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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No: **1BR-KEI2245**

July 28, 2022

Charlotte Lamontagne
Director – Contaminated Sites
Crown-Indigenous Relations and Northern Affairs
PO Box 2200, Iqaluit
Nunavut X0A 0H0

Email: charlotte.lamontagne@rcaanc-cirnac.gc.ca

RE: NWB Water Licence No: 1BR-KEI2245

Dear Ms. Lamontagne:

Please find attached Licence No: **1BR-KEI2245** (Licence) issued to Crown-Indigenous Relations and Northern Affairs (CIRNA) by the Nunavut Water Board (NWB or Board) 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 Section 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 Section 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 interested persons on issues identified. This information is attached for your consideration.¹

Sincerely,

Lootie Toomasie
Nunavut Water Board
Chair

LT/as/rqd

Enclosure: Licence No: **1BR-KEI2245**
Comments – CIRNA

Cc: Kitikmeot Distribution List

¹ Crown-Indigenous Relations and Northern Affairs (CIRNA), June 24, 2022.

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DECISION

LICENCE NUMBER: 1BR-KEI2245

This is the decision of the Nunavut Water Board (NWB or Board) with respect to a complete application received on May 16, 2022 for the renewal of a Water Licence made by:

CROWN-INDIGENOUS RELATIONS AND NORTHERN AFFAIRS (CIRNA)

to allow for the use of Water for the continued monitoring activities at the CAM-E Keith Bay Distant Early Warning (DEW) Line Site Landfill Monitoring Program located within the Kitikmeot Region, Nunavut, generally located at the geographical coordinates as follows:

Project extents:	Max Latitude: 68° 18' 13.4" N	Max Longitude: 88° 10' 51.39" W
	Min Latitude: 68° 14' 10.8" N	Min Longitude: 88° 5' 10.7" W

DECISION

After receiving confirmation that the Application was for a location that falls outside of an area with an approved Land Use Plan² as determined by the NPC (NPC file No. 148190) and that the project proposal was previously screened by the Nunavut Impact Review Board (NIRB) and continues to be subject to the terms and conditions recommended in the original May 13, 2016 Screening Decision Report No: 16AN060³, the NWB has decided that the Application could proceed through the regulatory process. In accordance with s. 55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (Act)* and Article 13 of the *Nunavut Agreement*, public notice of the application was given and interested persons were invited to make representations to the NWB.

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

Licence No: 1BR-KEI1722 be replaced by Licence No: 1BR-KEI2245 subject to the terms and conditions contained therein. (Motion #: 2022-B1-009)

Signed this 28th day of July, 2022 at Gjoa Haven, NU.

Lootie Toomasie
Nunavut Water Board, Chair
LT/as/rqd

² Nunavut Planning Commission (NPC) Determination, December 09, 2021

³ Nunavut Impact Review Board (NIRB), May 13, 2016

I. BACKGROUND

The CAM-E Keith Bay, former intermediate Distant Early Warning (DEW) Line facility, is located approximately 75 kilometers east of Kugaaruk, in the East Kitikmeot Region of Nunavut. The facility, which was constructed in 1957 by the Department of National Defence (DND), operated until 1963, after which the responsibility for the site and facility was transferred to Indigenous and Northern Affairs Canada (INAC, now Crown-Indigenous Relations and Northern Affairs, CIRNA). Between 2011 – 2014 INAC retained consultants to conduct a number of investigations and assessments of the site, following which a Remedial Action Plan, Archeological Assessment Report and an Environmental Impact Assessment Report were generated.

Remediation of the site began in 2016 and included demolishing most of the infrastructure. As part of the construction work, the beach airstrip and access roads were upgraded. Two landfill facilities were constructed to house the demolition waste, a non-hazardous waste landfill (NHWL) and a Tier II landfill. Construction of the landfills occurred between 2017 and 2018.

The CAM-E site is in Long Term Monitoring (LTM) phase now, and the 2020 LTM field program took place on August 28, 2020 and included visual inspection and GPS surveying, in addition to an environmental sampling program. A second visit was completed on September 08, 2020 to collect thermistor data followed by a visual and environmental inspection. The observations made during the 2020 LTM event support that both CAM-E landfills are performing as expected.⁴

The CAM-E Long-Term Monitoring Plan outlines the proposed frequency of monitoring as follows:

- Phase I – Years 1, 3, 5
- Phase II – Years 7, 10, 15 and 25
- Phase III – Beyond 25, if required

Year 1 monitoring event was completed in 2020. According to the LTM plan, the site will be in LTM phase until the year 2045, if not for any unforeseen circumstances. The Applicant has requested a 23-year term for this Licence.

II. PROCEDURAL HISTORY

On **May 16, 2022**, Crown-Indigenous Relations and Northern Affairs (Contaminated Sites Division) submitted a renewal Water Licence Application (Application). The following documents were submitted by the Applicant:

- NPC Determination #149627
- CAM E Keith Bay Drawings 1 and 2
- CAM E Keith Bay Water Use Licence Application
- CAM-E Keith Bay - Map

⁴ CAM-E Keith Bay Long Term Monitoring Event – 2020 Long Term Monitoring Report by BluMetric Environmental Inc., dated February 18, 2021.

- CAM-E Keith Bay NIRB Screening
- CAM-E Keith Bay NPC Conformity Letter - Not Required
- CAM-E Keith Bay Water License Amendment Application
- CAM-E Long Term Monitoring Plan 1246567
- CAM-E Keith Bay 2020 Long Term Monitoring (LTM) Report - Final 1293233.

On **May 24, 2022**, the NWB concluded that the Application generally met the requirements of section 48(1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSRTA or Act)* and forwarded notice of the Application to interested parties. All parties were invited to make representations to the NWB within thirty (30) days by **June 24, 2022**.

On the deadline for comments, submissions were received from Crown Indigenous Relations and Northern Affairs (Water Resources Division). The Applicant replied to the comments on July 12, 2022. On July 14, 2022, the Water Resources Division of CIRNA confirmed that the Applicant's response addressed their concerns.

The NWB has placed in its Public Registry copies of the Application and all comments received from Interveners. This information can be accessed on the NWB's file transfer protocol (FTP) site using the following link:

<ftp://ftp.nwb-oen.ca/registry/1%20INDUSTRIAL/1B/1BR%20-%20Remediation/1BR-KEI2245%20CAM%20E%20Keith%20Bay>

III. FILE HISTORY

According to information included on the NWB's (FTP) site, only one licence has been issued by the Nunavut Water Board (NWB) to Crown Indigenous Relations and Northern Affairs (CIRNA) for this Undertaking.

On January 17, 2017 the NWB issued Licence 1BR-KEI1722 to CIRNA (then INAC) for the use of up to 14 m³ of Water per day and the deposit of Waste. The Licence expired on January 16, 2022. An amendment was issued for this Licence on November 29, 2017.

IV. GENERAL CONSIDERATIONS

The following sections provide background information relevant to the terms and conditions included in this Licence, in the context of submissions received and/or the Board's rationale.

Term of the Licence

In accordance with s. 45 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSRTA or Act)*, the NWB may issue a licence for a term not exceeding twenty-five (25) years. In determining an appropriate term for a renewal licence, the Board generally takes into consideration several factors including Interveners' comments, the Licensee's compliance history, as well as the rationale contained in the application.

The Licensee requested in its Application, a twenty-three (23) year term for the licence. The only Intervener for this Application, CIRNA, in its submission did not comment on the term requested for the renewal licence. The Board, in examining the history of the Licensee, felt that a twenty-three-year term was appropriate to carry out the objectives of the Long-Term Monitoring (LTM) program. The Board has therefore granted the term requested by the Licensee. In so doing, the Board believes and expects that the **twenty-three-year term** will provide the Licensee with opportunities to monitor and evaluate the stability of the remediated site and consistently abide by the terms and conditions in the Licence over time, prior to a need for renewal.

Annual Reports

Under Part B, Item 1 of the Licence, the Licensee is required to submit Annual Reports for the purpose of ensuring that the NWB has an accurate annual update of site monitoring activities during each calendar year. This information is maintained on the Public Registry and is available to interested parties upon request. A “Standardized Form for Annual Reporting” is to be used by the Licensee and is available from the NWB FTP site under the Public Registry link at the NWB Website:

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

Water Use

The Board has authorized the maximum Water usage of five (5) cubic metres *per* day to allow for Water sampling and related activities. The Applicant has indicated that Water extracted for sampling and monitoring purposes will come from the on-site ponds in quantities, which are not expected to exceed 0.5 cubic metres *per* day. The NWB notes that although the Water use on-site is not expected to exceed 0.5 cubic metres *per* day, the Board set the maximum Water use for all purposes under Part C, Item 1 of this Licence at no more than five (5) cubic metres *per* day to allow for some flexibility.

Deposit of Waste

The Applicant has indicated that undertaking is for Long-Term Monitoring of the site and is not expected to create or generate any new Waste. Therefore, this Licence does not permit the Licensee to dispose of Waste.

Closure and Reclamation Plan

All remediation works were finalized in 2019 and the site is under long-term monitoring phase. Further reclamation activities are not expected to occur on-site. General terms and conditions have been included under Part J of the Licence.

Monitoring Plan

Under Part K, Item 1, the Board has reaffirmed that the Licensee will continue to implement the plan entitled “CAM-E Keith Bay Long-Term Monitoring Plan”, dated December 17, 2019, which was previously approved by the Board.

Under Part K, Item 2, the Board requires the Licensee to submit a revised QA/QC Plan, for Board review within the 2022 Annual Report.

The Licensee is required to seek approval and/or confirmation from the Board prior to making any changes to the Long-Term Monitoring Program. It should also be noted that additional sampling may be required upon request by the Board or the Inspector.

Summary of comments

CIRNA (Water Resources Division)

Crown Indigenous Relations and Northern Affairs (CIRNA) was concerned that without groundwater samples, potential contaminant transport via groundwater flow below the surface within and beyond the engineered confines of the landfill facilities would not be properly monitored and assessed.

CIRNA has recommended that the licensee explore alternative approaches to monitoring and assessing the performances of the landfills in-case no groundwater samples are obtained. The Licensee agrees to continue efforts in groundwater monitoring.

CIRNA has recommended that the licensee includes measures for in-situ measurements and applicable standard quality assurance measures such as travel and field blanks in their QA/QC Plan. The licensee responded that they employ a different contractor each year that let the contractor customize their approach to the industry approved practice. The licensee stated that they will consider this recommendation.



NUNAVUT WATER BOARD WATER LICENCE

Licence No: 1BR-KEI2245

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

CROWN-INDIGENOUS RELATIONS AND NORTHERN AFFAIRS

(Licensee)

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

(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:

Licence Number/Type: **1BR-KEI2245 TYPE "B"**

Water Management Area: **GULF OF BOOTHIA WATERSHED (34)**

Project/Location: **CAM-E DEW LINE SITE, KEITH BAY, KITIKMEOT REGION, NUNAVUT**

Classification: **INDUSTRIAL UNDERTAKING**

Purpose: **USE OF WATER**

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

Effective Date: **JULY 28, 2022**

Expiry of Licence: **JULY 27, 2045**

This Licence, 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

- a. This Licence allows for the use of Water for an Industrial Undertaking, classified as per Schedule 1 of the *Regulations*, for the Continued Long Term Monitoring Program Activities at the Keith Bay DEW Line Site (CAM-E), located within the Kitikmeot Region of Nunavut.
- b. 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
- c. 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

In this Licence 1BR-KEI2245

“**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;

“**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*;

“**Effluent**” means treated or untreated liquid Waste material that is discharged into the environment from a structure such as a settling pond, lagoon (including wetland), landfill 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.2d* 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;

“Geotechnical Engineer” means a professional engineer registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization with the engineering properties of earth materials in dealing with man-made structures and earthworks that will be built on a site. These can include shallow and deep foundations, retaining walls, dams, and embankments;

“Grab Sample” means an undiluted quantity of material collected at a particular time and place 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;

“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;

“Long-Term Monitoring (LTM) Program” refers to the Plan entitled “*CAM-E, Keith Bay Long Term Monitoring Plan*” prepared by AECOM, dated December 17, 2019, which was previously approved by the Board;

“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” means the facility located in the beach area, 200 m west of the airstrip, designed and constructed for the disposal of non-hazardous waste and debris

generated during the clean-up activities, as described in the Application documents received May 16, 2022;

“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*;

“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” means an excavation in impermeable soil for the purpose of catching or storing Water or Waste;

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

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

“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
- d. 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 March of the year following the calendar year being reported, containing the following information:
 - a. A summary report of Water use activities;
 - b. A summary of any construction work, modification and major maintenance work (including as-built diagrams) carried out;
 - c. Tabular summaries for all data and information generated under the Long-Term Monitoring Program;
 - d. A review and analysis of data collected during the Long-Term Monitoring Program and a brief description of any future studies planned by the Licensee;
 - e. The results of any review conducted and any recommendations regarding any changes to the Long-Term Monitoring Program and/or remediation requirements;
 - f. A summary of any remediation work undertaken during the year and an outline of any work anticipated for the next year;
 - g. A list of unauthorized discharges and summary of follow-up actions taken;
 - h. Any updates or revisions for manuals and plans as required by changes in operation and/or technology;
 - i. If applicable, a description of any trenches and sumps excavated, including the following: GPS coordinates, dimensions, depth below active layer, and secondary containment features;
 - j. A brief summary of work done to address any concerns of deficiencies listed in the inspection reports and/or compliance reports prepared by an Inspector;
 - k. An executive summary in English and Inuktitut of all plans, reports, or studies conducted under this Licence; and
 - l. Any other details on Water use or deposit of Waste requested by the Board by 1st of November of the year being reported.
2. The Licensee shall comply with the Long-Term Monitoring Program described in this Licence, and any amendments as may be made from time to time, pursuant to the conditions of this Licence.
3. The Long-Term Monitoring Program and compliance dates specified in the Licence may be modified at the discretion of the Board.
4. The Licensee shall post signs in the appropriate areas to identify the stations of the Long-Term Monitoring Program associated with the undertaking. All signage postings shall be in the Official Languages of Nunavut.
5. 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.
6. 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.

7. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
8. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
9. The Licensee shall review the Plans referred to in this Licence as required by changes in operation and/or technology and modify the Plans accordingly. Revisions to the Plans are to be submitted in the form of an Addendum to be included with the Annual Report required by Part B, Item 1, complete with a revisions list detailing where significant content changes are made.
10. 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, CIRNA
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4284
Fax: (867) 979-6445

11. 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.
12. 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.
13. This Licence is assignable as provided for in Section 44 of the *Act*.

14. 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. The Licensee is authorized to use up to five (5) cubic metres of Water *per* day for monitoring, sampling and related activities.
2. The Licensee is required to determine and record the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where Water is used and include this information in the submitted Annual Reports.
3. The Licensee is required to measure and record in cubic metres, the quantities of Water used.
4. The Licensee shall not remove any material from below the ordinary High-Water Mark of any water body unless authorized.
5. The Licensee shall implement and maintain sediment and erosion control measures prior to and during the operation to prevent entry of sediment and/or dust into Water.
6. The Licensee shall implement measures to prevent the deposition of dust and/or sediment into Water arising from contractor activities or any on-site vehicular traffic.

PART D: CONDITIONS APPLYING TO WASTE AND WASTE MANAGEMENT

1. The Licensee shall locate areas designated for Waste disposal including all pump-out Water 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 backhaul and dispose of all Waste not covered in Part D, Item 1, at an approved Waste disposal facility.
3. The Licensee shall not transport any hazardous wastes prior to registering with the Government of Nunavut as a waste generator and utilizing the prescribed manifests.
4. The Licensee shall provide to the Board documented authorization from all communities in Nunavut receiving Wastes from the Site prior to any backhauling and disposal of Wastes to those communities.

5. 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 in Part B, Item 1.

PART E: CONDITIONS APPLYING TO THE UNDERTAKING

1. The Licensee shall conduct all activities in such a way as to minimize impacts on surface drainage, and the Licensee shall immediately undertake any corrective measures in the event of any impacts on surface drainage.
2. The Licensee shall not cause erosion to the banks of any water body and shall provide necessary controls to prevent such erosion.
3. 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.
4. All sites affected by sampling and related 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.
5. The Licensee shall implement proper handling, storage and transportation procedures for hazardous materials to prevent entry to any water body.

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

1. No camp activities are authorized under the provisions of this Licence.
2. Winter lake and stream crossings, including ice bridges, shall be constructed entirely of Water, ice or snow, and shall be removed prior to spring break-up.
3. With respect to access road, pad construction or other earthworks, the deposition of debris or sediment into or onto any water body is prohibited. These materials shall be disposed at a distance of at least thirty-one (31) metres from the ordinary High-Water Mark in such a fashion that they do not enter the Water.
4. The Licensee shall not mobilize heavy equipment or vehicles unless the ground surface is capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles shall be suspended if rutting occurs.

PART G: CONDITIONS APPLYING TO DRILLING OPERATIONS

1. The Licensee is authorized to drill for the purpose of repairing and installing new monitoring wells and thermistors.
2. The Licensee shall not conduct any land-based drilling within thirty-one (31) metres of the ordinary High-Water Mark of any water body, unless otherwise approved by the Board in writing.
3. The Licensee shall dispose of all drill Waste, including Water, chips, muds and salts (CaCl₂) in any quantity or concentration, from land-based and on-ice drilling, in a properly constructed sump or an appropriate natural depression located at a distance of at least thirty-one (31) metres from the ordinary High-Water Mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created.
4. The Licensee shall restore all drill holes and disturbed areas to natural conditions immediately upon completion of the project. The restoration of drill holes must include the removal of any drill casing materials and the capping of holes with a permanent seal. Where drill casings cannot be removed the Licensee shall cut off the casings at ground level and identify with signage.

PART H: CONDITIONS APPLYING TO MODIFICATIONS AND CONSTRUCTION

1. The Licensee may, without written consent from the Board, carry out Modifications 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 H, 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 structures or facilities constructed under Part H, Item 1 of this Licence within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.

PART I: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

1. The Licensee shall update the Plan entitled “*Spill Contingency Plan CAM-E Remediation Project, Keith Bay, Nunavut*” dated July 2018, to include on-site operational changes and submit to the Board along with the 2022 Annual Report.
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 carry out 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 NWT/NU 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4284; 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.

PART J: CONDITIONS APPLYING TO CLOSURE AND RECLAMATION

1. The Licensee shall implement the Plan entitled “*Final Report: Remedial Action Plan CAM-E (Keith Bay), Nunavut*”, dated March 18, 2015, that was previously approved by the Board.
2. All roads shall be re-graded to match natural contours to reduce erosion.
3. In order to promote growth of vegetation and the needed microclimate for seed deposition, all disturbed surfaces shall be prepared by ripping, grading, or scarifying the surface to conform to the natural topography.
4. The Licensee shall remove from the site, all infrastructure and site materials, including all fuel caches, drums, barrels, material and equipment prior to the expiry of this Licence.
5. 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 Contaminated Site Remediation, 2009*. 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.

6. All disturbed areas shall be contoured and stabilized upon completion of work and restored to a pre-disturbed state.

PART K: CONDITIONS APPLYING TO THE MONITORING PROGRAM

1. The Licensee shall carry out the long-term monitoring activities as defined in the Plan entitled “*CAM-E, Keith Bay Long Term Monitoring Plan*”, dated December 17, 2019, which was previously approved by the Board.
2. The Licensee shall submit a revised Quality Assurance/Quality Control Plan (QA/QC) within the 2022 Annual Report. The QA/QC plan should incorporate the interveners comments and reflect the operation and/or technology being utilized.
3. 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.
4. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
5. The Licensee shall ensure that tabular summaries for all data and information generated under the Long-Term Monitoring Program, as well as an analysis of data collected during the undertaking, are provided to the Board in the Annual Report, in accordance with Part B, Item 1.
6. Future revisions to the QA/QC Plan and the detailed monitoring Plan are to be submitted in the form of an addenda to be included with the Annual Report, unless directed otherwise by the Board.
7. The Licensee shall conduct any additional monitoring requested by the Board and/or Inspector.
8. Modifications to the Long-Term Monitoring Program may be made only upon written request and subsequent approval of the Board in writing.