File No.: 2BE-ABP1823

June 19, 2018

Transition Metals Corp. 410 Falconbridge Road, Unit 5. Sudbury ON P3A 4S4 Tara Gunson APEX Geoscience Ltd. 110 8429-24 Street NW Edmonton, AB T6P 1L3

Email: <u>tgunson@apexgeoscience.com</u> <u>info@transitionmetalscorp.com</u>

**RE:** NWB New Water Licence No. 2BE-ABP1823

Dear Ms. Gunson:

Please find attached Licence No. 2BE-ABP1823 issued to Transition Metals Corp. 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 <u>sixty (60) days</u> 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) and Environment and Climate Change Canada on issues identified. This information is attached for your consideration<sup>1</sup>.

Sincerely,

Lootie Toomasie Nunavut Water Board

Chair

LT/kt/rqd

Enclosure: Licence No. 2BE-ABP1823

Comments - INAC, ECCC

Cc: Kitikmeot Region Distribution List

<sup>&</sup>lt;sup>1</sup> Letter from INAC to NWB, Re: Technical Review of New Water Licence Application (No. 2BE-ABP----) – Transition Metals Corporation, dated December 19, 2017; and Letter from ECCC to NWB, Re: 2BE-ABP---- – Transitions Metals Corporation – Arcadia Bay Project – Type "B" Water Licence Renewal, dated December 15, 2017.

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## **DECISION**

## **LICENCE NUMBER: 2BE-ABP1823**

This is the decision of the Nunavut Water Board (NWB) with respect to an application dated November 14, 2017 for a new Water Licence made by:

### TRANSITION METALS CORPORATION

to allow for the use of Water and the deposit of Waste during camp operations and activities related to mineral exploration that include drilling, sampling, prospecting, geological mapping, and geophysical surveys at the Arcadia Bay Project, located within the Kitikmeot Region, Nunavut, generally located at the geographical coordinates as follows:

**Project Extents:** 

Minimum Latitude: 67° 40' 30" N
Maximum Latitude: 67° 44' 39" N
Minimum Longitude: 111° 20' 10" W
Maximum Longitude: 111° 27' 10" W

Camp Location:

Latitude: 67° 43' 12.9" N Longitude: 111° 23' 6.9" W (Seasonal Camp)

### **DECISION**

After having been satisfied that the Application is for a proposal that falls outside of an area with an approved land use plan, and, as such, a conformity determination is not required<sup>2</sup>, and a review is required subject to the terms and conditions recommended by the Nunavut Impact Review Board's Screening Decision Report<sup>3</sup> in accordance with Article 12 of the Nunavut Agreement and s.88, 92(1) and 92(2)(a) of Nunavut Planning and Project Assessment Act (*NuPPAA*), 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:

A New Water Licence No. 2BE-ABP1823 be issued subject to the terms and conditions contained therein (Motion #: 2018-B1-014).

SIGNED this 19th day of June, 2018 at Gjoa Haven, NU.

Lootie Toomasie Nunavut Water Board Chair LT/kt/rqd

<sup>&</sup>lt;sup>2</sup> NPC letter, Re: NPC File #148574 Arcadia Bay Property, dated May 19, 2017

<sup>&</sup>lt;sup>3</sup> NIRB Screening Decision Report, NIRB File No.17EN059, dated September 19, 2017

### LICENCE NO. 2BE-ABP1823

## I. INTRODUCTION

The Arcadia Bay Property is located on the shore of Arcadia Bay, south of the Coronation Gulf, approximately 160 km east of Kugluktuk, 200 km west of Hope Bay, and 305 km southwest of Cambridge Bay in the Kitikmeot region of Nunavut.

The Arcadia Bay Property is owned and operated by Transition Metals Corporation and Nunavut Resources Corporation (Transition and NRC, respectively). Transition Metals Corporation (Transition or the Licensee) applied to the Nunavut Water Board (NWB or the Board) in order to obtain a Water Licence authorizing the use of water and deposit of waste for the Arcadia Bay Project (the Project).

The following activities are included under the scope of the Project: staking, prospecting, diamond drilling, sampling, airborne geophysics and the operation of a seasonal camp. The camp, a small, seasonal camp would include one office tent, three sleeping tents, one first aid tent, one generator storage shack and one core logging/ sample shack.

The personnel anticipated to be present during the exploration program include the program supervisor, cook/first aid attendant, helicopter pilot, helicopter engineer, drill contractor personnel (four) and geologist/ field assistants (four). The water use requirement is estimated in approximately 2 m³ per day for camp / domestic use and 40 m³ per day for drilling, resulting in a total estimate of 42 m³/day of water required for the project.

The Project area is located on Inuit Owned Land (IOL). Currently, the Licensee holds the Kitikmeot Inuit Association Licence KLT113B001 authorizing general exploration activities on the Property. This licence expired on April 30, 2017 and the Applicant has submitted an extension request.

## 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 May 19, 2017, NPC reviewed the Application presented by Transition and indicated that the Project is outside of the areas with regional land use plan and forwarded the Project proposal to the NIRB. On September 19, 2017 the NIRB determined that a review of the Project was not required pursuant to paragraph 92(1) (a) of *NuPPAA* and issued a Screening Decision Report for the Arcadia Bay Project.

## The Application before the NWB

On November 15, 2017, the Nunavut Water Board acknowledged receipt on November 14, 2017 of an application for a new Water Licence for the Arcadia Bay Project and informed that the Application satisfied 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:

- o NPC's Letter Re: Arcadia Bay Property, dated May 19, 2017;
- o Abandonment and Restoration Plan, Arcadia Bay Property, dated June 1, 2017;
- o Cover letter:
- o Environmental Management Plan, Arcadia Bay Property, dated October 6, 2017;
- o English summary;
- o Emergency Response Plan, Arcadia Bay Property, dated June 1, 2017;
- o Exploration/ Remote Camp Supplementary Questionnaire;
- o Figure 1, Arcadia Bay Property location;
- o Figure 2, Arcadia Bay Property over google earth;
- o Figure 3, Arcadia Bay Property Potential Field Areas;
- o Financial Statement;
- o General Water Licence Application, dated October 31, 2017;
- o Inuinnaqtun summary;
- o Inuktitut summary;
- Mining and Milling Supplemental Information Guideline (SIG) for Mineral Exploration
   Remote Camp- Arcadia Bay Property;
- Spill Contingency and Fuel Management Plan, Arcadia Bay Property, dated June 1, 2017;
- o Letter of authorization;
- o Waste Management Plan, Arcadia Bay Property, dated June 1, 2017;
- o Certificate of Registration of an Extra-Territorial Corporation, Nunavut.

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 December 15, 2017. On or before the deadline, comments were provided by Indigenous and Northern Affairs Canada (INAC), and Environment and Climate Change Canada.

## III. GENERAL CONSIDERATIONS

### A. 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 Licence term of five (5) years. Given that parties have not expressed concerns with respect to a Licence term of five (5) years, and following a review of

the information available during the licensing 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.

## B. Consultation

The Board notes the following information provided in the Water Licence application regarding consultation: "The Kitikmeot Inuit Association notified Transition Metals Corporation that there would be no requirement for a community consult as the project requires a consult of the Kitikmeot Inuit Association with the Community Beneficiary Committee's, who act as their land advisors. It was noted that the meeting with them is part of the application process."4

In its comments dated December 19, 2017, INAC expressed concerns regarding the above statement noting that although an agreement between Transition and KIA has been reached it does not absolve the applicant from its consultation duties. INAC further recommended that the NWB confirm that appropriate and adequate consultation has been done.

As part of the Water Licence process the NWB provided notice of the application in English and Inuinnaquun on November 17, 2017, including a request to local organizations to post the notices on a bulletin until December 15, 2017, where they can be viewed by the public.

In response to INAC's concerns the Board requires the Licensee to submit as part of its annual report, a summary of public consultation/participation, describing consultation with local organizations and residents of the nearby communities, if any were conducted.

## C. Barging

The Water Licence application states that a barge landing site, located at the north end of the Property may be used. In its comments dated December 19, 2017, INAC expressed concerns regarding the lack of detail in the application regarding this activity and recommended that the activity of barging be more fully developed and contained in a single section of one document. The NWB advises the Licensee to take INAC's comments into consideration in required updates to its Spill Contingency and Abandonment and Restoration Plans.

## D. Annual Reporting

The new Regulations, under s.14, include a legislated requirement for all licensees to submit an annual report to the Board, with minimal requirements as set out through sec.14(a) through 14(k) and subject to additional requirements and in a form acceptable to the Board. 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:

<sup>&</sup>lt;sup>4</sup>General Water Licence Application, dated October 31, 2017, p. 8, section 20

## 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.

#### E. Water Use

As indicated in the Application Form, the Applicant requested the use of forty-two (42) cubic meters of freshwater per day. Two (2) cubic meters of Water will be drawn for domestic purposes from the river adjacent to the camp; forty (40) cubic meters of Water will be drawn for drilling from unnamed water sources proximal to the drilling locations.

During the review period, no concerns were expressed by the interveners regarding the quantity of water requested. Therefore, the NWB has granted the quantity of water requested by the Applicants and set the maximum water use for all purposes under this Licence at forty-two (42) cubic meters of fresh water per day. If the Licensee requires water in quantities greater than allowed under the Licence, they will be required to submit an amendment application to the Board for its consideration.

# F. Waste and Water Management

Details on the type of waste that will be generated at site and its management are included in the Application submission including the Plan entitled "Waste Management Plan, Arcadia Bay Property, Coronation Gulf Area, NU", dated June 1, 2017. Wastes that may be generated at site include camp sewage and greywater, combustible and non-combustible solid waste, incinerator waste, hazardous waste or oil; contaminated soil or water; and drill waste.

In its comments' dated December 15, 2017, ECCC expressed concern regarding on-site incineration of black water from Pacto-toilets as proposed in the Water Licence application, and recommended that the Proponent clarify that the incineration equipment chosen is specifically designed to handle incineration of black water. In response to ECCC concerns, the Board has included a condition requiring the Licensee to contain all toilet wastes in latrine pits or use incineration, chemical, portable or composting toilets; and incinerators used for the incineration of toilet wastes shall be specifically designed to handle this type of waste.

The Licensee is advised to review the licence terms and conditions to ensure that the Project's Waste Management Plan is consistent with the Licence requirements.

## **G.** Modifications

Standard conditions are included in the Water Licence related to modifications.

# H. Spill Contingency Plan

The Plan entitled "Spill Contingency and Fuel Management Plan, Arcadia Bay Property, Coronation Gulf Area, NU", dated June 1, 2017, was submitted as part of the Water Licence application. In its comments dated December 19, 2017, INAC noted the applicant's proposal to contain contaminated materials including soils in 205L drums/barrels, and recommended that the applicant describe or explain the contingency plan for a larger spill where there may not be

enough drums/barrels to store the contaminated material. In addition, INAC noted that the contact information for its Water Resource Officer should be updated in all applicable documents.

In response to INAC's concern, the Board requires the Licensee to submit for Board approval within thirty (30) days following issuance of the Licence, a revision to the plan entitled "Spill Contingency and Fuel Management Plan, Arcadia Bay Property" dated June 1, 2017, that addresses comments received by the parties. Furthermore, the Licensee shall review the Plan 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. The Licensee is also advised to take INAC's comments regarding barging activities into consideration in any updates to the Plan.

#### I. Abandonment and Restoration Plan

The Plan entitled "Abandonment and Restoration Plan, Arcadia Bay Property, Coronation Gulf Area, NU", dated June 1, 2017 was submitted as part of the Water Licence application. The Board has approved of this Plan; however, the Board also requires the Licensee to submit within thirty (30) days of issuance of the Licence, an addendum to the Plan to update the contact information for INAC's Water Resources Officer and to address barging activities if applicable.

The Licensee shall review the Plan 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.



# NUNAVUT WATER BOARD WATER LICENCE

# Licence No. 2BE-ABP1823

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

## TRANSITION METALS CORPORATION

(Licensee)

# 410 FALCONBRIDGE ROAD, UNIT 5, SUDBURY, ON, P3A 4S4

(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-ABP1823 / TYPE "B"

Water Management Area: CORONATION GULF WATERSHED (No. 29)

Location: ARCADIA BAY PROJECT, KITIKMEOT REGION,

**NUNAVUT** 

Classification: MINING UNDERTAKING

Purpose: USE OF WATER AND DEPOSIT OF WASTE

Quantity of Water use not

to Exceed: FORTY-TWO (42) CUBIC METRES PER DAY

Date of Licence Issuance: JUNE 19, 2018

Expiry of Licence: JUNE 18, 2023

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 Arcadia Bay Project, located on the shore of Arcadia Bay, on the Coronation Gulf, approximately 160 km east of Kugluktuk, 200 km west of Hope Bay, and 305 km southwest of Cambridge Bay in the Kitikmeot 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;

"<u>Addendum</u>" 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.

"<u>Amendment</u>" 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;

"<u>Appurtenant Undertaking</u>" 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;

"<u>Effluent</u>" 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;
- "<u>High Water Mark</u>" means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities);
- "Inspector" means an Inspector designated by the Minister under Section 85 (1) of the *Act*;
- "Licensee" means the holder of this Licence;
- "<u>Modification</u>" 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;
- "<u>Toilet Wastes</u>" means all human excreta and associated products, but does not include greywater;

"<u>Waste</u>" 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 31<sup>st</sup> 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. 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 Waste disposed of on on-site Waste disposal facility;
  - d. Quantity of Waste backhauled to approved facility for disposal;
  - e. A list of unauthorized discharges and a summary of follow-up actions taken;
  - f. 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;
  - g. A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;
  - h. Report all artesian flow occurrences as required under Part F, Item 3;
  - i. A summary of all information requested and results of the Monitoring Program;
  - j. A summary of public consultation/participation, describing consultation with

- local organizations and residents of the nearby communities, if any were conducted; and
- k. 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, 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: <u>licensing@nwb-oen.ca</u>

# (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 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 and Inuinnaqtun.
- 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 all water for domestic use from the river adjacent to the Arcadia Bay Project Camp, not exceeding two (2) cubic meters per day. Water use for drilling and associated uses shall be obtained as required from sources proximal to the drilling targets and shall not exceed forty (40) cubic metres per day. The total volume of water for all purposes under this Licence shall not exceed forty-two (42) cubic meters 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 authorized 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 operation 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 Arcadia Bay 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.
- 8. All effluent shall be discharged in such a manner to minimize surface erosion.
- 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 contain all toilet wastes in latrine pits or use incineration, chemical, portable or composting toilets. Latrine pits shall be located at a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any water body, treated with lime and covered with native material to achieve the pre-existing natural contours of the land prior to abandonment. Incinerators used for the incineration of toilet wastes

shall be specifically designed to handle this type of waste.

# PART E: CONDITIONS APPLYING TO 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 immediately undertake any corrective measures in the event of any impacts on surface drainage.
- 3. 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.
- 4. The Licensee shall implement sediment and erosion control measures prior to and maintain such measures during construction and operation to prevent entry of sediment into water.
- 5. The Licensee shall limit any in-stream activity to low water periods. In-stream activity is prohibited during fish migration.
- 6. The Licensee shall not store material on the surface of frozen streams or lakes, including the adjacent banks, except what is for immediate use.
- 7. The Licensee shall not mobilize heavy equipment or vehicles for trenching 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 and trenching 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. On-ice drilling is not authorized under this Licence.

# 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 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 a Construction Summary Report along with as-built plans and drawings providing explanation to reflect any deviations from the for construction drawings. These plans and drawings shall be stamped by an Engineer.

# PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

- 1. The Licensee shall submit for Board approval within thirty (30) days following issuance of the Licence, a revision to the plan entitled "Spill Contingency and Fuel Management Plan, Arcadia Bay Property" dated June 1, 2017 and prepared in the format set out by the Consolidation of Spill Contingency Planning and Reporting Regulations R-068-93, that addresses comments received by the parties and addresses or includes the following:
  - a. the contingency plan for a larger spill where there may not be enough drums/barrels to store the contaminated material;
  - b. update to the contact information for INAC's water resource officer; and
  - c. barging activities, if applicable.

- 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, and the NWB, 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 Arcadia Bay Property", dated June 1, 2017.
- 2. The Licensee shall submit for Board review within thirty (30) days of issuance of the Licence, an Addendum to the Plan referred to in Part I, Item 1, to address the following:
  - a. update to the contact information for INAC's water resource officer; and
  - b. barging activities, if applicable.
- 3. The Licensee shall complete all restoration work prior to the expiry of this Licence.
- 4. The Licensee shall carry progressive reclamation of any components of the Project no longer required for the Licensee's operations;
- 5. The Licensee shall backfill and restore all sumps to the pre-existing natural contours of the land.
- 6. 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.

- 7. The Licensee shall re-grade all roads and airstrip, if any, to match natural contour to reduce erosion.
- 8. The Licensee shall remove any culverts and restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.
- 9. 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.
- 10. 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.
- 11. 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.
- 12. 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.
- 13. 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.
- 14. The shall contour and stabilize all disturbed areas to reduce erosion and sedimentation to Water, 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 obtained from water sources located in, on or flowing through Inuit Owned Land, used for camp, drilling and other industrial 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 the Arcadia Bay Project are deposited.
- 4. 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.
- 5. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
- 6. The Board and/or an Inspector may impose additional monitoring requirements.
- 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.