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NUNAVUT WATER BOARD  
NUNAVUT IMALIRIYIN KATIMAYINGI  
OFFICE DES EAUX DU NUNAVUT

File No.: **2BE-KDP1722**

May 25, 2017

Mr. Richard Kemp  
Dunnedin Ventures Inc.  
302-750 West Pender St.  
Vancouver, B.C. V6C 2T7

Email: [kemp\\_656@hotmail.com](mailto:kemp_656@hotmail.com)

**RE: NWB Licence No. 2BE-KDP1722**

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Dear Mr. Richard Kemp:

Please find attached Licence No. 2BE-KDP1722 issued to Dunnedin Ventures 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 disposal are an integral part of this approval.

If the Licensee contemplates the renewal of this Licence, it is the responsibility of the Licensee to apply to the NWB for its renewal. The past performance of the Licensee, new documentation and information, and issues raised during a public hearing, if the NWB is required to hold one, will be used to determine the terms and conditions of the Licence renewal. Note that if the Licence expires before the NWB issues a new one, then water use and waste disposal 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) and Fisheries and Oceans Canada (DFO) on issues identified. This information is attached for your consideration<sup>1</sup>.

Sincerely,

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Thomas Kabloona  
Nunavut Water Board  
Chair

TK/sa/ip

Enclosure: Licence No. **2BE-KDP1722**  
Comments – INAC and DFO

Cc: Kivalliq Region Distribution List

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<sup>1</sup> Indigenous and Northern Affairs Canada (INAC) March 10, 2017  
Fisheries and Oceans Canada (DFO), April 3, 2017

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## DECISION

### WATER LICENCE NUMBER: 2BE-KDP1722

This is the decision of the Nunavut Water Board (NWB) with respect to an application dated January 22, 2016 for a new Water Licence made by:

#### DUNNEDIN VENTURES INC.

to allow for the use of Water and the deposit of Waste during activities related to mineral exploration and bulk sampling that include rock, till and soil sampling, prospecting, geological mapping, test pit sampling, detailed ground geophysical surveys, trenching and diamond drilling at the Kahuna Diamond Project, located within the Kivalliq Region, Nunavut generally located at the geographical coordinates as follows:

Project Extents:

Minimum Latitude: 62° 59' 53.86" N Minimum Longitude: 90° 56' 30.39" W  
Maximum Latitude: 63° 12' 26.27" N Maximum Longitude: 91° 29' 14.38" W

### **DECISION**

After having been satisfied that the Application is for a proposal in conformity with the (North Baffin Regional or Keewatin Regional) Land Use Plan and subject to a 12.4.4(a) Screening Decision as determined by the Nunavut Planning Commission (NPC)<sup>2</sup> and that a review of the Project is not required in accordance with s. 92(1)(a) of NuPPAA as determined by the Nunavut Impact Review Board (NIRB)<sup>3</sup>, the NWB decided that the application could proceed through the regulatory process. In accordance with s. 55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (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-KDP1722 be issued subject to the terms and conditions contained therein (Motion #: 2017-B1-006).

SIGNED this 31<sup>st</sup> day of May, 2017 at Gjoa Haven, NU.

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<sup>2</sup> Nunavut Planning Commission, Conformity Determination, November 9, 2016.

<sup>3</sup> Nunavut Impact Review Board (NIRB) Screen Determination, February 28, 2017.

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Thomas Kabloona  
Nunavut Water Board Chair  
TK/sa/ip

## LICENCE NO. 2BE-KDP1722

### I. INTRODUCTION

The Kahuna Diamond Property is located 54 kilometers to the northeast of the community of Rankin Inlet and 25 kilometers to the southwest of the community of Chesterfield Inlet, in the Kivalliq Region of Nunavut. Dunnedin Ventures Inc. (Dunnedin) has been conducting mineral exploration at the Kahuna Diamond Project area since 2015.

The Project area is located on Inuit Owned Land (IOL) as well as on Crown Land. At the time of the Application's submission, IOL use which requires authorization by the Kivalliq Inuit Association (KivIA) and Crown land use, which requires authorization by Indigenous and Northern Affairs Canada (INAC), were pending approval.

Exploration work on the area started in 2015 and from July 15, 2015 through August 13, 2015 Dunnedin conducted an exploration program based out of Rankin Inlet, no camp was established. Dunnedin's personnel accessed the property by helicopter in the morning and were picked up in the evenings and returned to Rankin Inlet. The field program consisted of regional till sampling program, observation of kimberlite exposures and collection of mini – bulk samples of kimberlite. As was indicated in the Application, around 3,000 kg of samples were collected during the 2015 field work program.

Dunnedin expects to start the advanced exploration program in 2017 with the scope of the 2017 program to include:

- prospecting and till sampling;
- test pit trenching of up to 10 sites/year;
- ground geophysical surveying (magnetic and gravimetric);
- diamond and/or reverse circulation drilling on ice and on land with hole depths averaging 75 metres (m) for an estimated drill program of 1,000 to 2,500 m/year;
- bulk sampling at three (3) sample sites, including blasting, drilling, and excavation, of up to 500 tonnes of sampling material/site for a total bulk sampling program of up to 1,500 tonnes;
- use of up to 100 cubic metres per day (m<sup>3</sup>/day) of water for drilling operations with disposal in a sump or natural depression;
- use of helicopters to transport cargo and personnel from Rankin Inlet to site (no camp will be established at site);
- seasonal use of winter trail to transport personnel, equipment, and materials during winter months;
- two temporary fuel cache areas will be located in crown area, close by the bulk sample sites along an access trail from Rankin Inlet. Each site will hold 25 drums of Jet B and 40 drums of fuel; chemicals (including drill additives) and oil will also be stored at site;
- the collection and storage of sewage, non-combustible, and hazardous wastes for transportation to and disposal at accredited facilities in Rankin Inlet; and
- remediation, including capping and re-contouring, of all exploration sample sites.

## II. PROCEDURAL HISTORY

### Requirements of the NWNSTRA and the NA

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.

In 2015, NPC reviewed an initial Dunnedin Project proposal with a NPC conformity determination issued April 28, 2015. Subsequent to this, the proposal was screened by the NIRB, and a NIRB's screening decision, recommending approval of the mineral exploration activities, issued on July 15, 2015. The 2015 scope of the Project, as submitted by the Applicant and approved by the NIRB, included the following undertakings, works or activities<sup>4</sup>:

- Daily transport of up to six personnel to sample sites via helicopter from Rankin Inlet;
- Logistic support and personnel accommodations in Rankin Inlet;
- Collection of rock and soil samples to evaluate geology
- Document additional information where rock and soil samples were collected, specifically outcrop density, proximity to water, topography, plant species and local wildlife;
- Combustible and non-combustible wastes removed daily from project site for disposal in Rankin Inlet; and
- Burial of sewage

At that time, no application for a Nunavut Water Board's authorization concerning the undertaking was received by the Board.

In 2016, Dunnedin redefined the scope of the Project including more activities such as: diamond drilling, bulk sampling and trenching. Dunnedin submitted an updated scope of the Project to NPC for its assessment.

On January 7, 2016, the NPC issued a conformity letter, indicating that the Project Proposal conforms to the Keewatin Regional Land Use Plan (KRULP) and forwarded the Project proposal to the NIRB for screening.

On April 4, 2016 the NIRB issued a Screening Decision Report by which recommended Dunnedin modify or abandon the Project. NIRB's decision was primarily based on "*the project proposal has caused significant public concern, and is likely to result in significant adverse ecosystemic and socio-economic impacts*". During the NIRB's review of the Project Proposal, among others, concerns were expressed by the Kivalliq Inuit Association (KIA) regarding "*the lack of environmental remediation of past exploration projects in the area.*"

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<sup>4</sup> NIRB Screening Decision Report, NIRB File No. 15EN028, dated April 4, 2016

Following this, Dunnedin re-defined the Project and re-submitted it to the NPC for assessment. On November 9, 2016<sup>7</sup> the Nunavut Planning Commission (NPC) issued correspondence which indicated that the Kahuna Diamond Project Proposal was in conformity to the Keewatin Regional Land Use Plan (KRLUP) and that it required screening by the Nunavut Impact Review Board (NIRB). On February 28, 2017 the NIRB issued correspondence recommending that a review of the Kahuna Diamond Project is not required pursuant to paragraph 92(1)(a) of the *Nunavut Planning and Project Assessment Act* (NUPPAA) and that pursuant to its discretion under paragraph 92(2)(a) of the NUPPAA, the NIRB determined that specific terms and conditions are appropriate for this modified project. Accordingly, the NIRB issued its Screening Decision Report, dated February 28, 2017.

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

### **The Application Before the NWB**

On March 23, 2017, the Nunavut Water Board acknowledged receipt on January 22, 2016 of a Water Licence Application (Application) by Dunnedin Ventures Inc. (Dunnedin or the Licensee or the Applicant) for water use and waste disposal in support of Kahuna Diamond Advanced Exploration 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:

- Email Cover Dunnedin Submission to NPC December 11, 2015
- 2016 List of Company Directors Dunnedin Ventures Inc. January 22, 2016
- Appendix A Detailed Project Description Part 1 and 2 January 22, 2016
- Appendix B Non Technical Project Summary English and Inuktitut January 22, 2016
- Appendix C Abandonment and Restoration Plan January 22, 2016
- Appendix D Environment and Wildlife Management Plan January 22, 2016
- Appendix F Spill Contingency Plan
- Certificate of Incorporation January 22, 2016
- Cover Letter to Nunavut Water Board January 22, 2016
- Dunnedin Consolidated Financial Statement January 22, 2016
- Executive Summary of Application January 22, 2016
- General Water Licence Application January 22, 2016
- Letter of Authorization January 22, 2016
- Notice of Alteration Name Change August 2, 2013 January 22, 2016

At the same time the Board invited interested parties to make representation directly to the NWB within 20 (twenty) days from the date of the acknowledgment's letter, with a deadline of April 12, 2017. On or before April 12, 2017, comments were provided by Indigenous and Northern Affairs Canada (INAC) and Fisheries and Ocean Canada.

The Board notices that the 2015 exploration work was carried out by Dunnedin without a valid Nunavut Water Board's authorization.



The Applicant must be aware that water use and waste disposal in Nunavut without NWB's authorization contravene the *Nunavut Agreement and the Nunavut Waters and Nunavut Surface Rights Tribunal Act*.

**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's 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 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.

**B. Annual Reporting**

The NWB generally includes the requirement of the Licensee to produce an Annual Report. These Reports, which are standard requirements for most licences, 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.

Most recently, 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 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:

<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.

**C. Security**

In accordance with section 76(1) of the NWNSRTA, the Board may require an applicant, a Licensee or a prospective assignee to furnish and maintain security with the Minister in the

form, of the nature, subject to such terms and conditions and in an amount prescribed by, or determined in accordance with, the Regulations or that is satisfactory with the Minister.

The Regulations<sup>5</sup> allow the Board to fix the amount of security that the Licensee or applicant is required to furnish to an amount not exceeding the aggregate of the cost of:

- a. Abandonment of the undertaking;
- b. Restoration of the site(s) of the undertaking; and
- c. Any ongoing measures that may remain to be taken after the abandonment of the undertaking.

In accordance with this, for other similar exploration projects, the NWB required that an estimate of reclamation security be submitted by the Licensee for reasons of future security requirements. Further to this, noticing that information on reclamation security was not provided by the Proponent, under Part I, item 1b, the Board has included a condition requiring the Licensee to submit, within 90 (ninety) days subsequent to the issuance of the licence, to the Board for approval an estimate of the total financial security for the final reclamation of the Project.

#### **D. Water Use**

As indicated in the Application Form, the Applicant requested the use of 50 m<sup>3</sup>/day of freshwater. However, the NWB noticed that the NIRB Screening Decision Report states an “*use of up to 100 cubic metres per day of water for site operations*”. Regarding this difference, the Applicant was asked for clarification with respect to the amount of water use<sup>6</sup>.

Further correspondence sent by the Applicant confirmed that the overall quantity of water to be used is one hundred (100) m<sup>3</sup> per day. Water will be drawn from unnamed water sources within the boundaries of Kahuna Claim Group Property; the water will be mainly used for drilling purposes and associated activities, as no camp is being proposed/authorized at this time.

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*. If the Licensee requires water in quantities greater than allowed under the Licence, the Licensee will be required to submit an amendment application to the Board for its consideration.

#### **E. Waste and Water Management**

Waste that will be generated at site includes sewage, waste rock/overburden, solid waste, waste oil, hazardous waste, scrap metal, contaminated soil and/or water, excess brine and diamond drill cuttings.

Waste oil, bulky items/scrap metal, contaminated soil and water, hazardous waste and sewage will be removed from site and transported to an approved facility. No burning is authorized at site. Drill sludge and drill cuttings will be collected and buried in a sump located beside the

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<sup>5</sup> Nunavut Water Regulations s. 10(1)

<sup>6</sup> Email NWB to Denise Lockett, dated May 1, 2017

drill; the sumps will be located at least thirty-one (31) meters away from the High Water Mark (HWM) of any nearby water body.

Details provided in the Application indicate that no waste rock/overburden will be left at site and that surface disturbance areas for the bulk sample sites will vary from 0.03 hectares to a maximum of 0.14 hectares, and that site will be reclaimed after the bulk sampling<sup>7</sup> according to:

*Excavated overburden material will be segregated as it is removed. Vegetation, humus and topsoil will be removed and stored on the snow in separate piles. Boulders, sand and gravel underlying the humus layer will also be stockpiled separately. Once the bulk samples have been extracted, the stockpiled overburden will be replaced in reverse order and hand contoured as much as possible. Additional contouring and reclamation of the disturbed areas will be completed during the summer months.*

And

*All of the bulk samples will be back hauled overland to Rankin Inlet.*

#### **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 Planning**

With regard to fuel storage, two fuel caches will be temporarily established at Notch and PST/Killiq locations. Fuel caches will be located in natural low-lying depressions and at more than 100 metres from the normal High Water Mark of any body of water. Also, fuel caches will be contained in a portable fuel containment berm; fuel cache inspection will occur on a regular basis for leaks, damaged or punctured drums.

The Applicant state of preparedness in the event of a spill is shown through a valid project's Spill Contingency Plan. The Applicant has submitted a Spill Contingency Plan (SCP) which was reviewed along with the application. The SCP has been approved under Part H Item 1 of this Water Licence. Further to the approval, the Applicant shall submit an addendum to the SCP addressing some issues observed by the NWB and comments provided by Indigenous and Northern Affairs Canada (INAC) during the review process.

#### **H. Abandonment and Reclamation**

The Applicant has submitted as additional information with the Application, the plan entitled “Kahuna Diamond Project Abandonment and Restoration Plan (A&R Plan)”<sup>8</sup>. Following this,

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<sup>7</sup> Appendix A, Detailed Project Description, Application Submission.

<sup>8</sup>Appendix C: Kahuna Diamond Project Abandonment and Restoration Plan, Dunnedin Ventures Inc. dated

under Part I, Item 1 of this Water Licence, the Board has approved the submitted A&R Plan. The Applicant shall submit a revised A&R Plan addressing comments/recommendations made by INAC during the review period; the revised Plan shall include an estimate of the closure cost.



## NUNAVUT WATER BOARD WATER LICENCE

Licence No. 2BE-KDP1722

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

**DUNNEDIN VENTURES INC**

(Licensee)

**302 -750 WEST PENDER STREET VANCOUVER B.C. V6C 2T7**

(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-KDP1722 / TYPE "B"**

Water Management Area: **WILSON WATERSHED No.13**

Location: **KAHUNA DIAMOND 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**

Date of Licence Issuance: **May 31, 2017**

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

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

**Thomas Kabloona,  
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 Kahuna Diamond Project located approximately 54 kilometers northeast of Rankin Inlet and 25 kilometers southwest of Chesterfield Inlet, within the Kivalliq Region, Nunavut.

The Kahuna Diamond Project is located at the following general geographical coordinates:

Latitude: 63° 12' 18.89" N	Longitude: 91° 29' 14.38" W
Latitude: 63° 12' 26.27" N	Longitude: 90° 56' 36.93" W
Latitude: 63° 02' 58.96" N	Longitude: 90° 56' 30.39" W
Latitude: 62° 59' 53.86" N	Longitude: 91° 29' 03.18" W

- 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 Land Claims Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“**Bulk Fuel Storage Facility**” means the fuel storage facility as described in the 2017 Application and supporting documents submitted, and includes two fuel cache located at Notch and PST/Killiq locations for the storage of 25 drums of Jet B and 40 drums of diesel fuel at each site;

“**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*;

“**Grab Sample**” means an undiluted quantity of material collected at a particular time and place and that may be representative of the total substance being sampled at the time and place it was collected;

“**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;

“**Maximum Average Concentration**” means the average concentration of any four consecutively collected samples taken from the identical sampling location and taken during any given timeframe. Where less than four samples from the identical sampling location are obtained, the Maximum Average Concentration shall also apply as the Effluent quality criteria for discharge;

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

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

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

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

**“Sewage”** means all toilet wastes and greywater;

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

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

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

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

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

### 3. Enforcement

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



by Inspectors appointed under the *Act*; and

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

## **PART B: GENERAL CONDITIONS**

1. The 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. the monthly and annual quantities in cubic metres/day, of all freshwater obtained from sources on, in or flowing through Inuit Owned Lands used for drilling purposes and other industrial uses;
  - b. the monthly and annual quantities in cubic metres/day, of all freshwater obtained from sources on Crown owned land, used for drilling purposes and other industrial uses;
  - c. the monthly and annual quantities in cubic metres of Sewage removed for disposal to an approved facility;
  - d. the monthly and annual quantities in kilograms of solid waste transported to an approved facility;
  - e. report all artesian flow occurrences as identified under Part F, Item 3;
  - f. tabular summaries of all data generated under the Monitoring Program;
  - g. a summary of modification and/or major maintenance work carried out on the Water Supply Facilities, including all associated structures, and an outline of any work anticipated for the next year;
  - h. a list of unauthorized discharges and follow-up action taken;
  - i. updates or revisions to the Abandonment and Restoration Plan, and Spill Contingency Plan or any other plan;
  - j. a brief description of follow-up action taken to address concerns detailed in inspection and compliance reports prepared by the Inspector;
  - k. a summary of drilling activities and progressive reclamation of drill sites;
  - l. a public consultation/participation report describing consultation with local organizations and residents of the nearby communities;
  - m. a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;
  - n. a summary of any specific studies or reports requested by the Board, and a brief description of any future studies planned or proposed; and
  - o. any other details on Water use or Waste disposal requested by the Board by

November 1st 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 and 1.
5. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.
6. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
7. The Licensee shall review the Plans referred to in this Licence, as required by changes in operation and/or technology, and modify the Plan accordingly. Revisions to the Plans shall be submitted in the form of an Addendum to be included with the Annual Report.
8. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
9. The Licensee shall ensure a copy of this Licence is maintained at the site of operations at all times. Any communication with respect to this Licence shall be made in writing to the attention of:

**a. Manager of Licensing:**

Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU X0B 1J0  
Telephone: (867) 360-6338  
Fax: (867) 360-6369  
Email: [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)

**b. Inspector Contact:**

Manager of Field Operations, 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 total volume of water for all purposes under this Licence and from all sources, shall not exceed 100 cubic meters *per* day. Water use for drilling and associated uses shall be obtained as required from sources proximal to the drilling targets.
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 any work 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.

## **CONDITIONS APPLYING TO WASTE DISPOSAL**

1. The Licensee shall not practice open burning or on-site land filling of domestic waste, unless otherwise approved by the Board in writing.
2. 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.
3. The Licensees shall ensure that all waste generated through the course of operation are backhauled and disposed of at an approved waste disposal site or as otherwise approved by the Board.
4. 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.
5. The Licensee shall confirm through appropriate test methods, that the bulk sampling waste rock is free of contaminants, is non-acid generating and non-metal leaching prior to disposal in accordance to the approved Abandonment and Restoration Plan. Results shall be reported within the Annual Report.
6. The Licensee shall direct Water accumulated in blasted or excavated trenches to a Trench Water Sump to allow for sampling prior to release. Water collected in hand-dug trenches shall be directed to a natural depression sump.
7. All Effluent discharged from the Trench Water Sump shall not exceed the following Effluent quality limits:

<b>Parameter</b>	<b>Maximum Allowable Concentration in Any Grab Sample</b>
pH	6.5 - 9.0
Total Suspended Solids (TSS)	25 mg/L
Oil and Grease	10 mg/L and no visible sheen
Lead	0.020 mg/L
Nickel	0.50 mg/L
Zinc	0.60 mg/L
Arsenic	0.10 mg/L
Copper	0.040 mg/L

8. The Licensee shall establish compliance with the Effluent quality limits of Part D, Item 7 prior to discharge.
9. 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.

10. The Licensee shall provide at least ten (10) days notification to an Inspector, prior to initiating the release of Effluent from any facilities listed in this Part. The notice shall include Effluent quality monitoring results, an estimate of volume and the proposed receiving location.
11. All effluent shall be discharged in such a manner to minimize surface erosion.

**PART D: CONDITIONS APPLYING TO CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS**

1. No camp activities are authorized under the provisions of this Licence.
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. The Licensee shall construct all winter lake and stream crossings, including ice bridges, entirely of water, ice or snow. The Licensee shall minimize disturbance by locating ice bridges in an area that requires the minimum approach grading and the shortest crossing route. Stream crossings shall be removed or the ice notched prior to spring break-up.
4. 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 implement sediment and erosion control measures prior to and maintain such measures during construction and operation to prevent entry of sediment into water.
6. The Licensee shall limit any in-stream activity to low water periods. In-stream activity is prohibited during fish migration.
7. The Licensee shall not store material on the surface of frozen streams or lakes, including the adjacent banks, except what is for immediate use.
8. 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 E: CONDITIONS APPLYING TO DRILLING AND TRENCHING 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 ( $\text{CaCl}_2$ ) in any quantity or concentration, from land-based and on-ice drilling, in a properly constructed sump or an appropriate natural depression located at a distance of at least thirty-one (31) metres from the ordinary high water mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created.
3. If artesian flow is encountered, drill holes shall be immediately sealed and permanently capped to prevent induced contamination of groundwater or salinization of surface waters. The Licensee shall report all artesian flow occurrences within the Annual Report, including the location (GPS coordinates) and dates.
4. Drilling additives or mud shall not be used in connection with holes drilled through lake ice unless they are re-circulated or contained such that they do not enter the water, or are demonstrated to be non-toxic.
5. For “on-ice” drilling where drill additives are not being used, return water released must be nontoxic, and not result in an increase in total suspended solids in the immediate receiving waters, above the Canadian Council of Ministers for the Environment, Guidelines for the Protection of Freshwater Aquatic Life (i.e. 10 mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100 mg/L).
6. The Licensee shall establish water quality conditions prior to and upon completion of any drilling program through lake ice.
7. The Licensee shall, during trenching activities utilizing blasting, provide mitigation measures to prevent the transport of blast rock, explosives residues, sediments and other materials from entering water.
8. The Licensee shall provide to the Board for approval in writing, at least ninety (90) days prior to beginning any trenching operations, a trenching plan, which shall include the following:
  - a. Size and location (including GPS coordinates) of trenches;
  - b. Approximate dimensions (length, width and depth) of each trench;
  - c. Approximate mass of sample extracted from trenches for testing;
  - d. Proposed mitigation measures for the prevention of the transport of sediments, blasting residues, fly rock and other materials, from the trench area to the nearby water bodies;

- e. Plans for disposal of any waste rock or overburden generated from the activity;
- f. Projected volume and quality of water discharged from each trench with potential treatment required; and
- g. The proposed monitoring program to be carried out on trench wastewater prior to discharge.

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

1. The Licensee shall submit to the Board for review for-construction design drawings, stamped and signed by a qualified Engineer, at least sixty (60) days prior to the construction of any dams, dykes or structures intended to contain, withhold, divert or retain Water or Wastes.
2. 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.
3. Modifications for which all of the conditions referred to in Part G, Item 2 have not been met can be carried out only with written approval from the Board.
4. 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 G: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING**

1. The Board has approved the Plan entitled “*Spill Prevention and Response Plan, Kahuna Diamond Project, Dunnedin Ventures Inc., Nunavut, Canada*” dated November 2015 submitted as additional information with the Application. The Licensee shall submit, within ninety (90) following issuance of the Licence, for Board review an addendum to the Plan that will address the following:

- a. A map of appropriate scale to identify fuel cache locations, showing surface water features, elevation contours, sensitive areas, potential flow directions;
  - b. Include the INAC Rankin office contact information in the Emergency Contact List;
  - c. Include ECCC inspector contact information.
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 H: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION OR TEMPORARY CLOSING**

1. The Board has approved the Plan entitled “*Kahuna Diamond Project Abandonment and Restoration Plan, Dunnedin Ventures Inc.*” dated January 2016 and submitted as additional information with the Application. The Licensee shall submit for Board’s approval within 90 (ninety) days following issuance of the Licence a revised Plan that will address the following:
  - a. A schedule for reclamation of the drill holes within the year of sampling to prevent permafrost degradation.
  - b. An estimate of the total project closure restoration liability using the current version of RECLAIM, its equivalent or other similar method approved by the Board in writing, in accordance with principles of the INAC “Mine Site Reclamation Policy for Nunavut” (2002).



2. The approved Closure and Reclamation Plan shall be revised whenever there is a change to the Project design or no later than every five years.
3. Every Closure and Reclamation plan submission, regardless of its phase, should be accompanied by a revised reclamation cost estimate.
4. The Licensee shall, if not approved by the Board, revise the Plan(s) referred to in this Part and resubmit to the Board for approval within thirty (30) days of receiving notification of the Board's decision.
5. The Licensee shall complete all restoration work prior to the expiry of this Licence.
6. Progressive reclamation of bulk sample locations shall be completed within the year of sampling to prevent permafrost degradation.
7. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee's operations.
8. The Licensee shall backfill and restore all sumps to the pre-existing natural contours of the land.
9. 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.
10. The Licensee shall re-grade all roads and airstrip, if any, to match natural contour to reduce erosion.
11. The Licensee shall remove any culverts and restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.
12. 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.
13. 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.
14. 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.

15. The Licensee shall contour and stabilize all disturbed areas to a pre-disturbed state upon completion of work. The Licensee shall stockpile all overburden and vegetation materials removed during trenching and bulk sampling activities for later use in reclamation / re-contouring once trenching and bulk sampling activities are completed. Erosion prevention measures shall be provided as required by Part C, Item 7.
16. 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.
17. The Licensee shall, upon completion of sampling activities, restore all exploration trenches and bulk sample large diameter drill holes, prior to the closure of seasonal exploration programs and removal of equipment from site. Trenches are to be in-filled and covered with stockpiled overburden materials and re-contoured to the natural terrain, setting drainage away from nearby watercourses.

**PART I: 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 Kahuna Diamond Project are deposited.
5. The Licensee shall obtain representative samples of the water column below any ice where required under Part F, Item 5. 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.

6. The Licensee shall sample, prior to the release of any Effluent from the Trench Water Sump, in order to verify compliance with condition under Part D, Item 7. Analysis shall include:  
  
Total Suspended Solids  
pH  
Electrical Conductivity,  
Total Trace Metals as determined by a standard ICP Scan (to include at a minimum, the following elements: As, Cr, Co, Cu, Pb, Ni, Fe, and, Zn).
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.