

acknowledged by the Manager of Licensing.

The NWB strongly recommends that the Licensee consult the comments received from CIRNA on issues identified. This information is attached for your consideration.¹

Sincerely,

Lootie Toomasie
Nunavut Water Board,
Chair

LT/ak/rqd

Enclosure: Renewal Licence No. 2BE-LUX2025

Comments – CIRNA

Cc: Distribution List – Kivalliq

¹ Crown-Indigenous Relations and Northern Affairs (CIRNA), April 20, 2020.

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DECISION

LICENCE NUMBER: 2BE-LUX2025

This is the decision of the Nunavut Water Board (NWB or Board) with respect to an application dated March 5, 2020 for a renewal Water Licence made by:

NORTH ARROW MINERALS INC.

to allow for the use of Water and the deposit of Waste during activities related to exploration including prospecting, mapping, ground geophysics, sampling and diamond drilling on ice and on land at the Luxx Project located within the Kivalliq Region, Nunavut, generally located at the geographical coordinates as follows:

Project Extents:

Latitude: 63°37'30" N	Longitude: -91°45'2.16" W
Latitude: 63°37'30" N	Longitude: -91°38'53.52" W
Latitude: 63 °35'2.4" N	Longitude: -91°38'53.52" W
Latitude: 63°35'2.4" N	Longitude: -91°45'2.16" W

DECISION

After having been satisfied that the Application is for a proposal that was previously reviewed by the NPC¹ and for which the conformity determination, dated January 5, 2018, remains applicable and is exempt from the requirements for screening as described within s. 12.4.3 of the *Nunavut Agreement*, 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: 2BE-LUX2025 be issued subject to the terms and conditions contained therein. (Motion #: 2020-B1-003)

Signed this 28th day of April, 2020 at Gjoa Haven, NU.

Lootie Toomasie
Nunavut Water Board,
Chair

LT/ak/rqd

¹ Nunavut Planning Commission (NPC) Conformity Determination 149304 , February 20, 2020.

WATER LICENCE No. 2BE-LUX2025

I. BACKGROUND

The water licence renewal application (Application) being considered by the Nunavut Water Board (NWB or Board) was filed by North Arrow Minerals Inc. (the Applicant, Licensee or North Arrow) on March 6, 2020 to seek renewal of Type “B” Water Licence No: 2BE-LUX1820 resulting in the issuance of Water Licence No: 2BE-LUX2025 (Licence).

II. FILE PROCEDURAL HISTORY

The original Type “B” Water Licence No: 2BE-LUX1618 was issued on July 15, 2016 to North Arrow Minerals Inc. for a Mining undertaking comprising exploration diamond drilling on the Luxx Project (Project). The Board set a two-year licence term. However, no activity was performed by the Licensee in 2016 or 2017 on this Project. The original licence was renewed as Water Licence No: 2BE-LUX1820 in May 2018. In its 2018 and 2019 annual reports, North Arrow indicated that it did not conduct any operations at the Project.

On February 20, 2020, the Nunavut Planning Commission (NPC) determined that the Luxx Project proposal conformed to the Keewatin Regional Land Use Plan. The Project proposal was previously reviewed by NPC, and conformity determination 148160 issued on November 30, 2015 and renewed (148669) on January 5, 2018 still applies. In addition, the Nunavut Impact Review Board (NIRB) previously screened² the proposal and determined that it did not require a review under section 92(1)(a) of the Nunavut Planning and Project Assessment Act (NuPPAA). Therefore, as the scope of the activities were not changed, the NPC determined that the Project proposal was exempt from screening by the NIRB.

On March 6, 2020, a licence renewal application (Application) was received by the NWB, requesting that the licence be renewed again, this time to 2025.

III. GENERAL CONSIDERATIONS

In accordance with the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSRTA)* s. 45, the NWB may issue a licence for a term not exceeding twenty-five years. The Applicant requested extending the term of the Licence to October 2025, and the NWB satisfied the request.

A. Scope, Definitions and Enforcement

Scope

The scope of the Licence is the use of water and the deposit of waste in support of activities related to exploration including prospecting, mapping, ground geophysics, sampling and diamond drilling on ice and on land at the Luxx Project.

Enforcement

To ensure that the Licensee complies with the terms and conditions of the Licence, inspectors

² Nunavut Impact Review Board (NIRB) Screening Decision Report, February 8, 2016.

designated and empowered by the Minister of Northern Affairs (Minister) may inspect or examine works, activities, and undertakings associated with the use of waters and/or the deposit of waste for the purposes of exercising their powers in accordance with the *NWNSRTA*.³

Compliance

North Arrow should note that compliance with the terms and conditions of this Licence does not necessarily absolve the Licensee from the responsibility to comply with all other applicable legislation, guidelines, and directives.

B. General Conditions

Part B of the Licence addresses the general terms and conditions that apply to the Undertaking, such as annual report submission, protocols for handling documents related to the Licence, posting of signage at sites associated with the undertaking, and more.

C. Conditions Applying to Water Use

No domestic water use shall take place under this Licence. Water for drilling purposes shall not exceed fifty (50) cubic meters per day and is to come from lakes, creeks, rivers or streams near drilling targets. Total water use shall not exceed fifty (50) cubic meters per day.

D. Conditions Applying to Waste Disposal

No greywater or sewage shall be generated, as all personnel will be accommodated in Chesterfield. The only type of waste produced during the activities is drilling cuttings, which will be deposited in sumps or natural depressions.

E. Conditions Applying for Camps, Access Infrastructures and Operations

Camp use is not authorized under this Licence.

F. Conditions Applying to Drilling Operations

Drilling activities are permitted on land and on-ice. Provisions are included to mitigate impacts that the on-ice drilling activity could have on water quality.

G. Conditions Applying to Modifications

The Applicant is required to obtain permission from the NWB for modifications that do not meet the definition of modifications or the criteria of Part G, Item 1 of the Licence. Without written consent from the NWB, the Licensee is not allowed to carry out any modifications. Changes that do not meet the definition of a Modification under the Licence or the requirements of Part G may be considered amendments to the Licence.

³ Sections 85-88 of the *NWNSRTA*.

H. Conditions Applying to Spill Contingency Planning

The Plan entitled “Spill Contingency Plan” and dated April 21, 2020 was submitted as additional information during the 2020 licensing process. The Board has approved the Plan with the issuance of this Licence; however, North Arrow is required to submit an updated Plan at least thirty (30) days prior to initiating activities at the Project. The update ought to address the Applicant’s commitments.⁴

I. Conditions Applying to Closure and Reclamation or Temporary Closure

The Licensee shall complete all restoration work prior to the expiry of this Licence. The Board has previously approved the Plan entitled “Abandonment & Restoration Plan” dated December 11, 2017 that shall be implemented for restoration work.

J. Conditions Applying to the Monitoring Program

The Licensee shall record all sources and quantities of water used for all purposes and all locations where any type of waste is disposed. In this part, the Board included provisions included for the monitoring of water quality prior to and after on-ice drilling and set the conditions for all data gathered in accordance with the monitoring program to be included in annual reports.

⁴ Michael Macmorran (North Arrow) to Richard Dwyer (NWB), RE: 2BE-LUX1820 Water Licence Renewal Application, dated April 21, 2020.



NUNAVUT WATER BOARD RENEWAL WATER LICENCE

Licence No: 2BE-LUX2025

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

NORTH ARROW MINERALS INC.

(Licensee)

**SUITE 960-789 WEST PENDER STREET
VANVOUVER, BC V6C 1H2**

(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 Renewal:

Licence Number/Type: **2BE- LUX2025 / TYPE "B"**

Water Management Area: **CHESTERFILED INLET WATERSHED (10)**

Location: **LUXX PROJECT, KIVALLIQ REGION, NUNAVUT**

Classification: **MINING UNDERTAKING**

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

Quantity of Water use not to Exceed: **FIFTY (50) CUBIC METRES PER DAY**

Effective Date: **JULY 13, 2020**

Expiry of Licence: **OCTOBER 31, 2025**

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

**Lottie 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 Luxx Project, located approximately 60 km west of Chesterfield and 90 km north 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*;

“**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*;

“**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 18th 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” 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 31st of the year following the calendar year being reported, containing the following information:
 - a. A summary report of Water use 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 reporting period;
 - d. Quantity of Waste disposed of on on-site Waste disposal facility;
 - e. Quantity of Waste backhauled to an 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 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. GPS coordinates of the locations of sump(s) and drill holes;
 - l. 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;
 - m. 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;
 - n. A summary of public consultation/participation, describing consultation with local organizations and residents of the nearby communities, if any were conducted;
 - o. Any other details on Water use or Waste disposal requested by the Board by the 1st 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

(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

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 freshwater for drill/industrial purposes from local Water sources proximal to the drilling targets as outlined in the Application and shall not exceed fifty (50) 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 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.
6. The Licensee shall not conduct any work below the ordinary High Water Mark of any water body unless approved by the Board in writing.
7. The Licensee shall not cause erosion to the banks of any body of Water and shall provide necessary controls to prevent such erosion.
8. 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 Luxx 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 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 FOR CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS

1. No camp activities are authorized under the provisions of this Licence.
2. The Licensee shall not store material on the surface of frozen streams or lakes including the immediate banks except what is for immediate use.
3. 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.
4. 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.
5. Stream crossing shall be a minimum of five hundred (500) meters from spawning areas.
6. 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.
7. The Licensee shall not mobilize heavy equipment or vehicles 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 (CaCl₂) 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 nontoxic, 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 “Spill Contingency Plan” dated April 21, 2020 that was submitted as additional information with the Application.
2. The Licensee shall, at least thirty (30) days prior to initiating activities authorized under this Licence, submit for Board review an update to the Plan referred to in Part H, Item 1, addressing the commitments made during the 2020 licensing process.
3. 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.

4. 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.
5. 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.
6. 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 CLOSURE AND RECLAMATION OR TEMPORARY CLOSURE

1. The Licensee shall implement the Plan entitled “Abandonment & Restoration Plan” dated December 11, 2017 that was previously approved by the Board.
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 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. 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.
10. 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.
11. 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.
12. 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 that is used from sources located on, in or flowing through Crown Land, utilized for 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 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.