



Email: [\\_boyd3@sympatico.ca](mailto:_boyd3@sympatico.ca)

**RE: NWB Amended Renewal Water Licence No: 2BE-FER2227**

Dear Mr. Boyd:

Please find attached Licence No: **2BE-FER2227** issued to Canadian North Resources Inc. by the Nunavut Water Board (NWB or Board) 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 the use of Water and the deposit of Waste are an integral part of this approval.

If the Licensee contemplates the continuing of this Undertaking after the Water Licence expires, it is the responsibility of the Licensee to apply to the NWB for a renewal water licence. 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 renewal Water Licence. Note that if the Licence expires before the NWB issues a new one, then the use of Water and the 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 (NWNSTRA)*. 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. It should be noted that in accordance with s. 75(1)(a) of the *Nunavut Planning and Project Assessment Act (NuPPAA)*, the Board is not allowed to issue a permit or authorization for any project proposal that has not been submitted to the Nunavut Planning Commission (NPC) in accordance with s. 76 of *NuPPAA*.

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 application 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 by interested parties 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/ng/ri

Enclosure: Amended Renewal Licence No: **2BE-FER2227**

Comments – CIRNA, ECCC

Cc: Distribution List – Kivalliq

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<sup>1</sup> Crown-Indigenous Relations and Northern Affairs Canada (CIRNA), January 10, 2022; Environment and Climate Change Canada (ECCC), January 10, 2022

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## I. PROJECT OVERVIEW

The Ferguson Lake Project (Project) is located approximately 160 km south of Baker Lake and 240 km west of Rankin Inlet, within the Kivalliq region, Nunavut. This area was historically explored by the International Nickel Corporation (INCO) between 1949 and 1957, for its significant nickel, copper, palladium, platinum, and platinum group metals (Ni-Cu-Co-Pd-Pt). Starfield Resources Inc. acquired the property in 1999, and Canadian North Resources Inc. purchased it from them in 2013. The licensing history of the Project is outlined in Table 1. The Nunavut Water Board (NWB or Board) issued these Water Licences to allow for the use of Water (299 m<sup>3</sup>/day) and disposal of waste for a Mining undertaking as per schedule II of the *Nunavut Waters Regulations (Regulations)*.

**Table 1:**

<b>Licence No.</b>	<b>Date Issued</b>	<b>Licensee</b>
NWB2FER9901	April 22, 1999	Starfield
NWB2FER0102	April 3, 2001	Starfield
NWB2FER0305	April 11, 2003	Starfield
NWB2FER0507	June 27, 2005	Starfield
2BE-FER0712	October 2, 2007	Starfield
2BE-FER1318	December 2, 2007	CNRD
2BE-FER1823	December 12, 2018	CNRD

Exploration and mining activity have included prospecting, claim staking, geochemical sampling and drilling. Prior, to 2006, exploration mining was based out of an “old camp” located on an island located at a privately owned fishing lodge (Ferguson Lake Fishing Lodge). In 2006, a “new camp” was established on the mainland to better support exploration mining activities for the foreseeable future. The old camp was removed and all the scrap materials, garbage, and possible contaminated soils (placed in empty fuel drums), was slung by helicopter and consolidated at the new camp waste storage area during summer of 2012.

No significant exploration on the property was conducted from 2012. During the October of 2012, following confirmation of compliance with discharge criteria, water that had built up in the fuel storage area was discharged in the environment. During the 2012 work program, remediation work was also undertaken in the area of the old camp site. In 2015, the Ferguson Lake Project and the camp remained closed. A soil sampling survey was conducted in at the waste dump to check for hydrocarbon and other contaminants. In 2019, reclamation work was completed. The camp remained closed and boarded-up throughout 2019 and 2020. In 2021, follow-up water and soil survey were completed at the waste dump, fuel storage berm and catchments around the camp to check for contaminants.

### ***Starfield Bankruptcy and Project assignment to CNRD***

On March 13, 2013, starfield filed a Notice of Intention (NOI) to make a proposal pursuant to s. 50.4(1) of the Bankruptcy and Insolvency Act, R.S.C 1985, submitting subsequently to the Board their intention to retract their ongoing Renewal Application and declare bankruptcy. On June 5,

2013, the Ontario Superior Court of Justice approved the sale transaction (Transaction) contemplated by an Agreement of Purchase and Sale (Sale Agreement) between Starfield and 2369785 Ontario Inc. (Purchaser). On September 19, 2013, the following public review with no opposition to the assignment being brought forward, licence 2BE-FER0712 was assigned to Canadian North Resources and Development Corp. (CNRD). The Licensee was advised that pursuant to s.46 of the Act, the expiration of water use and waste disposal, all terms and conditions of this Licence remain in effect. On December 12, 2013, renewal water licence 2BE-FER1318 was issued to CNRD with an expiry date of December 11, 2018. The current renewal Water Licence 2BE-FER1823 was granted to CNRD on December 12, 2018 with an expiry set at December 11, 2023. On November 9, 2020, the Licensee's name was changed to Canadian North Resources Inc.

## **II. PROCEDURAL HISTORY**

Nunavut Water Board (NWB or Board) received the Water Licence Renewal Application (Application) from Canadian North Resources Inc. (CNRI) on November 12, 2021 to replace their current Water Licence 2BE-FER1823, which expires on December 11, 2023. The Application included the following documents:

- Water Licence Amended Renewal Application form
- Ferguson Lake Project Area Map
- Project Summary English
- Project Summary Inuktitut
- Project camp map figure
- Annual Reports for the year 2019, 2020, 2021
- 2BE-FER1823 Spill Form
- Water Licence Inspection Form
- Ferguson Lake Spill Contingency Plan
- Ferguson Lake Abandonment and Restoration Plan
- Ferguson Lake FCA Memo

On November 25, 2021, following a preliminary internal technical review, the NWB requested additional information be submitted to complete the application prior to public review.

On November 30, 2021, the NWB concluded that the Application met the requirements of the section 48(1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA or Act) and forwarded notice of the Application to regulators, the council of the municipality most affected by the Project, and other interested parties. All parties were invited to make representations to the NWB by January 10, 2022.

Written comments were received from CIRNA and Environment and Climate Change Canada (ECCC). No public concern was expressed during the notice period. Therefore, the NWB waived the requirement to hold a public hearing and proceeded with the application process.

Based on the results of the detailed assessment of the Application, including consideration of any potential accidents, malfunctions, or impacts to water that the overall Project might have in the

area, the Board has approved the Renewal Application and has issues amended Renewal Water Licence 2BE-FER2227.

### **III. GENERAL CONSIDERATIONS**

The issued Renewal Water Licence (No: **2BE-FER2227**) will replace the current Licence No: 2BE-FER1823.

Exploration activities are planned for the upcoming years with an increased use of water for drilling and domestic purposes. With the submission of updated management plans and sampling memo, the licence terms and conditions remain similar in nature with effective licence renewal for a period of five years.

#### *Term of Licence*

In accordance with the s. 45 of Act, the NWB may issue a Licence for a term not exceeding twenty-five (25) years. A five (5) year term was requested and the NWB believes that a term of five (5) years is appropriate considering the phase of development as requested by the Applicant.

#### *A. Scope Definitions and Enforcement*

The Licence allows for the use of Water and deposit of Waste in support of a Mining Undertaking, as defined by the Nunavut Waters Regulations. The Project is classified as exploration mining. Water will be used for drilling and domestic purposes.

#### *B. General Conditions*

##### *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 2 of this Licence, requirements for the Licensee to submit to the Board for review, prior to the 31st 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.

The Board provides public access to the information submitted in licensees' annual reports through its ftp site as well as upon request from interested parties.

The NWB has included on its website a standardized form for annual reporting that licensees can use to submit annual reporting information, supplemented by other project-specific, relevant details. A copy of the NWB's generic Annual Report Form can be obtained from the NWB upon request or electronically from the NWB's FTP site using the following link:

<ftp://ftp.nwb-oen.ca/other%20documents/>

### ***C. Conditions Applying to Water Use***

The Licensee has requested two hundred ninety-nine (299) cubic meters per day of water use, two seventy-four (274) cubic metres per day for drilling and five (25) cubic metres per day for domestic purposes. No concerns were expressed regarding the requested water volume. The Board considers the volume of water requested to be reasonable and has included conditions governing water use under Part C, Item 1 in the Licence.

### ***D. Conditions Applying to Waste Disposal***

The Application has addressed sewage, greywater, solid wastes, waste oil, bulky scrap metal, drilling related wastes. Other than waste oil, no hazardous wastes will be generated by the Project. All combustible material will be incinerated on site. Conditions have been updated in the Licence to allow the combustion of small (<500ml) amounts of waste oil. The Licensee has indicated that minimal large bulky objects exist on site, which includes scrap that will be backhauled on supply flights as required.

Part D, Item 11, has been updated so that the Applicant is required to provide in writing, ten (10) days prior to release of effluent from the Fuel Containment Area or any other waste or hazardous materials facility, a notice to the Inspector. This will provide a record for future reference.

As per Environment and Climate Change Canada's (ECCC) recommendation, appropriate QA/QC standards shall be applied for incinerator ash testing and where there are non-regulated parameters in measurable concentrations, relative guidelines be considered such that any releases are not harmful to the environment.

### ***E. Conditions Applying for Camps, Access Infrastructures and Operations***

The Board provides conditions for construction and operation activities associated with exploration activities in Part E of this Licence.

### ***F. Conditions Applying to Drilling Operations***

The Applicant indicated that drilling will occur on land and on ice. The Licence includes standard conditions under Part F related to drilling operations for the purpose of core drilling.

### ***G. Conditions Applying to Modifications***

The Board allows for modification to the Project in accordance with Part G of this Licence.

### ***H. Conditions Applying to Spill Contingency Planning***

The Licensee has submitted with their Application the updated Ferguson Lake Project Spill Contingency Plan, 2021, dated August, 2021. Comments received from Crown-Indigenous Relations and Northern Affairs Canada (CIRNA), recommended that the receipts issued by a facility licensed to dispose of Hazardous waste be included in the required annual reports due on

March 31st of every year by the proponent and also to be held on-site. Additionally, copies of these receipts should be held on site and available at upon request by a CIRNA Inspector during the course of an Inspection. CIRNA recommends that the details on the cleaning and crushing of barrels in the field be provided to CIRNA and Environment and Climate Change Canada (ECCC) prior to the commencement of such activity. ECCC recommends the contaminated waste to be characterized and confirmed to be acceptable for disposal at a specific disposal site. Further, the Board provides conditions for spill contingency planning associated with exploration in Part H of this Licence.

#### ***I. Conditions Applying to Abandonment and Restoration or Temporary Closure***

The Licensee has submitted with their Application the updated Ferguson Lake Project, Abandonment and Restoration Plan, 2021, dated November, 2021, that was originally approved by the Board. CIRNA recommends that the process for cleaning and care of drums scheduled to be crushed be provided along with details concerning waste fuel and contaminated adsorbents used in the process. As per the recommendation from ECCC, the Applicant shall include post-reclamation visual inspections of stability to monitor for potential contaminant releases from remaining project components and the possibility of post-reclamation water quality sampling to support the post-closure assessment of chemical and physical stability. Further, the Board provides conditions for monitoring associated with closure and reclamation in Part I of this Licence.

#### ***J. Conditions Applying to the Monitoring Program***

The Board provides conditions for monitoring associated with exploration in Part J of this Licence. The Licensee is reminded to provide water quality monitoring results and the location of discharge to an Inspector, prior to effluent release from the Fuel Containment Area.



## DECISION

### LICENCE NUMBER: 2BE-FER2227

This is the decision of the Nunavut Water Board (NWB or Board) with respect to an application dated November 12, 2021 for an amended renewal of a Water Licence made by:

#### **Canadian North Resources Inc.**

to allow for the use of Water and the deposit of Waste during camp operations and activities related to exploration that include drilling at the Ferguson Lake Project located within the Kivalliq Region, Nunavut, generally located at the geographical coordinates as follows:

#### Project Extents :

NW : Latitude : (62° 53' 35" N) Longitude : (96° 54' 16" W)  
NE : Latitude : (62° 53' 35" N) Longitude : (96° 54' 03" W)  
SE : Latitude : (62° 53' 29" N) Longitude : (96° 54' 03" W)  
SW : Latitude : (62° 53' 29" N) Longitude : (96° 54' 16" W)

#### Camp Location :

Latitude : (62° 53' 33" N) Longitude : (96° 54' 05" W)

## **DECISION**

After having been satisfied that the Application was previously reviewed by NPC and conforms to the Keewatin Regional Land Use Plan for which the conformity determination<sup>1</sup>, dated November 17, 2021, remains applicable. In addition, as per NPC, the activities were previously reviewed by the Nunavut Impact Review Board (NIRB). As stated by NIRB Screening Decision Report<sup>2</sup> a review of the Project is not required pursuant to Article 12, Section 12.4.4(a) of Nunavut Agreement and s. 92(1)(a) of *Nunavut Planning and Project Assessment Act (NuPPAA)*, subject to the NIRB Screening Decision Report terms and conditions, 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:

**Amended Renewal Licence No: 2BE-FER2227 be issued to replace Licence No: 2BE-FER1823 subject to the terms and conditions contained therein. (Motion #: 2021-B1-023)**

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<sup>1</sup> Nunavut Planning Commission, Conformity Determination, November 17, 2021.

<sup>2</sup> Nunavut Impact Review Board (NIRB), Screening Decision Report, February 19, 2020.

Signed this 2<sup>ND</sup> day of March, 2022 at Gjoa Haven, NU.

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Lootie Toomasie  
Nunavut Water Board,  
Chair

LT/ng/ri



## NUNAVUT WATER BOARD RENEWAL WATER LICENCE

**Licence No. 2BE-FER2227**

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

**CANADIAN NORTH RESOURCES INC.**

(Licensee)

**299 COURTNEYPARK DRIVE EAST, MISSISSAUGA, ONTARIO, L5T 2T6**

(Mailing Address)

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

Licence Number/Type: **2BE-FER2227 / TYPE "B"**

Water Management Area: **FERGUSON WATERSHED - 12**

Location: **FERGUSON LAKE PROJECT  
KIVALLIQ REGION, NUNAVUT**

Classification: **MINING UNDERTAKING**

Purpose: **DIRECT USE OF WATER AND DEPOSIT OF WASTE**

Quantity of Water use not to Exceed: **TWO HUNDRED NINETY-NINE (299) CUBIC METRES PER DAY**

Effective Date: **MARCH 2, 2022**

Expiry of Licence: **MARCH 1, 2027**

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

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

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

### **1. Scope**

This Licence allows for the use of Water and the deposit of Waste for a Mining undertaking classified as per Schedule 1 of the *Regulations* at the Ferguson Lake Project, located approximately 160 km south of Baker Lake and 240 km west of Rankin inlet within the Kivalliq Region, Nunavut.

- a. This Licence is issued subject to the conditions contained herein with respect to the taking of Water and the deposit 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
- b. 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**

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

“**Addendum**” means the supplemental text that is added to a full plan or report usually included at the end of the document and is not intended to require a full resubmission of the revised report;

“**Amendment**” means a change to original terms and conditions of this Licence requiring correction, addition or deletion of specific terms and conditions of the Licence; modifications inconsistent with the terms of the set terms and conditions of the Licence;

“**Applicant**” means the Licensee;

“**Appurtenant Undertaking**” means an undertaking in relation to which a use of Water or a deposit of Waste is permitted by a licence issued by the Board;

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

“**Bulk Fuel Storage Facility**” means the fuel storage facility as described in the Application and supporting documents submitted on November 19, 2021;

**“Closure and Reclamation Plan”** means a Plan developed to reach the closure goal and taking in account the “Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories” 2013;

**“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;

**“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*;

**“Fuel Containment Area”** means the area designated to store hydrocarbon fuels as described in the Application and supporting documents, submitted to the Board;

**“Greywater”** means all liquid Wastes from showers, baths, sinks, kitchens and domestic washing facilities, but does not include toilet Wastes;

**“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);

**“ICP Scan”** means the laboratory method for determining trace metals in water through Emission Spectroscopy using inductively coupled plasma (including from approximately 22 to 32 elements, depending on the laboratory performing the analysis);

**“Inspector”** means an Inspector designated by the Minister under Section 85 (1) of the *Act*;

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

**“Modification”** means an alteration to a physical work that introduces 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;

**“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;

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

**“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;

**“Sewage”** means all toilet Wastes and Greywater;

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

**“Sump or Sumps”** 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;

**“Toilet Wastes”** means all human excreta and associated products, but does not include greywater;

**“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 fees payable to the Receiver General for Canada for the right to use Waters, shall be sent to the Board annually in accordance with Section 12 of the *Regulations*.
2. The Licensee shall file an Annual Report on the Appurtenant Undertaking with the Board no later than March 31<sup>st</sup> of the year following the calendar year being reported, containing the following information:

- a. A summary report of all Water use (in cubic metres/day) and Waste disposal activities;;
  - b. Quantity of Water (in cubic metres/day) obtained for domestic and other purposes from sources on, in or flowing through Inuit-owned lands for the reporting period;
  - c. Quantity of Water (in cubic metres/day) obtained for domestic and other purposes from sources on, in or flowing through Crown Lands for the reporting period;
  - d. Quantity of Waste disposed of on on-site Waste disposal facility;
  - e. Quantity of Waste backhauled to approved facility for disposal;
  - f. A list of unauthorized discharges and a summary of follow-up actions taken;
  - g. Any revisions to the Spill Contingency Plan, Closure and Reclamation Plan, as required by Part B, Item 7, submitted in the form of an Addendum;
  - h. A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;
  - i. Report all artesian flow occurrences as required under Part F, Item 3;
  - j. A summary of all information requested and results of the Monitoring Program;
  - k. Details pertaining to locations of sump(s) and drill holes;
  - l. GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) for the locations of all temporary camps established in support of the Project if the actual coordinates differ from that provided in the application;
  - m. A summary, including photographic records before, during and after any relevant construction activities or Modifications and/or major maintenance work carried out on facilities under this Licence and an outline of any work anticipated for the next year;
  - n. Detailed discussion on the performance, installation, and evaluation, including the use of photographic record, of the primary and secondary containment functions used in fuel storage to safeguard impacts to freshwaters;
  - o. A summary of public consultation/participation, describing consultation with local organizations and residents of the nearby communities, if any were conducted;
  - p. Any other details on Water use or Waste disposal requested by the Board by the 1<sup>st</sup> November of the year being reported.
3. 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.
  4. The Licensee shall install flow meters or other such devices, or implement suitable methods required for the measuring of Water volumes as required under Part J, Item 1.
  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. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.

7. 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.
8. 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.
9. 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, CIRNAC  
Nunavut District, Nunavut Region  
P.O. Box 100  
Iqaluit, NU X0A 0H0  
Telephone: (867) 975-4295  
Fax: (867) 979-6445
10. The Licensee shall submit an 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.
11. The Licensee shall ensure that all documents or correspondence submitted by the Licensee to the NWB are received and acknowledged by the Manager of Licensing.
12. This Licence is assignable as provided for in Section 44 of the *Act*.
13. 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 WATER USE**

1. The Licensee shall obtain all Water for domestic camp use from Ferguson Lake. Total camp Water use shall not exceed twenty-five (25) cubic metres per day. Drill Water shall be obtained from local Water source(s), proximal to the drilling targets as outlined in the



Application and shall not exceed two hundred seventy-four (274) cubic metres per day. The volume of Water for all purposes under this Licence shall not exceed two hundred ninety-nine (299) cubic metres per day.

2. The use of Water from streams or any Water bodies not identified in Part C, Item 1, is prohibited unless authorized and approved by the Board in writing.
3. The withdrawal of Water from any stream shall not exceed ten (10) per cent of the low flow of that stream unless approved by the Board in writing.
4. Where the use of Water is of a sufficient volume that the source Water body may be drawn down, the Licensee shall submit, for approval of the Board in writing, the following information: the volume required, a hydrological overview of the water body, details of impacts, and proposed mitigation measures.
5. The Licensee shall submit to the Board for approval in writing, the following information at least thirty (30) days prior to the use of Water of a sufficient volume that the source water body may be drawn down: volume required, hydrological overview of the water body, details of impacts, and proposed mitigation measures.
6. The Licensee shall equip all water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw Water at a rate such that fish do not become impinged on the screen.
7. The Licensee shall not conduct any work below the ordinary High Water Mark of any water body unless approved by the Board in writing.
8. The Licensee shall not cause erosion to the banks of any body of Water and shall provide necessary controls to prevent such erosion.
9. Sediment and erosion control measures shall be implemented prior to and maintained during the undertaking to prevent entry of sediment into Water.

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

1. The Licensee shall locate areas designated for 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.
2. The Licensee shall not practice on-site land filling of domestic Waste, unless otherwise approved by the Board in writing.
3. The Licensee is authorized to dispose of all acceptable food Waste, paper Waste and untreated wood products in an incinerator.
4. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire,

Styrofoam, asbestos or painted wood to prevent the deposition of Waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding Waters, unless otherwise approved by the Board in writing.

5. The Licensee shall provide to the Board documented authorization from all communities in Nunavut receiving Wastes from the Ferguson Lake Project prior to any backhauling and disposal of Wastes to those communities.
6. The Licensee shall backhaul and dispose of all hazardous Wastes, Waste oil and non-combustible Waste generated through the course of the operation at a licensed Waste disposal site.
7. The Licensee shall backhaul large amounts (>500mL) of Waste oil, or use it for heating camp facilities during exploration activities.
8. 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.
9. The Licensee shall contain all greywater in a Sump located at a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any water body, at a site where direct flow into a water body is not possible and no additional impacts are created, unless otherwise approved by the Board in writing.
10. The Licensee shall dispose of all toilet wastes through incineration, chemical or composting toilets. Any remaining residue generated through the course of the operation shall be backhauled and disposed of in an approved Waste disposal site.
11. The Licensee shall provide at least ten (10) days written notification to an Inspector, prior to initiating the release of effluent from the Fuel Containment Area. The notice shall include Water quality results, an estimate of volume and the proposed receiving location.
12. All Effluent discharged from the any Secondary Containment Area or the Fuel Containment Area shall be carried out in accordance with Part D, Item 1, directed to a natural depression where direct flow into a water body is not possible and no additional impacts are created. All Effluent discharges shall not exceed the following Effluent quality limits:

PARAMETER	MAXIMUM CONCENTRATION OF ANY GRAB SAMPLE
pH	6 to 9 (pH units)
Oil and Grease (mg/L)	15 and no invisible sheen
Lead (µg/L)	1
Benzene (µg/L)	370
Toluene (µg/L)	2
Ethyl Benzene (µg/L)	90

**PART E: CONDITIONS FOR CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS**

1. The Licensee shall not erect camps or store material on the surface of frozen streams or lakes including the immediate banks except what is for immediate use. Camps shall be located such as to minimize impacts on surface drainage.
2. The Licensee shall conduct all activities in such a way as to minimize impacts on surface drainage and the Licensee shall immediately undertake corrective measures in the event of any impacts on surface drainage.
3. The Licensee shall construct all winter lake and stream crossings, including ice bridges, entirely of Water, ice or snow. The Licensee shall minimize disturbance by locating ice bridges in an area that requires the minimum approach grading and the shortest crossing route. Stream crossings shall be removed or the ice notched prior to spring break-up.
4. Stream crossing shall be a minimum of five hundred (500) meters from spawning areas.
5. With respect to access road, pad construction or other earthworks, the deposition of debris or sediment into or onto any water body is prohibited. These materials shall be disposed a distance of at least thirty one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter the Water.
6. The Licensee shall not mobilize heavy equipment or vehicles for drilling or other activities unless the ground surface is capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles shall be suspended if rutting occurs.

**PART F: CONDITIONS APPLYING TO DRILLING OPERATIONS**

1. The Licensee shall not conduct any land based drilling within thirty-one (31) metres of the ordinary High Water Mark of any water body, unless otherwise approved by the Board in writing.
2. The Licensee shall dispose of all drill waste, including Water, chips, muds and salts (CaCl<sub>2</sub>) in any quantity or concentration, from land-based and on-ice drilling, in a properly constructed Sump or an appropriate natural depression located at a distance of at least thirty-one (31) metres from the ordinary High Water Mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created.
3. If artesian flow is encountered, drill holes shall be immediately sealed and permanently capped to prevent induced contamination of groundwater or salinization of surface Waters. The Licensee shall report all artesian flow occurrences within the Annual Report, including the location (GPS coordinates) and dates.

4. Drilling additives or mud shall not be used in connection with holes drilled through lake ice unless they are re-circulated or contained such that they do not enter the Water, or are demonstrated to be non-toxic.
5. For “on-ice” drilling where drill additives are not being used, return Water released must be non-toxic, and not result in an increase in total suspended solids in the immediate receiving Waters, above the Canadian Council of Ministers for the Environment, Guidelines for the Protection of Freshwater Aquatic Life (i.e. 10 mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100 mg/L).
6. The Licensee shall establish water quality conditions prior to and upon completion of any drilling program through lake ice.

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

1. The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply Facilities and Waste Disposal Facilities 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;
  - b. such 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 G, Item 1 have not been met can be carried out only with written approval from the Board.
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 H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING**

1. The Board has approved the Plan entitled “Ferguson Lake Project, Spill Contingency Plan, 2021” dated August 2021 that was 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 from 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 approved Spill Contingency Plan;
  - b. Report the spill immediately to the NWT/NU 24-Hour 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 5, regardless of the quantity of releases of harmful substances, report to the NWT/NU 24-Hour Spill Line if the release is near or into a Water body.

**PART I: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION OR TEMPORARY CLOSURE**

1. The Board has approved the Plan entitled “Ferguson Lake Project, Abandonment and Restoration Plan, 2021” dated November, 2021 that was submitted as additional information with the Application.
2. The Licensee shall complete all restoration work prior to the expiry of this Licence.
3. The Licensee shall carry out progressive reclamation of any components of the Project no longer required for the Licensee’s operations.
4. The Licensee shall backfill and restore all sumps, sewage pits to the pre-existing natural contours of the land.
5. The Licensee shall remove from the site, all infrastructure and site materials, including all fuel caches, drums, barrels, buildings and contents, docks, water intakes, pumps and lines, material and equipment prior to the expiry of this Licence.
6. All roads and airstrip, if any, shall be re-graded to match natural contour to reduce erosion.
7. The Licensee shall remove any culverts and restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.

8. 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.
9. Areas that have been contaminated by hydrocarbons from normal fuel transfer procedures shall be reclaimed to meet objectives as outlined in the Government of Nunavut's Environmental Guideline for Site Remediation, 2010. The use of reclaimed soils for the purpose of back fill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.
10. The Licensee shall restore all drill holes and disturbed areas to natural conditions immediately upon completion of the drilling. The restoration of drill holes must include the removal of any drill casing materials and if having encountered artesian flow, the capping of holes with a permanent seal. Where drill casings cannot be removed the Licensee shall cut off the casings at ground level and identify with signage.
11. The Licensee may leave the casings on site, if it intends to continue drilling in existing casings, but shall add signaling to keep the area safe for the other territory users. The drill casings left cannot stay on the field for more than 2 years after the drilling.
12. The Licensee may store drill core produced by the appurtenant undertaking in an appropriate manner and location at least thirty one (31) metres above the ordinary High Water Mark of any adjacent water body, where any direct flow into a water body is not possible and no additional impacts are created.
13. The Licensee shall contour and stabilize all disturbed areas to reduce erosion and sedimentation to Water, upon completion of work upon completion of the undertaking and as per Part I, Item 4.

## **PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM**

1. The Licensee shall measure and record, in cubic metres, the daily quantities of water utilized for camp, drilling and other purposes.
2. The Licensee shall provide the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where sources of Water are utilized for all purposes.
3. The Licensee shall determine the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where Wastes associated with camp operations and drilling operations are deposited.
4. The Licensee shall obtain representative samples of the Water column below any ice where required under Part F, Item 5 and 6. Monitoring shall include but not be limited to the following:

Total Suspended Solids

pH

Electrical Conductivity,

Total Trace Metals as determined by a standard ICP Scan (to include at a minimum, the following elements: Al, Sb, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Li, Mn, Mo, Ni, Se, Sn, Sr, Tl, Ti, U, V, Zn), and

Trace Arsenic and Mercury

5. 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.
6. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
7. The Licensee shall include in the Annual Report required under Part B, Item 2 all data, monitoring results and information required by this Part.