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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No.: **1BR-EKA1734**

September 22, 2017

Ms. Charlotte Lamontagne
Director, Land and Contaminated Sites
Indigenous and Northern Affairs Canada
P.O. Box 2200, Iqaluit, NU X0A 0H0

Email: charlotte.lamontagne@aandc.gc.ca

RE: NWB Licence No. 1BR-EKA1734

Dear Ms. Charlotte Lamontagne:

Please find attached Renewal Licence No. 1BR-EKA1734 issued to Indigenous and Northern Affairs Canada (INAC) – Contaminated Sites 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 consideration¹.

Sincerely,

Lootie Toomasie
Nunavut Water Board
Chair

LT/sa/rd

Enclosure: Licence No. **1BR-EKA1734**
Comments – INAC, and DFO

Cc: Qikiqtani Region Distribution List

¹ Indigenous and Northern Affairs Canada (INAC) August 15, 2017
Fisheries and Oceans Canada (DFO), July 27, 2017

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DECISION

WATER LICENCE NUMBER: 1BR-EKA1734

This is the decision of the Nunavut Water Board (NWB) with respect to an application dated June 7, 2017 for the renewal of a Water Licence made by:

INDIGENOUS AND NORTHERN AFFAIRS CANADA (INAC) – CONTAMINATED SITES

to allow for the use of Water during the implementation of the *FOX-C Ekalugad Fjord Long Term Monitoring Plan*, at the former FOX-C Intermediate Distant Early Warning (DEW) Line Site located within the Qikiqtani Region, Nunavut, generally located at the geographical coordinates as follows:

Project Location:

Latitude: 68° 42' 00" N Longitude: 68° 33' 00" W

DECISION

After having been satisfied that the Application, as indicated by the Nunavut Planning Commission²(NPC), is for a proposal previously reviewed by the NPC, for which the Conformity Determination issued on April 1, 2005 still applies; and, also that the Project Proposal is exempt from screening by the Nunavut Impact Review Board (NIRB), because it was previously screened by the NIRB and the scope, as it stands, has not changed, the NWB decided that the application could proceed through the regulatory process. In accordance with s. 55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (Act)* and Article 13 of the *Nunavut Agreement*, public notice of the Application was given and interested persons were invited to make representations to the NWB.

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

A Renewal Water Licence No. 1BR-EKA1734 be issued subject to the terms and conditions contained therein (Motion #: 2017-B1-029).

SIGNED this 22nd day of September, 2017 at Gjoa Haven, NU.

Lootie Toomasie
Nunavut Water Board Chair
LT/sa/rd

² NPC letter, Re: NPC File# 148608 FOX- C Ekalugad Fjord Long Term Monitoring, dated July 7 2017

LICENCE NO. 1BR-EKA1734

I. INTRODUCTION

Indigenous and Northern Affairs Canada (INAC) – Contaminated Sites Division (the Licensee) holds Water Licence 1BR-EKA1017 (the existing Licence) which was issued on March 1, 2010 with an expiration date of September, 30, 2017. The existing Water Licence authorizes the implementation of a long-term monitoring plan, entitled *FOX-C Ekalugad Fjord Long Term Monitoring Plan* (LTM Plan) at the former FOX-C Intermediate Distant Early Warning (DEW) Line Site.

The former FOX-C Intermediate Distant Early Warning (DEW) Line Site is located on the South shore of Ekalugad Fjord, the Northeast coast of Baffin Island, approximately 240 kilometres northwest of Qikiqtarjuaq and 260 kilometres south of Clyde River. The FOX-C Intermediate Distant Early Warning (DEW) Line Site was constructed in 1957 and abandoned in 1963. A hazardous material removal program, implemented by Indigenous and Northern Affairs Canada (INAC), was completed in 1985 and an environmental assessment, also carried out by INAC, was completed in 1994. Further INAC's site investigation concluded in a FOX-C Remedial Action Plan. The Remedial Action Plan was implemented in 2005 and continued through 2006 to 2008. Equipment and materials were demobilized from the site in September 2008. Remediation took place over three field seasons between 2006 and 2008 and included the construction of a Non-Hazardous Waste Landfill (NHWL) (the only structure remaining at site), a Landfarm Facility and a Sewage Lagoon Facility, additional activities carried out at site included the cleaning and disposal of fuel drums, debris collection, contaminated soil excavation, hazardous waste removal, and building and structure demolition. Afterwards, the LTM Plan was implemented to ensure that the Remedial Action Plan performs as expected and that potential impacts to the environment are sufficiently mitigated.

The LTM Plan, which started in 2009, is a twenty-five years' monitoring plan and includes visual inspection, groundwater sampling, soil sampling (if required), and environmental (wildlife and vegetation) monitoring. Monitoring events at site took place as scheduled the years 1, 3, 5, and 8; the next event is scheduled to take place in 2018 (year 10). Further monitoring events are scheduled for years 15, 20 and 25, at which time a review will be conducted and the need for further monitoring will be assessed. A brief summary of the file history is provided below:

<i>Water Licence No.</i>	<i>Scope of the Licence</i>
NWB5ELA0406	To allow for the use of Water and deposit of Waste during cleanup activities;
1BR-EKA0607	To allow for the use of Water and deposit of Waste during camp operations and remediation activities;
1BR-EKA0607 Amendment No.1	To authorize the construction of culvert crossing at River Crossings #1 and #2;
1BR-EKA0809	To allow for the use of Water and deposit of Waste during camp operations and remediation activities;
1BR-EKA1017	To allow for the use of Water during the implementation of a Long Term Monitoring Plan at Site.

II. PROCEDURAL HISTORY

Requirements of the NWNSRTA, Nunavut Agreement and NuPPAA

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

On July 7, 2017, NPC reviewed the Application submitted by INAC – Contaminated Sites Division and determined that

“the activities associated with this proposal were previously reviewed by the NPC and the conformity determination issued on April 1, 2005 still applies”

At the same time, it also indicated that the activities carried out under the Project were previously screened by the NIRB, and since the scope of the project has not changed, it is now exempt from NIRB’s screening.

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

The Application Before the NWB

On July 25, 2017, the Nunavut Water Board acknowledged receipt on July 14, 2017 of a Water Licence Application (Application) by INAC – Contaminated Sites Division (the Licensee or the Applicant) for water use in support of the FOX-C Ekalugad Fjord Long Term Monitoring Plan and informed that the Application concluded the pre-licensing steps required under the *Nunavut Agreement*, the *NUPPA* and the *NWNSRTA*. The following documents were submitted to the NWB in support of the Application:

- Renewal Application;
- Project Summary English;
- Project Summary in Inuktitut.

At the same time the Board invited interested parties to make representation directly to the NWB, with a deadline of August 15, 2017. On or before August 15, 2017, comments were provided by Indigenous and Northern Affairs Canada (INAC), and Fisheries and Ocean Canada (DFO).

III. GENERAL CONSIDERATIONS

A. Compliance with Licence 1BR-EKA1017

1. Annual Reports as per Part B Item 1 of the Licence

Under *Part B Item 1* of the existing Licence, the Licensee is required to file, annually, an Annual Report on the Undertaking.

In this regard, the Licensee submitted on July 28, 2014 the following reports: 2010, 2011, 2012 and 2013 Annual Reports, and also informed that, as per the Long Term Monitoring Plan no monitoring was carried out at site in 2010 or 2012.

The 2011 Annual Report, was submitted along with the document entitled “*Long Term Monitoring, 2011 FOX-C, Ekalugad Fjord, Nunavut Final Report*” (the 2011 LTM Report) dated January 17, 2012. And the 2013 Annual Report, was submitted along with the document entitled “*Long Term Monitoring, 2013 FOX-C, Ekalugad Fjord, Nunavut Final Report*” (the 2013 LTM Report) dated January 20, 2014.

On June 26, 2015 the Licensee submitted the 2014 Annual Report and informed that per the Long Term Monitoring Plan, no monitoring activities were carried out in 2014.

On March 28, 2017 the Licensee submitted the 2015 and 2016 Annual Reports and informed that the 2015 site monitoring (year seven of the 25 years LTM Plan) was not possible due to poor weather conditions. The 2016 Annual Report, was submitted along with the document entitled “*Long Term Monitoring, 2016 FOX-C Ekalugad Fjord, Nunavut*” (the 2016 LTM Report) dated February 3, 2017.

The 2011, 2013 and 2016 LTM Reports present visual observations obtained during the 2011, 2013 and 2016 site visits; also they inform that no groundwater samples were taken during the 2011, 2013 and 2016 site visits due to “*the frozen state of groundwater in all the monitoring wells*”.

The Reports were opportunely forwarded to the distribution list for information; no comments were received on the submission.

The NWB has completed a technical review of the Project 2010, 2011, 2012, 2013, 2014, 2015, and 2016 Annual Reports. The Annual Reports were found to be complete as submitted and meeting the reporting requirements of Licence 1BR-EKA1017.

2. Submission of information related to the disposal of soil treated at the landfarm and sewage lagoon sludge as per Part B, Item B, 1 of the Licence

Condition written under *Part B, Item B, 1* of the existing Licence 1BR-EKA1017 required the Licensee

“For the first Annual Report following issuance of the Licence, include disposal information for soil treated in the Landfarm and sludge in the sewage lagoons”

Information pertaining to the disposal location of the treated landfarm soil and/ or sewage sludge was not found in the 2011 Annual Report or in the submitted 2011 LTM Report. Some information with respect to those topics is found in the *FOX-C 2008 Construction Clean-up Summary Final Report*, dated April 28, 2009, where it states:

With regard to the sewage lagoon³:

³ Section 2.8 Remediation Support Activities, FOX-C 2008 Construction Clean-up Summary Final Report

“In 2006 a temporary sewage lagoon was commissioned to support the camp operations... The Lagoon was decommissioned at the end of the 2008 season by removing the berm and covering and shaping the area”.

With regard to the landfarm soil⁴

“In-situ landfarming began on July 6, 2008. Samples obtained in August 2008 indicated that the area met site clean-up criteria and it was subsequently regraded.”

Following this, the NWB considers that the Licensee is in compliance with this requirement.

3. Submission of an Addendum to the LTM Plan as per Part J, Item 2 of the Licence

Condition established under Part J, Item 2 of the existing Licence 1BR-EKA1017 required the Licensee, within sixty (60) days following issuance of the Licence, submit an addendum to the LTM Plan that addresses comments made by Environment Canada on April 27, 2009. There is no record of the addendum submission at the NWB ftp site. And though, as pointed out by INAC’s reviewer, some of the comments on issues such as erosion and ponding seem to have been addressed in the LTM Reports, the question of why does the LTM Plan not include thermal monitoring at site remains unanswered.

On August 16, 2017 the NWB, by means of an email⁵, requested the Licensee response to this specific INAC’s comment; the Applicant responded⁶ indicating that *“based on site-specific conditions and the design of the non-hazardous waste landfill (NHWL) thermal monitoring was not required”* and further to this *“this is consistent with the Abandoned Military Site Remediation Protocol (AMSRP) which requires thermal monitoring for leachate contained landfills and new Tier II soil facilities but not for NHWLS”*.

Following this, the NWB considers that the Licensee is in compliance with this requirement.

4. Submission of a Long Term Monitoring Report as per Part J, Item 7 of the Licence

Condition established under Part J, Item 7 of the existing Licence 1BR-EKA1017 required the Licensee submit for information, at minimum six months prior to the expire of the Licence, a Long Term Monitoring Report. The Report was to summarize data collected and assess the integrity of the Non-Hazardous Waste Landfill.

The Board has reviewed the information included in the *“Long Term Monitoring, 2011 FOX-C, Ekalugad Fjord, Nunavut Final Report”*, the *“Long Term Monitoring, 2013 FOX-C, Ekalugad Fjord, Nunavut Final Report”*, and the *“Long Term Monitoring, 2016 FOX-C Ekalugad Fjord, Nunavut”* the Reports were found complete as submitted and meeting the requirement under Part J, Item 2; therefore, The NWB considers that the Licensee has satisfied this requirement.

B. Term of Licence

⁴ Section 2.4 Remediation of Contaminated Soil, FOX-C 2008 Construction Clean-up Summary Final Report,

⁵ Email to Charlotte Lamontagne Re: NWB Water Licence 1BR-EKA for the FOX-C Dew Line Site, Ekalugad Fjord Project, dated August 16, 2017

⁶ INAC letter, Re: 1BR-EKA1017 – FOX Ekalugad Fjord Long Term Monitoring Program – Water Licence Application, dated August 24, 2017

In accordance with s.45 the *Nunavut Waters and Nunavut Surface Right Tribunal Act* (NWNSTRA), 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 seventeen (17) years. Given that parties have not expressed concerns with respect to a Licence term of 17 years, and following a review of the information available during the renewal process, the NWB concurs with the Applicant that the requested Licence term of 17 years is appropriate.

The Licence duration will allow the Licensee to properly carry out the Long Term Monitoring Plan as planned, as well as to follow the terms and conditions under the Licence to the satisfaction of the NWB.

C. Annual Reporting

Under the reporting section in the Licence, *Part B, Item 1*, the Licensee is required to submit, on annual basis, a report that pertains to the activities carried out under the Project. The Annual 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.

D. Water Use

The existing water licence authorize the use of five (5) cubic metres per annum for sampling purposes in support of the LTM Plan; water samples are collected from five (5) groundwater monitoring wells and from runoff/and or surface water, if required. As indicated in the Application Form, this amount has not changed: it remains the same as that considered in the existing licence.

Reviewers have not expressed concerns regarding the amount of water use; 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 5 cubic meters of fresh water per year*. If the Licensee requires water in quantities greater than that 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

The Applicant has indicated solid waste as the only type of waste to be generated at site during the monitoring activities. Solid waste generated at site is mainly composed by packaging, paper towels, paper, kimwipes, filters, Teflon tubing, in a quantity less than 0.5 m³. All waste will be backhauled off site to a municipal landfill at the end of the monitoring event.

F. Modifications

Under *Part G* of the Renewal Licence, standard conditions are included related to modifications. Likewise, under *Part G, Item 1*, the Licensee is required to submit to the Board for approval, issued 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.



NUNAVUT WATER BOARD WATER LICENCE

Licence No. 1BR-EKA1734

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

INDIGENOUS AND NORTHERN AFFAIRS CANADA – CONTAMINATED SITES

(Licensee)

P.O. BOX 2200, IQALUIT, NU X0A 0H0

(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: **1BR-EKA1734 / TYPE “B”**

Water Management Area: **NORTHWESTERN DAVIS STRAIT WATERSHED No.50**

Location: **FORMER FOX-C DEW LINE SITE, EKALUGAD FJORD,
BAFFIN ISLAND, QIKIQTANI REGION, NUNAVUT**

Classification: **INDUSTRIAL UNDERTAKING**

Purpose: **DIRECT USE OF WATER DURING LONG TERM
MONITORING**

Quantity of Water use not
to Exceed: **FIVE (5) CUBIC METRES PER ANNUM**

Date of Licence Issuance: **SEPTEMBER 22, 2017**

Expiry of Licence: **SEPTEMBER 21, 2034**

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

**Lootie Toomasie,
Nunavut Water Board, Chair**

PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. Scope

This Licence authorizes the use of Water in support of an Industrial Undertaking classified as per schedule 1 of the *Regulations*, for the *FOX-C Ekalugad Fjord Long Term Monitoring Plan* located at the former FOX-C Intermediate Distant Early Warning (DEW) Line Site on the south shore of Ekalugad Fjord, approximately 240 km northwest of Qikiqtarjuaq and 260 km south of Clyde River, within the Qikiqtani Region, Nunavut.

The former FOX-C Intermediate Distant Early Warning (DEW) Line Site is located at the following general geographical coordinates:

Latitude: 68° 42' 00" N

Longitude: 68° 33' 00" 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*;

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

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

“Existing Water Licence” means the 1BR-EKA1017 Water Licence;

“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;

“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);

“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;

“Long Term Monitoring Plan” means the plan entitled “FOX-C Ekalugad Fjord Long-Term Monitoring Plan” dated March 23, 2008 and approved with the Licence Renewal;

“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;

“Non-Hazardous Waste Landfill” comprises the landfill and adjacent monitoring wells and associated structures designed to contain non-hazardous solid waste, creosote timbers, tier 1 soil, F3 and F4 fraction hydrocarbon contaminated soil and double bagged asbestos as detailed in drawing no. 413759-C12;

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

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

“Renewal Water Licence” means this Licence, the 1BR-EKA1734 Water Licence;

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

“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;

“Tier I Soil” means soil containing contaminant concentrations within the types and ranges defined as DCC Tier I in Appendix E of the NTI Agreement, including its preamble and schedules, and any amendments to that agreement made pursuant to it (see Table No.1);

“Tier II Soil” means soil containing contaminant concentrations within the types and ranges defined as DCC Tier II in Appendix E of the NTI Agreement including its preamble and schedules, and any amendments to that agreement made pursuant to it (see Table No.1);

“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;

“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 the 31st of March of the year following the calendar year being reported, containing the following information:
 - a. Tabular summaries for all data and information generated under the “Long Term Monitoring Plan”;
 - b. A review and analysis of data collected during the “Long Term Monitoring Plan” and a brief description of any future studies planned by the Licensee;
 - c. A summary of any abandonment and restoration work undertaken during the year and an outline of any work anticipated for the next year;
 - d. The results of any review conducted and any recommendations regarding any changes to the Monitoring Plan and/or remediation requirements;
 - e. A summary of any studies requested by the Board that relate to waste disposal, water use or reclamation, and a brief description of any future studies planned;
 - f. A list of unauthorized discharges and summary of follow-up actions taken;

- g. If applicable, a description of any trenches and sumps excavated, including the following: GPS coordinates, dimensions, depth below active layer, and secondary containment features;
 - h. A public consultation/participation report describing consultation with local organizations and the residents of the nearby communities;
 - i. A brief summary of work done to address concerns or deficiencies listed in the inspection reports and/or compliance reports prepared by an Inspector;
 - j. An executive summary in English and Inuktitut of all plans, reports, or studies conducted under this Licence;
 - k. Any other details on water use or waste disposal requested by the Board by November 1st 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, INAC
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 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.
9. 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.
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 THE USE OF WATER

1. The Licensee is authorized to use water up to five (5) cubic metres of water annually for sampling and related purposes. Total quantity of water allowed for all purposes under this Licence shall not exceed five (5) cubic metres per annum.
2. The Licensee shall not perform any work below the ordinary High Water Mark of any water body unless authorized 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. The Licensee shall implement sediment and erosion control measures to prevent the deposition of dust and/or sediment into water, arising from contractor activities or on-site vehicular travel.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensees shall ensure that all wastes generated through the course of the Long Term Monitoring Plan are backhauled and disposed of at an approved waste disposal site or as otherwise approved by the Board.
2. 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.

3. Water remaining from sampling activities shall be discharged at minimum 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. Any other deposit / discharge of waste is not authorized under the provisions of this Licence.

PART E: CONDITIONS APPLYING TO THE UNDERTAKING

1. The Licensee shall, upon the failure of any constructed facilities designed to contain waste, repair such facilities immediately to the satisfaction of an Inspector.
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 implement sediment and erosion control measures prior to and maintain such measures during monitoring and related activities to prevent entry of sediment into water.
4. The Licensee shall minimize disturbance to terrain, permafrost and drainage during movement of contractor's equipment and personnel around the site during post-closure monitoring activities.
5. All sites affected by sampling 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.
6. Licensee shall not deposit any waste in any body of water, or on the banks thereof, which may impair the quality, quantity, or flow of water.

PART F: CONDITIONS FOR CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS

1. No camp operation is authorized under the provisions of this Licence.

PART G: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out Modifications to the Non Hazardous Waste Landfill 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 ensure that any equipment maintenance and servicing be conducted only 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.
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. 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.
4. The Licensee shall, in addition to Part H, Item 3, regardless of the quantity of releases of harmful substances, report to the NWT/NU Spill Line if the release is near or into a Water body.

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

1. The Licensee shall ensure that any area disturbed as result of the undertaking is to 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 PLAN

1. The Licensee shall conduct monitoring at site according to the Plan entitled “*FOX-C Ekalugad Fjord Long-Term Monitoring Plan*” dated March 23, 2008, opportune approved by the Board.
2. The Licensee shall conduct all sampling, sample preservation and analyses 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.
3. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
4. The Board and/or an Inspector may impose additional monitoring requirements.
5. The Licensee shall include in the Annual Report required under Part B, Item 1, all data, monitoring results and information required by this Part.
6. The Licensee shall submit for Board information, at minimum six (6) months prior to the completion of the 25-year Long Term Monitoring Plan, a Final Report. The Final Report shall summarize data collected and assesses the integrity of the Non-Hazardous Waste Landfill, including recommendations for any maintenance or additional monitoring.