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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No.: 1BR-RBL1929

May 13, 2019

Holly Poklitar
Kelly Hunnie
Transport Canada
344 Edmonton St
Winnipeg, MB R3C 0P6

Email: holly.poklitar@tc.gc.ca
kelly.hunnie@tc.gc.ca

RE: NWB Amended Renewal Water Licence No. 1BR-RBL1929

Dear Holly Poklitar, Kellie Hunnie:

Please find attached Licence No. 1BR-RBL1929 issued to Transport Canada 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 the use of Water and the deposit of Waste are an integral part of this approval.

If the Licensee contemplates the continuing of this Undertaking after the Water Licence expires, it is the responsibility of the Licensee to apply to the NWB for a renewal water licence. The past performance of the Licensee, new documentation and information, and issues raised during a public hearing, if the NWB is required to hold one, will be used to determine the terms and conditions of the renewal Water Licence. Note that if the Licence expires before the NWB issues a new one, then the use of Water and the deposit of Waste must cease, or the Licensee may be in contravention of the *Nunavut Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSTRA)*. However, the expiry or cancellation of a licence does not relieve the holder from any obligations imposed by the licence. The NWB recommends that an application for the renewal of this Licence be filed at least **three (3) months** prior to the Licence expiry date. It should be noted that in accordance with s. 75(1)(a) of the *Nunavut Planning and Project Assessment Act (NuPPAA)*, the Board is not allowed to issue a permit or authorization for any project proposal that has not been submitted to the Nunavut Planning Commission (NPC) in accordance with s. 76 of *NuPPAA*.

If the Licensee contemplates or requires an amendment to this licence, the NWB may decide, in the public's interest, to hold a public hearing. The Licensee should submit 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 CIRNAC on issues identified. This information is attached for your consideration.¹

Sincerely,

Lootie Toomasie
Nunavut Water Board,
Chair

LT/ak/rqd

Enclosure: Renewal Licence No. 1BR-RBL1929

Comments – CIRNAC

Cc: Distribution List – Qikiqtani

¹ Crown-Indigenous and Northern Affairs Canada (CIRNAC), March 8, 2019.

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DECISION

LICENCE NUMBER: 1BR-RBL1929

This is the decision of the Nunavut Water Board (NWB) with respect to an application dated January 31, 2019 for a renewal of a Water Licence made by:

TRANSPORT CANADA

to allow for the deposit of Waste associated with the Resolute Bay Landfill Remediation Project located within the Qikiqtani Region, Nunavut, generally located at the geographical coordinates as follows:

Project Extents:

Latitude: 74° 44' 44.77" N	Longitude: 94° 01' 55.13" W
Latitude: 74° 44' 52.46" N	Longitude: 95° 01' 20.17" W
Latitude: 74° 42' 48.04" N	Longitude: 94° 58' 40.22" W
Latitude: 74° 42' 45.01" N	Longitude: 95° 00' 09.30" W

DECISION

After having been satisfied that the Application is for a proposal that is in conformity with the North Baffin Regional Land Use Plan subject to the attached requirements as determined by the Nunavut Planning Commission (NPC)¹ and as determined by the Nunavut Impact Review Board (NIRB)², a review of the Project is not required in accordance with s. 92(1)(a) of *NuPPAA*, subject to the terms and conditions recommended by NIRB's Screening Decision Report, the NWB decided that the application could proceed through the regulatory process. In accordance with s. 55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSRTA or Act)* and Article 13 of the *Nunavut Agreement*, public notice of the Application was given and interested persons were invited to make representations to the NWB.

After reviewing the submission of the Applicant and considering the representations made by interested persons, the NWB, having given due regard to the facts and circumstances, the merits of the submissions made to it and to the purpose, scope and intent of the *Nunavut Agreement* and of the *Act*, waived the requirement to hold a public hearing, and determined that:

Amended Renewal Licence No. 1BR-RBL1929 be issued subject to the terms and conditions contained therein (Motion #: 2019-B1-004).

¹ Nunavut Planning Commission, Conformity Determination, March 27, 2018.

² Nunavut Impact Review Board (NIRB) Screening Decision, June 22, 2018.

Signed this 13th day of May, 2019 at Gjoa Haven, NU.

Lootie Toomasie
Nunavut Water Board,
Chair

LT/ak/rqd

INTRODUCTION

The Resolute Bay Landfill Remediation Project (Project) involves the implementation of remediation activities planned for the Waste Disposal Facilities comprised of a Solid Waste Landfill (AEC 1), a Historical Landfill (AEC 2), and a Vehicle Storage Area (AEC 3), all of which are located proximal to the Resolute Bay Airport on Cornwallis Island, approximately 5 kilometres northwest of the current Resolute Bay Airport in the Qikiqtani Region of Nunavut.

Part of the preparatory work carried out for the project involved a Phase II/III Environmental Site Assessment (ESA) that took into consideration previous environmental studies and/or assessments carried out for the site. The following is a summary of the activities/undertakings proposed by the Licensee to achieve the Project's remediation objectives:

- Ship the remaining collected hazardous waste materials to a licensed hazardous waste disposal facility;
- Collect and consolidate the steel from AEC 2 into AEC 1;
- Develop one or more borrow sites on the airport property to create the gravel required for the landfill capping;
- Stabilize the landfill slopes at AEC 2 and AEC 1, along with grading and construction of drainage swales at both locations;
- Excavate approximately 125 m³ of contaminated soil from AEC 3 and dispose at an approved facility;
- Cap both landfills with a layer of gravel to minimize water infiltration; and
- Install sampling wells for groundwater monitoring.

After the completion of above stated activities, the Licensee will undertake site monitoring.

PROCEDURAL HISTORY

On July 11, 2014, the Nunavut Water Board issued a type "B" Water Licence 1BR-RBL1419 to Transport Canada to allow for the deposit of waste during the remediation activities at the Resolute Bay Landfill Remediation located proximal to the Resolute Bay Airport in the Qikiqtani Region, Nunavut. The Licence was set to expire on July 10, 2019.

The NWB acknowledged receipt on February 8, 2019 of the following documents as part of the water licence renewal application (Application) by Transport Canada for the Project:

- Water Licence Renewal Application;
- Nunavut Airports aggregate approval (July 5, 2018);
- Plan of Construction Operations (PCO) (July 5, 2018);
- Nav Canada approval in principle (June 21, 2018);
- Executive Summaries in English and Inuktitut;
- Topographical Map;
- NPC Determination dated March 2018;
- NPC Determination dated May 2011;
- NIRB Screening Decision dated February 2012;

- NIRB Screening Decision dated June 2018; and
- Health and Safety Plan.

On March 27, 2018, the Nunavut Planning Commission (NPC) issued correspondence indicating that the project proposal conforms to the North Baffin Regional Land Use Plan. On June 22, 2018, the Nunavut Impact Review Board issued its Screening Decision notifying that a review of the project is not required in accordance with paragraph 92(1)(a) of the Nunavut Planning and Project Assessment Act (NuPPAA). The Screening Decision was issued with recommendations.

GENERAL CONSIDERATIONS

A. Term of the Licence

In accordance with the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* S. 45, the NWB may issue a licence for a term not exceeding twenty-five years. The applicant requested a ten-year term for the licence, which the NWB believes is consistent with and appropriate for the type of undertaking and schedule of activities proposed in the application. The Board has therefore granted the requested term.

B. Annual Report

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

C. Water Use

No water use is authorized under this Licence except for the purposes of groundwater monitoring and sampling.

D. Deposit of Waste

Aggregate Sources

Information contained in the Phase II/III Environmental Site Assessment Report accompanying Application indicates that aggregate will be required to cap the landfills being remediated irrespective of the remediation option being chosen and implemented by the proponent. Conditions have been included under Part E in the Licence to ensure that aggregates used for any facilities associated with the project do not possess acid generating and/or metal leaching characteristics. In cases where it is determined that the materials are suitable for use, the Licensee is required to implement appropriate drainage control measures to prevent sediment loading into nearby water bodies. The NWB has included conditions under Part D and Part J to ensure that quality of effluent from borrow pits and quarries is monitored.

Solid Waste Landfill (AEC 1)

The Solid Waste Landfill, which has a surface area of approximately 40,000 m² and located proximal to the Resolute Bay Airport's Sewage Lagoon Facility, was used as a dump during the 1960s and 1970s, mainly. A new landfill was constructed southeast of the Hamlet in 1995; however, the information provided suggests that the Solid Waste Landfill had continued to be used unofficially as a dump up to 2005. The environmental assessment and audit carried out on the site identified a variety of waste types including drums, scrap metals and plastic scattered

near the site. Pools of standing water near the landfill, evidence of leachate containing petroleum hydrocarbons and metals, and significant vegetative growth were also observed near the landfill during the ESA. Drainage from the landfill discharges towards the west into Allen Bay while the area behind the toe of the landfill drains into a small unnamed creek and several small ponds. The NWB has included terms and conditions under Part D and Part J in the Licence requiring the Licensee to monitor this facility during and after remediation.

Historic Landfill (AEC 2)

The Historical Landfill covers an area of approximately 145,000 m² and is located southwest of the airport terminal building. The site was used from the period 1947 to 1996. The Canadian and American Military Forces used the site from 1947 to 1964 while Transport Canada and various airport tenants used the site from 1964 to 1995. Information provided as part of the application indicates that although disposal activities had ended in the early 1970s, the use of the landfill did not officially cease until 1996. The environmental assessment carried out on the site identified significant vegetative growth proximal to the landfill. The community water supply, Strip Lake, is located several kilometres to the south of the landfill and a hotel project is currently being developed along the northeast boundary of the Historic Landfill. Drainage from historical Historic Landfill is described as a complex of interconnected lakes and drainage channels that ultimately discharge towards the south into Resolute Bay. Three small lakes west of the landfill capture runoff and drainage from the landfill and eventually drain into Meretta Lake onto Resolute Lake and finally into Resolute Bay. A patchy, discontinuous wetland has developed at the toe of the Historic Landfill along its southern extents. Conditions have been included under Part D and Part J in the Licence to ensure that this facility is monitored before, during and after remediation activities.

Vehicle Storage Area (AEC 3)

The Vehicle Storage Area consists of two sites with areas of 3750 m² and 900 m², respectively, and that are located 1 to 3 kilometers northwest of the airport terminal. The site has been used as an area for the disposal of vehicles and other equipment including drums, tires, tanks, glass, etc. Although the site was identified in an audit conducted in 1993, it was not included in the investigation carried out for the Solid Waste Landfill and Historic Landfill. Drainage from the Vehicle Storage Area discharges towards the west into Allen Bay and surficial flow drains into McMaster River Valley. The NWB has included conditions under Part D and Part J to ensure that potential runoff or leachate from this facility is monitored before, during and after remediation activities.

E. Camps, Access Infrastructures and Operations

The Licensee is required to submit to the Board for approval within sixty (60) days following the completion of remediation of the Waste Disposal Facilities, an Operation and Maintenance (O&M) Manual for the Waste Disposal Facilities.

F. Drilling Operations

The Licensee is authorized to drill for the purposes of installing monitoring wells and/or

thermistors, and other instrumentation required for the monitoring of the Waste Disposal Facilities.

G. Construction and Modifications

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

H. Spill Contingency Planning

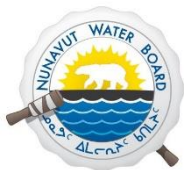
The Licensee shall implement the updated Plan submitted as additional information in section 10 “*Spill Contingency Plan*” of the Plan entitled “*Specific Health and Safety Plan*” dated June 2018.

I. Closure and Reclamation or Temporary Closure

Under Part I, the Licensee is required to submit to the Board for review, within sixty (60) days following the completion of remediation activities, an updated stand-alone Remedial Action Plan that reflects documented remediation options implemented for the Resolute Bay Landfill Remediation Project.

J. Monitoring Program

The Licensee shall submit to the Board for approval, at least sixty (60) days prior to initiating Long-Term Monitoring for the Project, a Post-closure Monitoring Plan for the site that includes information on Long-Term Monitoring of the Waste Disposal Facilities and that addresses water quality monitoring, site stability and the need for thermal monitoring and ground water monitoring. Conditions have been included that require the Licensee to monitor water quality up-gradient and down-gradient of the Solid Waste Landfill, Historic Landfill and proximal to the Vehicle Storage Area, as well as runoff from borrow pits and quarries. In addition, the Licensee is required to submit to the Board for review sixty (60) days prior to the first release of any effluent, a Quality Assurance/Quality Control (QA/QC) Plan. The Plan must receive approval from an analyst confirming Plan’s acceptability. All of the monitoring results, along with analyses carried out on the results, are to be provided to the NWB as part of the annual reporting requirements.



NUNAVUT WATER BOARD WATER LICENCE AMENDMENT

Licence No. 1BR-RBL1929

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

TRANSPORT CANADA

(Licensee)

344 EDMONTON ST, WINNIPEG, MB R3C 0P6

(Mailing Address)

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

Licence Number/Type: **1BR-RBL1929 / TYPE "B"**

Water Management Area: **BATHURST AND CORNWALLIS ISLANDS WATERSHED (55)**

Location: **QIKIQTANI REGION, NUNAVUT**

Classification: **MINING UNDERTAKING**

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

Quantity of Water use not to Exceed: **USE OF WATER IS NOT AUTHORIZED**

Date of Licence Issuance: **MAY 13, 2019**

Expiry of Licence: **MAY 12, 2029**

This Licence 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 allows for the use of Water and deposit of Waste for an Industrial undertaking classified as per Schedule 1 of the *Regulations* at the Resolute Bay Landfill Remediation Project, located approximately 5 kilometres northwest of the Hamlet of Resolute Bay within the Qikiqtani Region, Nunavut.

- a. This Licence is issued subject to the conditions contained herein with respect to the taking of Water and the deposit of Waste of any type in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposits of such Waste may enter any Waters. Whenever new Regulations are made or existing *Regulations* are amended by the Governor in Council under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, or other statutes imposing more stringent conditions relating to the quantity or type of Waste that may be so deposited or under which any such Waste may be so deposited, this Licence shall be deemed, upon promulgation of such Regulations, to be subject to such requirements; and
- b. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

2. Definitions

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

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

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

“**Applicant**” means the Licensee;

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

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

“**Borrow Pits**” means sites for which materials, such as gravel or sand, are excavated for the purposes of constructing site infrastructure and facilities;

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

“Effluent” means treated or untreated liquid Waste material that is discharged into the environment from a structure such as a settling pond, landfarm or a treatment plant;

“Engineer” means a professional engineer registered to practice in Nunavut in accordance with the *Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2* and the *Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12*;

“Final Discharge Point” means the point at which the Licensee no longer exerts care and/or control over the quality and/or quantity of the effluent from a treatment process;

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

“Hazardous waste” means waste classified as “hazardous” by Nunavut Territorial or Federal Legislation, or as “dangerous goods” under the *Transportation of Dangerous Goods Act* at the time of clean-up;

“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);

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

“Licensee” means the holder of this Licence;

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

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

“Quarry or Quarries” means the areas of surface excavation for extracting rock material for use as construction materials in the development of infrastructure and facilities for the Resolute Bay Landfill Remediation Project;

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

“Secondary Containment” means an impermeable structure, external to and separate from primary containment, which prevents unplanned spills of hazardous materials and

provides a minimum capacity of 110% of the original vessel. Where multiple vessels are stored within the containment, it must provide a minimum capacity equal to the sum of the largest vessel and 10% of the aggregate volume of all other vessels located in the containment. This structure shall also provide containment and control of hoses and nozzles;

“Sewage” means all toilet Wastes and greywater;

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

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

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

“Type A Soil” means soil contaminated with hydrocarbons in which the primary petroleum product present in the soil as determined by laboratory analysis consists of lubricating oil and grease (F3 – F4 Fractions);

“Type B Soil” means soil contaminated with hydrocarbons in which the primary petroleum product present in the soil as determined by laboratory analysis consists of fuel oil and/or diesel fuel and /or gasoline (F1 – F2 Fractions);

“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;

“Waste Disposal Facilities” means all facilities designated for the purpose of disposing and/or treating waste including the Solid Waste Landfill, Historical Landfill and the Vehicle Storage Area as described in the original Application, which the NWB acknowledged receiving on June 23, 2011;

“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 Licensee shall file an Annual Report on the Appurtenant Undertaking with the Board no later than March 31st of the year following the calendar year being reported, containing the following information:
 - a. A summary report of Water use and Waste disposal activities;
 - b. Quantity of Waste disposed of on on-site Waste disposal facility;
 - c. Quantity of Waste backhauled to approved facility for disposal;
 - d. A list of unauthorized discharges and a summary of follow-up actions taken;
 - e. Any revisions to the management plans, as required by Part B, Item 6, submitted in the form of an Addendum;
 - f. A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;
 - g. A summary of all information requested and results of the Monitoring Program;
 - h. A summary, including photographic records before, during and after any relevant construction activities or Modifications and/or major maintenance work carried out on facilities under this Licence and an outline of any work anticipated for the next year;
 - i. If applicable, a description of any trenches and sumps excavated, including but not limited to the following: GPS coordinates, dimensions, depth below active layer, and secondary containment features;
 - j. A summary of public consultation/participation, describing consultation with local organizations and residents of the nearby communities, if any were conducted;
 - k. A summary of work done to address concerns or deficiencies listed in inspection reports and/or compliance reports prepared by an Inspector;
 - l. An executive summary in English and Inuktitut of all plans, reports, or studies conducted under this Licence; and
 - m. Any other details on Waste disposal requested by the Board by the 1st November of the year being reported.
2. 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.
3. 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.

4. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
5. 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.
6. 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.
7. The Licensee shall ensure a copy of this Licence is maintained at the site of operations at all times. Any communication with respect to this Licence shall be made in writing to the attention of:
 - (a) **Manager of Licensing:**
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0
Telephone: (867) 360-6338
Fax: (867) 360-6369
Email: licensing@nwb-oen.ca
 - (b) **Inspector Contact:**
Manager of Field Operations, CIRNAC
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4295
Fax: (867) 979-6445
8. 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.
9. The Licensee shall ensure that all documents or correspondence submitted by the Licensee to the NWB are received and acknowledged by the Manager of Licensing.
10. This Licence is assignable as provided for in Section 44 of the *Act*.
11. The expiry or cancellation of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirement.

PART C: CONDITIONS APPLYING TO WATER USE

1. Water use is not authorized under this Licence except for the purposes of groundwater sampling.
2. The Licensee shall not conduct any work below the ordinary High Water Mark of any water body unless approved by the Board in writing.
3. The Licensee shall not cause erosion to the banks of any body of Water and shall provide necessary controls to prevent such erosion.
4. Sediment and erosion control measures shall be implemented prior to and maintained during the undertaking to prevent entry of sediment into Water.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensee shall locate areas designated for Waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any water body such that the quality, quantity or flow of Water is not impaired, unless otherwise approved by the Board in writing.
2. The Licensee shall not practice on-site land filling of domestic Waste, unless otherwise approved by the Board in writing.
3. The Licensee is authorized to dispose of all acceptable food Waste, paper Waste and untreated wood products in an incinerator.
4. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of Waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding Waters, unless otherwise approved by the Board in writing.
5. The Licensee shall direct appropriate Waste originating from the Resolute Bay Landfill Remediation Project to the Waste Disposal Facilities authorized under this Licence or as otherwise approved by the Board in writing.
6. The Licensee shall provide to the Board documented authorization from all communities in Nunavut receiving Waste from the Resolute Bay Landfill Remediation Project prior to any backhauling and disposal of Wastes to those communities.
7. The Licensee shall backhaul and dispose of all hazardous Waste, Waste oil and non-combustible Waste generated through the course of the operation at a licensed Waste disposal site.
8. The Licensee shall maintain records of all Waste backhauled and records of confirmation of proper disposal of backhauled Waste and include this information within the Annual Report, under Part B, Item 1. These records shall be made available to an Inspector upon request. The Licensee shall not transport hazardous wastes prior to registering with the

Government of Nunavut as a waste generator and utilizing the prescribed manifests.

9. The Licensee shall dispose of any hazardous materials including Polychlorinated Biphenyl (PCB) amended paints or lead painted products, and Petroleum Hydrocarbon Contaminated Soils that do not meet incineration criteria, off site at a currently approved treatment facility.
10. The Licensee shall provide notice to an Inspector at least ten (10) days prior to initiating any decant or discharge from the Waste Disposal Facilities.
11. All contact water associated with the Waste Disposal Facilities including seepage from Monitoring Program Stations shall meet the following Effluent quality limits prior to being released onto land at a location that is at least thirty-one (31) metres away 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:

Parameter	Maximum Allowable Concentration (mg/L)
pH	6 to 9 (pH units)
TSS	50
Oil and Grease	15 and no visible sheen
Total Lead	0.001
Benzene	0.37
Toluene	0.002
Ethylbenzene	0.090

12. If the effluent associated with Part D, Item 11 does not meet the Effluent limits under Part D, Item 11, it shall be considered hazardous waste and disposed off-site at an approved facility or as otherwise approved by the Board in writing.
13. All surface runoff and/or discharge from borrow pits and quarries, and drainage management systems, during the construction of any facilities and infrastructure associated with this project, where flow may directly or indirectly enter a water body, at Monitoring Program Station(s) RBL-X shall not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)
Total Suspended Solids	50.0	100
Oil and Grease	15,000 and no visible sheen	15,000 and no visible sheen
pH	Between 6.5 and 9.5	Between 6.0 and 9.5

14. All water being pumped from excavated areas and borrow pits shall be contained at holding facility and shall be treated if necessary, to meet Effluent quality limits set in Part D, Item 13, prior to being released.

15. The Licensee shall dispose of all scrap metal, discarded machinery and parts, and other bulky material in a manner that conforms to the remedial option selected in the “Conceptual Remedial or Risk Management Action Plan” Section of the Phase II/III Environmental Site Assessment Final Report, Resolute Bay Airport Landfill Sites, Resolute Bay Nunavut, dated March 2010.

PART E: CONDITIONS FOR CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS

1. No camp activities are authorized under the provisions of this Licence.
2. The Licensee may use aggregates for the purposes specified in the “*Conceptual Remedial or Risk Management Action Plan*” Section of the Phase II/III Environmental Site Assessment Final Report, Resolute Bay Airport Landfill Sites, Resolute Bay Nunavut, dated March 2010, provided that the aggregate sources are approved by an Inspector, free of contaminants.
3. The Licensee shall submit to the Board for approval, within sixty (60) days following the completion of remediation of the Waste Disposal Facilities, an Operation and Maintenance Manual for all facilities operated at the Resolute Bay Landfill Remediation Project. The manual shall be prepared in accordance with the “*Guidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories; 1996*”.
4. The Operations and Maintenance Manual referred to in Part E, Item 3 shall address the following items:
 - a. As-built construction drawings of the facility (stamped by a professional Engineer registered in Nunavut);
 - b. Feasibility of alternative disposal methods and sites;
 - c. Operation and maintenance procedures for each facility;
 - d. Runoff diversion and management;
 - e. Monitoring Program for both water and soil.
5. The Licensee shall, upon the failure of any constructed facilities, repair such facilities immediately to the appropriate standards as recommended by an Engineer.
6. The Licensee shall implement proper handling, storage and transportation procedures for hazardous materials during remediation activities.
7. The Licensee shall minimize disturbance to terrain, permafrost and drainage during extraction of granular material, development and closure of landfills, movement of contractor’s equipment and personnel around the site and removal of site debris.
8. The Licensee shall not cause erosion to the banks of any body of water and shall provide and implement necessary controls prior to and maintained during the activities to prevent such erosion and entry of sediment into Water.

9. The Licensee shall design and construct all stream crossings to minimize erosion and/or deposition of Waste into water.
10. The Licensee shall ensure that existing creek channels are maintained at their normal width and depth to the extent possible, during and after construction.
11. Granular materials and rock rip-rap used for any temporary stream crossings, approaches or required for bank stabilization must be obtained from a source that is approved by an Inspector, and is clean and free of contaminants as outlined in Part E, Item 2. Such material must not be removed or gathered from below the ordinary High Water Mark of any water body.
12. All sites affected by construction or removal activities shall be stabilized, landscaped as necessary, and suitable erosion control measures implemented to minimize sediment deposition into watercourses located on or adjacent to the site.
13. The Licensee shall restore and stabilize all areas affected by the undertaking upon completion of the work.
14. The Licensee shall not deposit Waste in any water body, or on the banks thereof, which may impair the quality, quantity, or flow of water.
15. The Licensee shall not store material on the surface of frozen streams or lakes including the immediate banks except what is for immediate use.
16. The Licensee shall conduct all activities in such a way as to minimize impacts on surface drainage and the Licensee shall immediately undertake corrective measures in the event of any impacts on surface drainage.
17. 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.
18. Stream crossing shall be a minimum of five hundred (500) meters from spawning areas.
19. With respect to access road, pad construction or other earthworks, the deposition of debris or sediment into or onto any water body is prohibited. These materials shall be disposed a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter the Water.
20. 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.
21. The Licensee shall conduct quarrying activities in accordance with all applicable legislation, guidelines, and industry standards including the *Northern Land Use*

Guidelines - Pits and Quarries (2009).

22. The Licensee shall maintain a minimum of thirty-one (31) metres large undisturbed buffer zone between the periphery of quarry sites and the ordinary High Water Mark of any water body.
23. The Licensee shall not excavate and/or remove material from the quarry/borrow area beyond a depth of one (1) metre above the ordinary High Water Mark or above the groundwater table, to prevent contamination of groundwater.

PART F: CONDITIONS APPLYING TO DRILLING OPERATIONS

1. The Licensee is authorized to drill for the purposes of installing monitoring wells and/or thermistors, and other instrumentation required for the monitoring of the Waste Disposal Facilities.

PART G: CONDITIONS APPLYING TO CONSTRUCTION AND MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - a. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - b. such Modifications do not place the Licensee in contravention of the Licence or the *Act*;
 - c. such Modifications are consistent with the NIRB Screening Decision;
 - d. the Board has not, during the sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
 - e. the Board has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part G, Item 1 have not been met can be carried out only with written approval from the Board.
3. The Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.

PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

1. The Licensee shall implement the updated Plan submitted as additional information in section 10 “*Spill Contingency Plan*” of the Plan entitled “*Specific Health and Safety Plan*”

dated June 2018.

2. The Licensee shall prevent any chemicals, petroleum products or Wastes associated with the project from entering Water. All Sumps and fuel caches shall be located at a distance of at least thirty-one (31) metres from the ordinary High Water Mark of any adjacent water body and inspected on a regular basis.
3. The Licensee shall conduct any equipment maintenance and servicing in designated areas and shall implement special procedures (such as the use of drip pans) to manage motor fluids and other Waste and contain potential spills.
4. If during the term of this Licence, an unauthorized discharge of Waste occurs, or if such a discharge is foreseeable, the Licensee shall:
 - a. Employ the approved Spill Contingency Plan;
 - b. Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and
 - c. For each spill occurrence, submit to the Inspector, no later than thirty (30) days after initially reporting the event, a detailed report that will include the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.
5. The Licensee shall, in addition to Part H, Item 4, regardless of the quantity of releases of harmful substances, report to the NWT/NU Spill Line if the release is near or into a Water body.

PART I: CONDITIONS APPLYING TO CLOSURE AND RECLAMATION OR TEMPORARY CLOSURE

1. The Licensee shall carry out remediation activities on the Waste Disposal Facilities in accordance with the option selected under the “Conceptual Remedial or Risk Management Action Plan” Section of the Phase II/III Environmental Site Assessment Final Report, Resolute Bay Airport Landfill Sites, Resolute Bay Nunavut, dated March 2010. The Licensee is required to submit to the Board for review within sixty (60) days following the completion of remediation activities an updated stand-alone Remedial Action Plan that reflects the actual remedial options implemented for the Resolute Bay Landfill Remediation Project.
2. The Licensee shall complete all restoration work prior to the expiry of this Licence.
3. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee’s operations.
4. The Licensee shall remove from the site, all infrastructure and site materials, including all fuel caches, drums, barrels, buildings and contents, docks, water intakes, pumps and lines, material and equipment prior to the expiry of this Licence.

5. All roads, if any, shall be re-graded to match natural contour to reduce erosion.
6. Areas that have been contaminated by hydrocarbons from normal fuel transfer procedures shall be reclaimed to meet objectives as outlined in the Government of Nunavut's Environmental Guideline for Site Remediation, 2010. The use of reclaimed soils for the purpose of back fill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.
7. The Licensee shall contour and stabilize all disturbed areas to reduce erosion and sedimentation to Water, upon completion of the undertaking.
8. All disturbed areas shall be stabilized and re-vegetated as required, upon completion of work, and restored as practically as possible to a pre-disturbed state.

PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM

1. The Licensee shall submit to the Board for approval, at least sixty (60) days prior to initiating Long-Term Monitoring for the Project, a Post-closure Monitoring Plan for the site that includes information on Long-Term Monitoring of the Waste Disposal Facilities and that addresses water quality monitoring, site stability and the need for thermal monitoring and ground water monitoring.
2. The Licensee shall maintain Monitoring Program Stations at the following locations:

Monitoring Program Station Number	Description	Status
RBL-1	Monitoring Well installed up-gradient of the Solid Waste Landfill	Active (Water Quality)
RBL-2	Monitoring Well installed down-gradient of the Solid Waste Landfill	Active (Water Quality)
RBL-3	Monitoring Well installed down-gradient of the Solid Waste Landfill	Active (Water Quality)
RBL-4	Discharge from the Solid Waste Landfill	Active (Water Quality)
RBL-5	Monitoring Well installed up-gradient of the Historic Landfill	Active (Water Quality)
RBL-6	Monitoring Well installed down-gradient of the Historic Landfill	Active (Water Quality)
RBL-7	Monitoring Well installed down-gradient of the Historic Landfill	Active (Water Quality)
RBL-8	Discharge from the Historic Landfill	Active (Water Quality)
RBL-10	Monitoring Well installed up-gradient of the Vehicle Storage Area (Site 1)	Active (Water Quality)
RBL-11	Monitoring Well installed down-gradient of the Vehicle Storage Area (Site 1)	Active (Water Quality)

RBL-12	Monitoring Well installed down-gradient of the Vehicle Storage Area (Site 1)	Active (Water Quality)
RBL-13	Discharge from the Vehicle Storage Area (Site 1)	Active (Water Quality)
RBL-14	Monitoring Well installed up-gradient of the Vehicle Storage Area (Site 2)	Active (Water Quality)
RBL-15	Monitoring Well installed down-gradient of the Vehicle Storage Area (Site 2)	Active (Water Quality)
RBL-15	Monitoring Well installed down-gradient of the Vehicle Storage Area (Site 2)	Active (Water Quality)
RBL-16	Discharge from the Vehicle Storage Area (Site 2)	Active (Water Quality)
RBL-X where X refers to a number of a Station	Discharge from quarries and/or borrow pits	Active (Water Quality)

3. The Licensee shall measure and record, in cubic metres, the daily quantities of Effluent discharged from the Waste Disposal Facilities at Monitoring Program Stations RBL-4, RBL-8, RBL-13, RBL-16 and RBL-X.
4. The Licensee shall sample the Effluent, prior to discharge, at Monitoring Program Stations RBL-4, RBL-8, RBL-13, RBL-16 and RBL-X analyze for the following parameters:

pH	Conductivity
Total Suspended Solids (TSS)	Ammonia Nitrogen
Nitrate – Nitrite	Oil and Grease (visual)
Total Phenols	Sulphate
Total Hardness	Total Alkalinity
Sodium	Potassium
Magnesium	Calcium
Chloride	Total Cadmium
Total Copper	Total Chromium
Total Iron	Total Lead
Total Mercury	Total Nickel
Total Zinc	Total Phosphorous
Total Aluminum	Total Manganese
Total Cobalt	Total Arsenic
Polycyclic Aromatic Hydrocarbons (PAH)	Total Petroleum Hydrocarbons (TPH)
Benzene, Toluene, Ethylbenzene, Xylene (BTEX)	

5. The Licensee shall sample twice per year (once during spring freshet and once during mid-summer) water at Monitoring Program Stations RBL-1, RBL-2, RBL-3, RBL-5, RBL-6, RBL-7, RBL-9, RBL-10, RBL-11, RBL-12, RBL-14 and RBL-15 for the purpose of analyzing samples for the parameters listed under Part J Item 4.

6. 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 project operations are deposited.
7. The Licensee shall monitor compliance with respect to Part D Item 11, by collecting a representative sample once at the beginning of discharge, upon initial release and prior to the end of discharge, from the Final Discharge Points of the Waste Disposal Facilities at Monitoring Program Stations RBL-4, RBL-8, RBL-13, RBL-16, and with respect to Part D, Item 13 at the Monitoring Stations RBL-X.
8. The Licensee shall monitor compliance with respect to Part D Items 11 and 13 by collecting a representative composite sample from the total volume to be released from the Final Discharge Points identified in Part J, Item 2 of this Licence.
9. The Licensee shall assess and record, when carrying out the project, the concentration of F1 – F4 fractions in petroleum hydrocarbon contaminated soil, according to the *CCME Canada-Wide Standard for Petroleum Hydrocarbons (PHC) in Soil*, from all sources and excavations associated with the project.
10. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by the Board in writing.
11. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
12. The Licensee shall submit to the Board for review, at least sixty (60) days prior to the first release of any effluent, a Quality Assurance/Quality Control Plan that conforms to the guidance document “*Quality Assurance (QA) and Quality Control (QC) Guidelines For Use by Class “B” Licensees in Collecting Representative Water Samples in the Field and for Submission of a QAQC Plan*” INAC (1996). The Plan shall be acceptable to an accredited laboratory and include a covering letter from the accredited laboratory confirming acceptance of the Plan for analyses to be performed under the Licence.
13. The Licensee shall include in the Annual Report required under Part B, Item 1 all data, monitoring results and information required by this Part.