



ᓄᓇᑦ ᐃᓕᓂᓴᑦ ᑲᓂᓴᓴᓴ
NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No.: **2BE-QIL1722**

October 6, 2017

Mike MacMorran
North Arrow Minerals Inc.
Suite 960 – 789 West Pender St.
Vancouver, B.C., V6C 1H2

Email: mmacmorran@northarrowminerals.com

RE: NWB Renewal Licence No. 2BE-QIL1722

Dear Mr. MacMorran:

Please find attached Water Licence No. 2BE-QIL1722 issued to North Arrow Minerals Inc. 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 deposit 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 water use and waste deposit 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. 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 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 by Indigenous and Northern Affairs Canada (INAC), Fisheries and Oceans Canada (DFO) and Environment and Climate Change Canada on issues identified. This information is attached for your consideration¹.

Sincerely,

Lootie Toomasie
Nunavut Water Board
Chair

LT/sa/rd

Enclosure: Licence No. **2BE-QIL1722**
Comments – INAC, DFO, and ECCC

Cc: Kivalliq Region Distribution List

¹ Indigenous and Northern Affairs Canada (INAC), August 25, 2017
Fisheries and Oceans Canada (DFO), July 20, 2017
Environment and Climate Change Canada, August 21, 2017

TABLE OF CONTENTS

DECISION	ii
LICENCE NO. 2BE-QIL1722.....	1
I. INTRODUCTION.....	1
II. PROCEDURAL HISTORY.....	2
III. GENERAL CONSIDERATIONS	3
A. Compliance with Licence 2BE-QIL1722	3
Annual Reports	3
Addendum to the Spill Contingency Plan	3
B. Term of Licence.....	3
C. Annual Reporting	4
D. Water Use	4
E. Waste and Water Management.....	4
F. Modifications.....	5
G. Spill Contingency and Abandonment and Reclamation Plans.....	5
PART A: SCOPE, DEFINITIONS AND ENFORCEMENT	6
1. Scope	6
2. Definitions	6
3. Enforcement	8
PART B: GENERAL CONDITIONS	8
PART C: CONDITIONS APPLYING TO THE USE OF WATER AND WATER MANAGEMENT.....	10
PART D: CONDITIONS APPLYING TO WASTE DISPOSAL	11
PART E: CONDITIONS APPLYING TO CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS.....	12
PART F: CONDITIONS APPLYING TO DRILLING AND TRENCHING OPERATIONS	13
PART G: CONDITIONS APPLYING TO MODIFICATIONS	14
PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING	15
PART I: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION OR TEMPORARY CLOSING.....	15
PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM.....	17



DECISION

WATER LICENCE NUMBER: 2BE-QIL1722

This is the decision of the Nunavut Water Board (NWB) with respect to an application dated April 11, 2017 for the renewal of water licence made by:

NORTH ARROW MINERALS INCORPORATED

to allow for the use of Water and the deposit of Waste during activities related to mineral exploration that include prospecting, geological mapping, geophysical survey, diamond and reverse circulation drilling on land and on ice, bulk sampling, and trenching at the Naujaat Project, located within the Kivalliq Region of Nunavut generally located at the geographical coordinates as follows:

Project Extents:

Latitude 66° 35' 38" N	Longitude 86° 07' 02" W
Latitude 66° 35' 38" N	Longitude 86° 07' 50" W
Latitude 66° 35' 22" N	Longitude 86° 07' 50" W
Latitude 66° 35' 22" N	Longitude 86° 07' 02" W

DECISION

After having been satisfied that the Application, as indicated by the Nunavut Planning Commission² (NPC), is for a proposal previously reviewed by the NPC for which the Conformity Determinations of March 21, 2012 and February 27, 2015 still apply, and exempt from screening by the Nunavut Impact Review Board (NIRB) because the Project Proposal was previously screened by the NIRB³ and the scope as it stands has not changed, 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 (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:

Licence No. 2BE-QIL1217 be renewed as Licence No. 2BE-QIL1722 subject to the terms and conditions contained therein (Motion #: 2017-B1-032).

SIGNED this 6th day of October, 2017 at Gjoa Haven, NU.

Lootie Toomasie
Nunavut Water Board, Chair
LT/sa/rd

² NPC Letter, Re: NPC File #148542 (Naujaat Q1-4 Project), dated April 11 2017

³ NIRB File No. 12EN012



LICENCE NO. 2BE-QIL1722

I. INTRODUCTION

The Naujaat Project is located approximately 10 km northeast of the Hamlet of Naujaat (formerly known as Repulse Bay), in the Kivalliq region of Nunavut. The property consists of three claims and seven leases and sits on both Crown and Commissioner's Land.

North Arrow Minerals Inc. (North Arrow or the Licensee), an exploration and mining company focused on the identification and evaluation of diamond opportunities in Canada operates the Naujaat Project. Regarding the Naujaat Project, North Arrow holds Water Licence 2BE-QIL1217, which authorizes Water use and Waste deposit during mineral exploration activities at the Naujaat Project (previously known as Qilalugaq Project). The existing licence was issued on November 28, 2012 with an expiration date of November 30, 2017.

Main activities included under the Project scope are prospecting, geophysics survey, diamond and/or reverse circulation drilling, bulk sampling and trenching. Fuel storage areas will include a main storage site within the Hamlet and small fuel caches located adjacent to active drill sites when drilling is underway.

The Applicant has indicated that camp facilities at site are not required because accommodation for North Arrow personnel will be provided in the Hamlet of Naujaat. Notwithstanding, a small temporary facility will be built at the Project site for core logging and preparation. Following logging, drill core will be flied out to Naujaat to prepare the cores for further processing and shipping to the south.

Work at site is planned to be conducted during the spring months between April and May and in the summer/fall months between July and September. The timing and execution of the proposed drill programs are dependent upon weather logistics and resources.

North Arrow's 2017 exploration campaign includes drilling and archaeological surveying; in order to carry out those activities, a five-member crew (two to three geologists, one archaeologist, one helicopter pilot, one engineer and one cook/first aid attendant) is currently working at site.

A brief summary of the file history is provided below:

<i>Water Licence No.</i>	<i>Issuance Date</i>	<i>Scope</i>	<i>Licensee</i>
<i>2BE-QIL0712</i>	February 19, 2007	To allow for the use of water and deposit of waste during mineral exploration activities that included drilling.	Stornoway Diamond Corporation
<i>2BE-QIL1217</i>	November 28, 201	To allow for the deposit of waste during activities related to exploration that included bulk sampling with trenching.	Stornoway Diamond Corporation
<i>2BE-QIL1217</i>	June 24,	To allow for the use of water and deposit of	Stornoway



<i>Amendment No.1</i>	2015	waste during mineral exploration activities including prospecting, geological mapping, geophysical surveys, drilling, bulk sampling and trenching.	Diamond Corporation
<i>2BE-QIL1217 Assignment</i>	July 18, 2017	Assignment of Water Licence No. 2BE-QIL1217 from Stornoway Diamond Corporation to North Arrow Minerals Inc.	North Arrow Minerals Inc.

II. PROCEDURAL HISTORY

Requirements of the NuPPAA, NWNSRTA and the Nunavut Agreement

Since the implementation of the *Nunavut Planning and Project Assessment Act* (NuPPAA), all project proposals must first be assessed by the Nunavut Planning Commission (NPC) and, if required, by the Nunavut Impact Review Board (NIRB) before proceeding to the permitting and approvals stages. The NWB shall not approve any water licence application until these requirements have been met. Further to that, the NWB does not proceed beyond the technical review stage of considering the Application until the NPC and the NIRB assessment processes are complete.

On April 11, 2017, the NPC reviewed the Application presented by North Arrow and indicated that the Project is for a proposal previously reviewed by the NPC for which the Conformity Determinations of March 21, 2012 and February 27, 2015 still apply, and also that the Project Proposal is exempt from screening by the Nunavut Impact Review Board (NIRB) because it was previously screened by the NIRB and the scope of the Project has not changed.

On this basis, the NWB considered the requirements of the *NWNSRTA*, the *Nunavut Agreement* and the *NuPPAA* fulfilled such that the NWB could continue processing the Application.

The Application Before the NWB

On July 18, 2017, the Nunavut Water Board acknowledged receipt on April 11, 2017 of a Water Licence Application (Application) from North Arrow Minerals Inc. (North Arrow or the Licensee or the Applicant) for water use and waste deposit in support of the Naujaat Project and informed that the Application concluded the pre-licensing steps required under the *Nunavut Agreement*, the *NuPPAA* and the *NWNSRTA*. The following documents were submitted to the NWB in support of the Application:

- Application for Water Licence Renewal;
- Project Summary in English and Inuktitut;
- Abandonment and Restoration Plan, Naujaat Project, Naujaat, Nu, dated April 11, 2017;
- Spill Contingency Plan, Naujaat Project, Naujaat, Nu, dated April 11, 2017;
- North Arrow Financial Statement, dated January 2017.

At the same time the Board invited interested parties to make representation directly to the NWB within 30 (thirty) days from the date of the acknowledgment's letter, with a deadline of August 18, 2017. The review period was extended for 10 days more, in order to allow the



parties to access to supplementary information submitted by the Applicant and a new deadline of August 28, 2017 was set.

On or before August 28, 2017, comments were provided by Indigenous and Northern Affairs Canada (INAC), Fisheries and Ocean Canada (DFO), and Environment and Climate Change Canada (ECCC).

III. GENERAL CONSIDERATIONS

A. Compliance with Licence 2BE-QIL1217

A review of the available information at the NWB Public Registry shows that the Licensee is in compliance with the terms and conditions of the existing 2BE-QIL1217, according to:

Annual Reports

Under *Part B Item 1* of the existing Licence, the Licensee is required to file, annually, an Annual Report on the Undertaking. In this regard, the Licensee has submitted Annual Reports during the Licence's period in a timely manner. Also, all the Reports were opportunely forwarded to the distribution list for information; no comments were received at that time.

The NWB has completed a technical review of the 2012 Annual Report for the Project. The 2012 Annual Report was found to be complete as submitted and meeting the reporting requirements of Licence 2BE-QIL1217. The 2013⁴ and 2014⁵ Annual Reports, were opportunely reviewed by the NWB and were found to be complete and meeting the reporting requirements of the Licence. Further to this, the Applicant informed that not activity was undertaken at site during 2015 and 2016.

Addendum to the Spill Contingency Plan

Under *Part H, Item 2* of the existing Water Licence the Licensee was required to submit an addendum to the Spill Contingency Plan. The addendum was submitted along with the 2013 Annual Report. On May 28, 2014 the Nunavut Water Board issued a letter informing⁴ that the addendum was found to be complete and meeting the requirements of the Licence 2BE-QIL1217.

B. Term of Licence

In accordance with s.45 the *Nunavut Waters and Nunavut Surface Right Tribunal Act* (NWNSRTA), the NWB may issue a licence for a term not exceeding twenty-five years. In determining an appropriate term of a water licence, the Board considers a number of factors including, but not limited to Licensee compliance record and intervener comments provided during the application review process.

The Applicant has requested a term of five (5) years⁶ for the licence renewal. Given that parties have not expressed concerns with respect to a Licence term of five (5) years, and

⁴ NWB letter, Re: Licence No. 2BE-QIL1217 "Qilalugaq Project, Stornoway Diamond Corporation, Submission of 2013 Annual Report Addendum to the Spill Contingency Plan, dated May 28, 2014

⁵ NWB letter, Re: Licence No. 2BE-QIL1217 "Qilalugaq Project, Stornoway Diamond Corporation, Submission of 2014 Annual Report, dated October 20, 2015

⁶ NWB email, Re: Application for Renewal of Water Licence 2BE-QIL1217 -request for deficient information on



following a review of the information available during the renewal process, the NWB concurs with the Applicant that a Licence term of five (5) years is appropriate.

The Licence duration will allow the Licensee to properly carry out the terms and conditions of the Licence for the proposed activities during this time as well as to develop, submit and implement the plans required under the Licence to the satisfaction of the NWB.

C. Annual Reporting

In accordance with s. 14 (1) of the *Nunavut Regulations*, requirements have been included under *Part B, Item 1* of the Licensee for the submission of an annual report detailing the activities carried out under the Project for the year preceding one in which the report is filed. The Annual Reports are required for the purpose of ensuring that the NWB has an accurate annual update of the Licensee's activities related to the use of Water and the deposit of Waste during a calendar year.

This information is maintained at the NWB Public Registry and is available to interested parties upon request. A "Standardized Form for Annual Reporting" may be used by the Licensee for the basic reporting requirements and is available from the NWB file transfer protocol (FTP) site under the Public Registry link at the NWB Website.

Website Public Registry:

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

This form provides the basis for annual reporting and format. However, individual licences with project-specific reporting requirements may need to provide information in addition to that of the standard form.

D. Water Use

The Applicant has requested the use of one hundred (100)⁷ cubic meters of freshwater per day for drilling purposes and related activities. Further to this, it has also indicated that the Water will be drawn from unnamed water sources proximal to the drilling locations.

Therefore, the NWB has granted the quantity of water requested by the Applicant and set the maximum water use for all purposes under this Licence *at 100 cubic meters of fresh water per day*.

E. Waste Management

Types of Waste generated at site include solid waste, bulky items / scrap metal, waste oil and drill cuttings. Regarding current waste management practices at site, the Applicant has indicated the following:

- solid Waste (domestic waste) is backhauled daily to Naujaat for disposal at an approved facility;

⁷ NWB email, Re: Application for Renewal of Water Licence 2BE-QIL1217 -request for deficient information on June 6, 2017



- hazardous Waste (waste oil produced during drilling activities) and bulky items composed by empty fuel drums are backhauled to Naujaat at the end of operations for proper disposal at an authorized facility;
- drill cuttings like mud and slurry are pumped to an on-land natural depression or hand-dug sump.

F. Modifications

Standard conditions are included in the Water Licence related to modifications. Likewise, under Part G, Item 1, the Licensee is required to submit to the Board for approval, for Construction drawings at least sixty (60) days prior to commencing the construction or modification of any water or waste facility, and in accordance with Part G, Item 4, provide as-built plans and drawings of the construction and/or Modifications. These plans and drawings shall be stamped and signed by an Engineer.

G. Spill Contingency and Abandonment and Reclamation Plans

The Licensee has submitted with the Application updated Spill Contingency and Abandonment and Reclamation Plans; the Plans have been found generally acceptable and therefore they are approved under the relevant sections of the Renewal Licence.



NUNAVUT WATER BOARD WATER LICENCE

Renewal Licence No. 2BE-QIL1722

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 INCORPORATED

(Licensee)

SUITE 960 – 789 WEST PENDER STREET, VANCOUVER, B.C. V6C 1H2

(Mailing Address)

Herein after 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:

Licence Number/Type: **2BE-QIL1722 / TYPE “B”**

Water Management Area: **REPULSE BAY WATERSHED (NO. 18)**

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

Classification: **MINING UNDERTAKING**

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

Quantity of Water use not to Exceed: **ONE HUNDRED (100) CUBIC METRES PER DAY FOR DRILLING PURPOSES ONLY**

Date of Licence Issuance: **DECEMBER 01, 2017**

Expiry of Licence: **NOVEMBER 30, 2022**

This Licence renewal – amendment, 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 authorizes the use of Water and the deposit of Waste in support of a Mining Undertaking classified as per schedule 1 of the *Regulations*, at the Naujaat Project, located approximately 10 kilometers northeast of the Hamlet of Naujaat, within the Kivalliq Region of Nunavut.

- a. This Licence is issued subject to the conditions contained herein with respect to the taking 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
- 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 require an amendment;

“**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 Sample Program**” means the activities described in the water licence renewal application dated March 20,2012;

“Burnable Waste” means food waste, paper waste and untreated wood products that are authorized to burn in an incinerator;

“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*;

“Existing Licence” means the 2BE-QIL1217 Water Licence issued on November 28, 2017 and its amendment, 2BE-QIL1217 Amendment No.1 issued on November 28, 2012;

“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;

“Renewal Licence” means the 2BE-QIL1722 Water Licence;

“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;

“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;

“Trench Water Containment” means the lined sump or sumps, poly tank or other means of containment for water that has collected within the blasted / excavated trench(s) and subsequently removed for disposal upon confirmation of water quality;

“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 water use fees, payable to the Receiver General for Canada, shall be sent to the Board annually for the right to the use of Water 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 the 31st of March of the year following the calendar year being reported, containing the following information:
 - a. a summary report of water use and waste deposit activities;
 - b. GPS coordinates of the location (s) of any small fuel cache located adjacent to active drill sites;
 - c. GPS coordinates of the location (s) of any small fuel cache left at site at the end of the season, along with an inventory of the stored fuel;
 - d. a list of unauthorized discharges and a summary of follow-up actions taken;
 - e. any revisions to the Spill Contingency Plan and Abandonment and Restoration Plan, as required by Part B, Item 7, submitted in the form of an Addendum;
 - f. a description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;
 - g. a report of all artesian flow occurrences as required under Part F, Item 9;
 - h. a summary of all information requested and results of the Monitoring Program;
 - i. a summary of public consultations carried out in affected communities; and
 - j. any other details on water use or waste disposal requested by the Board by November 1 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, Items 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, INAC
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 one paper copy and 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.
11. 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.
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 THE USE OF WATER AND WATER MANAGEMENT

1. The Licensee shall obtain drill water from sources proximal to the drilling targets up to a maximum of *100 cubic meters per day*. The volume of Water used for all purposes authorized under this Licence shall not exceed *one hundred (100) cubic meters per day*.
2. Streams cannot be used as a water source unless authorized and approved by the Board in writing.
3. If the Licensee requires water in sufficient volume that the source water body may be drawn down, the Licensee shall, at least thirty (30) days prior to commencement of use of water, submit to the Board for approval in writing, the following; volume required,

hydrological overview of the water body, details of impacts and proposed mitigation measures.

4. 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.
5. The Licensee shall not remove any material from below the ordinary High Water Mark of any water body unless authorized by the Board in writing.
6. The Licensee shall not cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion.
7. Sediment and erosion control measures shall be implemented prior to and maintained during the operation to prevent entry of sediment into water.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensee shall locate areas designated for Effluent discharge at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any water body where direct flow into a water body is not possible and additional impacts are not created, unless otherwise approved by the Board in writing.
2. The Licensee shall not practice on-site landfilling 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 Naujaat Project prior to any backhauling and disposal of wastes to those communities.
6. The Licensees shall ensure that all non – burnable waste, waste contaminated by petroleum products, Hazardous Waste, and dry drilling sludge generated through the course of operation are backhauled and disposed of at an approved waste disposal site or as otherwise approved by the Board.
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 the

Board or an Inspector upon request.

8. The Licensee shall ensure that all extracted rock is removed from the Project area and no rock stockpiles are left at site.
9. The Licensee shall direct all Water accumulated in blasted or excavated trenches to a Trench Water Containment to allow for sampling prior to release. Water collected in hand-dug trenches shall be directed to a natural depression sump, as required by condition under Part D, Item 1.
10. The Licensee shall provide at least ten (10) days notification to an Inspector, prior to initiating the release of effluent from the Trench Water Containment. The notice shall include water quality results, an estimate of volume and the proposed receiving location.
11. All effluent discharge from the Trench Water 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 discharges shall not exceed the following effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)
Total Arsenic	0.50
Total Copper	0.30
Total Lead	0.20
Total Nickel	0.50
Total Zinc	0.50
Total Suspended Solids (TSS)	25
Oil and Grease	No Visible Sheen
pH	Between 6 and 9.5

12. The Licensee shall confirm compliance with effluent quality limits in Part D, Item 11, prior to the release of any effluent.
13. All effluent shall be discharged in such a manner to minimize surface erosion.

PART E: CONDITIONS APPLYING TO CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS

1. No camp activities are authorized under the provisions of this Licence.
2. The Licensee shall not move any equipment or vehicles 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 must be suspended if rutting occurs.
3. The Licensee shall conduct all activities in such a way as to minimize impacts on

surface drainage and immediately undertake any corrective measures in the event of any impacts on surface drainage.

4. 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 at a distance of at least thirty-one (31) metres from the ordinary High Water Mark of any water body in such a fashion that they do not enter the water, or as otherwise approved by the Board in writing.
5. The Licensee shall not store material on the surface of frozen streams or lakes, including the adjacent banks, except what is for immediate use.

PART F: CONDITIONS APPLYING TO DRILLING AND TRENCHING OPERATIONS

1. The Licensee shall not conduct any land-based drilling and or trenching activities 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 ensure that removal of material from trenches take place within one metre of the high water mark above the groundwater table.
3. The Licensee shall dispose of all bulk sampling waste rock 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.
4. The Licensee shall implement sediment and erosion control measures by employing erosion prevention measures (e.g., berms or silt fence) in the trenching area during the project operation.
5. The Licensee shall stockpile all overburden/topsoil generated during trenching using proper erosion prevention measures. Upon completion of operation, the Proponent shall back fill, reclaim/re-contour and re-vegetate all disturbed areas.
6. The Licensee shall pump accumulated water in trenches to a natural depression sump, and build berms where necessary. Water should meet the discharge criteria as outlined by Part D, Item 12 before being discharged into the environment.
7. The Licensee shall, during trenching activities utilizing blasting, provide mitigation measures to prevent the transport of blast rock, explosives residues, sediment and other materials from entering water as required by condition under Part E, Item 4.
8. 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.

9. 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.
10. 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.
11. 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).
12. 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 Facility, and Waste Management 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 within ninety (90) days of completion of the Modification or Construction of facilities and/or infrastructure associated to this Project, submit to the

Board as-built plans and drawings. These plans and drawings shall be stamped by an Engineer.

PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

1. The Board has approved with the issuance of this Licence the Plan entitled “*Spill Contingency Plan Naujaat Project, Naujaat, Nunavut*” dated April 11, 2017. The Licensee shall submit with the 2017 Annual Report to the Board for review, an addendum to the approved Plan that addresses the following:
 - a. geographical coordinates of the main Fuel Cache located in Naujaat;
 - b. include the 24 Hour Northwest Territories – Nunavut Spill Report Line and clarify that ECCC will be involved when its involvement is required by a lead agency.
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 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 4, regardless of the quantity of releases of harmful substances, report to the NWT/NU Spill Line if the release is near or into a Water body.

PART I: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION OR TEMPORARY CLOSING

1. The Board has approved with the issuance of this Licence the Plan entitled “*Abandonment and Restoration Plan Naujaat Project, Naujaat Nu*” dated April 11, 2017.
2. The Licensee shall complete all restoration work prior to the expiry of this Licence.
3. The Licensee shall carry 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 pumps and lines, material and equipment prior to the expiry of this Licence.
6. The Licensee shall re-grade all roads and airstrip, if any, 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. The Licensee shall, for all disturbed surfaces, in order to promote growth of vegetation and the needed microclimate for seed deposition, prepare the surfaces by ripping, grading, or scarifying the surface to conform to the natural topography.
9. The Licensee shall reclaim areas that have been contaminated by hydrocarbons from normal fuel transfer procedures 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 stockpile all overburden / topsoil generated during trenching using proper erosion prevention measures. Upon completion of operation, the Licensee shall backfill, reclaim/re-contour and re-vegetated all disturbed areas to where possible, a pre-disturbed state. Erosion prevention measures shall be consistent with condition under Part C, Item 7.
11. The Licensee shall restore all trenches prior to the closure of seasonal exploration programs and removal of equipment from site. Trenches are to be in-filled and covered with stockpile overburden materials and re-contoured to the natural terrain, providing drainage is directed away from nearby watercourse
12. 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.

13. The Licensee may store drill cores 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.

PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM

1. The Licensee shall measure and record, in cubic metres, the daily quantities of water obtained from water sources located in, on or flowing through Inuit Owned Land, used for drilling and other industrial purposes.
2. The Licensee shall measure and record, in cubic metres, the daily quantities of water obtained from water sources located on Crown Owned Land, used for drilling and other industrial purposes.
3. 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.
4. The Licensee shall determine the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where wastes associated with the Naujaat Project are deposited.
5. Any water collected in the trenches shall be tested prior to discharge and analyzed for the following:

Total Suspended Solids pH

Total Trace Metals as determined by a standard ICP Scan (to include at a minimum, the following elements: Cd, Cr, Co, Cu, Fe, Pb, Mn, Ni, Zn), and
Trace Arsenic and Mercury.

6. The Licensee shall obtain representative samples of the water column below any ice where required under Part F, Item 11 and 12. 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.

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.
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. The Board and/or an Inspector may impose additional monitoring requirements.
10. The Licensee shall include in the Annual Report required under Part B, Item 2, all data, monitoring results and information required by this Part.