforcement measures and the penalties provided for in the *Act*;
- b. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the *Act*; and

- c. For the purpose of enforcing this Licence and with respect to the use of Water and deposit or discharge of Waste by the Licensee, Inspectors appointed under the *Act*, hold all powers, privileges and protections that are conferred upon them by the *Act* or by other applicable law.

## **PART B: GENERAL CONDITIONS**

- 1. The Licensee shall file an Annual Report on the Appurtenant Undertaking with the Board no later than the 31<sup>st</sup> of March of the year following the calendar year being reported, containing the following information:
  - a. Summary report of all construction activities including photographic records before, during and after construction;
  - b. Summary report of acid rock drainage and metal leaching characterization of the fill material to be used for construction as required under Part E, Item 4;
  - c. All monitoring information required under Part H of the Licence;
  - d. A list of unauthorized discharges and a summary of follow-up action taken;
  - e. A summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;
  - f. Any revision to approved plans and manuals as required by Part B, Item 8 submitted in the form of an addendum;
  - g. A summary of any studies or reports requested by the Board that relate to the use of Water and the deposit of Waste, or restoration, and a brief description of any future studies planned; and
  - h. Any other details on water use or Waste disposal requested by the Board by the 1st of November of the year being reported.
- 2. The Licensee shall notify the NWB of any changes in operating plans or conditions associated with this Project at least thirty (30) days prior to any such change.
- 3. The Licensee shall comply with the Monitoring Program described in Part I of this Licence, and any amendments to the Monitoring Program as may be made from time to time, pursuant to the conditions of this Licence.
- 4. The Monitoring Program and compliance dates specified in the Licence may be modified at the discretion of the Board.
- 5. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.
- 6. In the event that a Plan is not found acceptable to the Board, the Licensee shall, within thirty (30) days of notification by the Board, provide a revised version to the Board for

review or approval in writing.

7. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
8. The Licensee shall review the Plans referred to in this Licence, as required by changes in operation and/or technology, and modify the Plan accordingly. Revisions to the Plans shall be submitted in the form of an Addendum to be included with the Annual Report.
9. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
10. The Licensee shall ensure a copy of this Licence is maintained at the site of operations at all times. Any communication with respect to this Licence shall be made in writing to the attention of:
  - (a) **Manager of Licensing:**  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU X0B 1J0  
Telephone: (867) 360-6338  
Fax: (867) 360-6369  
Email: [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)
  - (b) **Inspector Contact:**  
Manager of Field Operations, CIRNA  
Nunavut District, Nunavut Region  
P.O. Box 100  
Iqaluit, NU X0A 0H0  
Telephone: (867) 975-4295  
Fax: (867) 979-6445
11. The Licensee shall submit one electronic copy of all reports, studies, and plans to the Board. Reports or studies submitted to the Board by the Licensee shall include a detailed executive summary in Inuktitut.
12. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the NWB is received and acknowledged by the Manager of Licensing.
13. This Licence is assignable as provided for in Section 44 of the *Act*.
14. The expiry or cancellation of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirement.

## **PART C: CONDITIONS APPLYING TO THE PROTECTION OF WATER**

1. The Licensee shall not deposit of sediment into any water body.
2. The Licensee shall not remove any material from below the ordinary High Water Mark of any water body unless authorized.
3. The Licensee shall not cause the obstruction of natural drainage, flooding, or channel diversion unless authorized.
4. The Licensee shall minimize stream bank disturbances and shall provide necessary controls to prevent erosion of stream banks.
5. The Licensee shall undertake appropriate corrective measures to mitigate impacts on surface drainage resulting from the Licensee's activities.
6. The Licensee shall limit any in-stream activity to either no-flow or low-flow water periods. In stream activity is prohibited during fish migration.
7. Machinery is not permitted to travel up the stream bed and fording of any water body is to be kept to a minimum and limited to one area and a one-time event. Equipment used should be well cleaned and free of oil and grease and maintained free of fluid leaks.
8. The Licensee shall ensure that pollutants from machinery fording the crossing do not enter Water.
9. To minimize impacts on surface drainage, the Licensee shall prepare all sites in such a manner as to prevent rutting of the ground surface.
10. Equipment storage holding areas should be located on gravel, sand or other durable land, a distance of at least thirty-one (31) meters above the ordinary High Water Mark of any water body in order to minimize impacts on surface drainage and water quality.
11. The Licensee shall designate an area for the deposition of excavated and stockpiled materials that is at least thirty-one (31) metres above the ordinary High Water Mark of any water body.
12. The Licensee shall not utilize any equipment or vehicles in the course of this undertaking unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles shall cease if rutting occurs.

## **PART D: CONDITIONS APPLYING TO WASTE DISPOSAL**

1. Permanent disposal of waste at site is not authorized.

2. The Licensee shall locate areas designated for temporary Waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any water body such that the quality, quantity or flow of water is not impaired, unless otherwise approved by the Board in writing.
3. The Licensee shall not practice on-site land filling of domestic Waste, unless otherwise approved by the Board in writing.
4. The Licensee shall backhaul and all Waste generated through the course of the operation to a licensed Waste disposal site in the Municipality of Pond Inlet.
5. The Licensee shall provide to the Board, documented authorization from all communities in Nunavut receiving Waste from the Project prior to the backhauling any Waste.
6. The Licensee shall maintain records of all Waste backhauled and records of confirmation of proper disposal of backhauled Waste. These records shall be made available to an Inspector upon request.

#### **PART E: CONDITIONS APPLYING TO CONSTRUCTION AND OPERATIONS**

1. The Licensee shall notify the Board and the Inspector at least ten (10) days prior to the construction or installation of any of the Water crossings associated with the Project.
2. The Licensee shall submit to the Board for review and acceptance, for-construction drawings stamped and signed by an Engineer, at least thirty (30) days prior to the construction of any dams, dykes or structures intended to contain, withhold, divert or retain Water or Wastes.
3. The Licensee shall, within ninety (90) days of completion of construction activities, submit to the Board for review a Construction Summary Report that includes stamped as-built plans and drawings, explanation for any deviation from construction drawings, and consideration of construction and field decisions and their effects on the performance of engineered facilities.
4. The Licensee shall ensure that all fill material used for the Project is from an approved source, shall be free of all contaminants, and shall be characterized and confirmed to not possess acid generating potential or metal leaching properties prior to its use, with results and assessment to be submitted within the annual reporting requirements of Part B, Item 1.
5. All surface runoff or discharges impacted by construction activities associated with the Project, where flow may directly or indirectly enter Water, shall not exceed the following Effluent quality limits:

<b>Parameter</b>	<b>Maximum Average Concentration (mg/L)</b>	<b>Maximum Concentration of Any Grab Sample (mg/L)</b>
Total Suspended Solids	50.0	100

Oil and Grease	No Visible Sheen	No Visible Sheen
pH	Between 6.0 and 9.5	Between 6.0 and 9.5

6. The Licensee shall locate stream crossings to minimize approach grades. Approaches shall be stabilized to control runoff, erosion and subsequent siltation of any water body.
7. The Licensee shall not gather rock or construction materials from below the ordinary High Water Mark of any water body.
8. Sediment and erosion measures must be used to mitigate the deposition of debris and sediment into or onto any water body during the construction and operation. These materials shall be disposed at a distance of at least thirty one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter Water.
9. The Licensee shall, during periods of flow and following a major precipitation event, conduct water quality testing on a monthly basis, of any significant water seeps in contact with the road and earthworks for criteria listed under Part I, Item 5.
10. The Licensee shall limit any in-stream activity to low water periods. In-stream activity is prohibited during fish migration.
11. The Licensee shall not cut any stream bank or remove any material from below the ordinary High Water Mark of any water body.

#### **PART F: CONDITIONS APPLYING TO MODIFICATIONS**

1. The Licensee may, without written approval from the Board, carry out Modifications to the water crossings provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
  - a. The Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the modifications, this will to include:
    - i. a description of the facilities and/or works to be constructed;
    - ii. the proposed location of the structure(s);
    - iii. identification of any potential impacts to the receiving environment;
    - iv. a description of any monitoring required, including sampling locations, parameters measured and frequencies of sampling;
    - v. schedule for construction;
    - vi. drawings of engineered structures signed and stamped by an Engineer; and
    - vii. proposed sediment and erosion control measures.
  - b. the proposed Modifications do not place the Licensee in contravention of the Licence or the Act;
  - c. such Modifications are consistent with the NIRB Screening Decision;
  - d. the Board has not, during the sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and

- e. the Board has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part F, Item 1, have not been met, may only be carried out upon approval from the Board in writing.
3. The Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence, within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.

#### **PART G: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING**

1. The Board has approved the plan entitled *Spill Response Plan* dated May 14, 2021 submitted as additional information with the Application.
2. The Licensee shall prevent any chemicals, petroleum products or Wastes associated with the Project from entering Water. All sumps and fuel caches shall be located at a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any adjacent water body and inspected on a regular basis.
3. The Licensee shall conduct any equipment maintenance and servicing in designated areas and shall implement special procedures (such as the use of drip pans) to manage motor fluids and other waste and contain potential spills.
4. If during the term of this Licence, an unauthorized discharge of Waste occurs, or if such a discharge is foreseeable, the Licensee shall:
  - a. Employ the *Spill Contingency Plan*;
  - b. Report the spill immediately to the 24-Hour NWT/NU Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and
  - c. For each spill occurrence, submit to the Inspector, no later than thirty (30) days after initially reporting the event, a detailed report that will include the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean-up the spill site.
5. The Licensee shall, in addition to Part H, Item 4, regardless of the quantity of releases of harmful substances, report to the 24-Hour NWT/NU Spill Line if the release is near or into a Water body.
6. The Licensee shall have a spill kit with a minimum capacity of approximately 205 litres available at the site, in the event that fuel lines and/or hydraulic hoses rupture on equipment being used near the water.
7. The Licensee shall remove and treat any hydrocarbon contaminated soils at an approved facility.

## **PART H: CONDITIONS APPLYING TO RECLAMATION AND CLOSURE**

1. The Licensee shall submit for Board approval a Closure and Reclamation Plan within ninety (90) days of the issuance of this Licence.
2. The Licensee shall, once the marine Project construction is complete, barricade the haul road with an earth berm and hand over the haul road to the municipality in useful condition and without potholes.
3. The Licensee shall complete any additional restoration work prior to the expiry of this Licence, including the removal of all infrastructure, site materials, fuel caches, drums, barrels, and equipment from the site.
4. The Licensee shall carry out progressive reclamation of any components of the Project no longer required for the Licensee's operations.
5. The Licensee shall re-establish vegetation and/or stabilize exposed soils before removing erosion control measures.
6. The Licensee shall restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.
7. In order to promote growth of vegetation and the needed microclimate for seed deposition, all disturbed surfaces shall be prepared by ripping, grading, or scarifying the surface to conform to the natural topography.
8. All disturbed areas shall be contoured and stabilized upon completion of work and restored, to the extent possible, to a pre-disturbed state.

## **PART I: CONDITIONS APPLYING TO MONITORING PROGRAM**

1. The Licensee shall monitor all activities for signs of erosion and shall implement and maintain sediment and erosion control measures prior to the undertaking to prevent entry of sediment into any water body.
2. The Licensee shall obtain a digital photographic record of the water crossing before, during, and after the completion of construction activities.
3. The Licensee shall determine the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of the location where the watercourse crossing (culverts) are located.
4. The Licensee shall, during periods of flow, conduct water quality testing immediately upstream and downstream of the water crossings, any significant water seeps in contact with the road and any significant seeps originating from earthworks prior to construction, weekly during the construction and upon completion.

5. The Licensee shall monitor runoff and/or discharge from the road and earthworks, during periods of flow and following significant precipitation events, on a monthly basis, for the following parameters:

<b>Group</b>	<b>Parameters</b>
<b>Physical Parameters</b>	pH (field and laboratory), temperature (field), alkalinity, bicarbonate, carbonate, electrical conductivity, hardness, hydroxide, ion balance, total dissolved solids, total suspended sediments.
<b>Nutrients</b>	Ammonia-nitrogen, nitrate nitrogen, nitrite-nitrogen, orthophosphate.
<b>Major Ions</b>	Calcium, chloride, magnesium, potassium, sodium, sulphate.
<b>Total Metals</b>	Aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, tin, titanium, uranium, vanadium and zinc.

6. The Licensee shall implement water crossings visual inspection and maintenance program prior to and during spring freshet and after heavy rainfall events to identify issues relating to watercourse crossings structural integrity and hydraulic function.

7. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of Standard Methods for the Examination of Water and Wastewater, or by such other methods approved by the Board in writing.

8. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.

9. Additional monitoring requirements may be requested by the Inspector.

10. The Licensee shall include in the Annual Report required under Part B, Item 1, all monitoring data and analysis and information required by this Part.

11. Modifications to the Monitoring Program may be made only upon written request and subsequent approval of the Board in writing.