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NUNAVUT WATER BOARD  
NUNAVUT IMALIRIYIN KATIMAYINGI  
OFFICE DES EAUX DU NUNAVUT

**File No.: 1BR-JEN1323**

October 10, 2013

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**RE: NWB Renewal Licence No. 1BR-JEN1323**

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Dear Ms. Van Dyck & Ms. Schulz:

Please find attached Licence No. 1BR-JEN1323 issued to Defense Construction 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*. 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 will be in contravention of the *Nunavut Land Claims Agreement* (NLCA) and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA). 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.

If the Licensee contemplates or requires an amendment to this licence, the NWB may decide, in the public 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 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.<sup>1</sup>

Sincerely,



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Thomas Kabloona  
Nunavut Water Board  
Chair

TK/es/mp

Enclosure:

Licence No. **1BR-JEN1323**  
Comments – AANDC, EC, DFO

cc: Distribution – Kitikmeot

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<sup>1</sup> Aboriginal Affairs and Northern Development Canada (AANDC), March 20, 2013; Environment Canada (EC), March 21, 2013. Fisheries and Oceans Canada (DFO), April 09, 2013.

## DECISION

### LICENCE NUMBER: 1BR-JEN1323

This is the decision of the Nunavut Water Board (NWB) with respect to an application dated February 7, 2013 for the renewal and amendment of a Licence made by:

### DEFENCE CONSTRUCTION CANADA

to allow for Post-Construction Monitoring Activities at the CAM-1 DEW Line site located on the east central side of Jenny Lind Island in the Queen Maud Gulf, approximately 140 km southeast of the community of Cambridge Bay within the Kitikmeot Region, Nunavut, (located at the general latitude of 68°40' N and general longitude 101°43' W).

## DECISION

After having been satisfied that the application was exempt from the requirement for screening as described within Schedule 12-1 by the Nunavut Impact Review Board<sup>2</sup> in accordance with Article 12 of the *Nunavut Land Claim Agreement (NLCA)*, 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 *NLCA*, 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 *NLCA* and of the *Act*, waived the requirement to hold a public hearing, and determined that:

**Licence Number 1BR-JEN0712 is renewed as Licence No. 1BR-JEN1323 subject to the terms and conditions contained therein. (Motion #: 2013-B1-041)**

SIGNED this 9<sup>th</sup> day of October 2013 at Gjoa Haven, NU.



Thomas Kabloona  
Nunavut Water Board  
Chair

TK/es/mp

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<sup>2</sup> NIRB Screening Decision dated March 04, 2013.

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## **I. BACKGROUND**

The CAM-1 (Jenny Lind Island) DEW Line site is located on the east central side of Jenny Lind Island in the Queen Maud Gulf, approximately 140 km southeast of the Community of Cambridge Bay, within the Kitikmeot Region, Nunavut (at general latitude 68°40'17" N and general longitude 101 °43' 39" W).

The CAM-1 site has been determined to be surplus, and accordingly operations on the site have ceased. As has been the practice at other DEW line facilities, a detailed site investigation was undertaken prior to the commencement of remediation activities. This site assessment took place between 1997 and 2002. The CAM-1 site remediation occurred between 2007 and 2012, and included the following activities:

- Demolition and removal of existing facilities that are not required for the operation of the North Warning System;
- Management of contaminated soils in accordance with Federal Regulations and the *"Agreement Between Nunavut Tunngavik Incorporated and Her Majesty the Queen in Right of Canada, as Represented by the Minister of National Defense for the Clean-up and Restoration of Distant Early Warning Sites within the Nunavut Settlement Area-Environmental Provisions"* including its preamble and schedules, and any amendments to that agreement made pursuant to it; Construction, operation, and closure of a landfarm at the Old Town Site to treat petroleum hydrocarbon contaminated soils;
- Remediation of existing site landfills, and construction of engineered landfill facilities for the containment of non-hazardous waste and contaminated soils;
- Collection and disposal of scattered surface debris on the CAM-1 site; and
- Restoration of disturbed areas to a stable condition shaped to match existing terrain.

The site Cleanup and demolition of facilities was completed in 2009 with a landfill monitoring plan to address post closure monitoring requirements for the landfills at the CAM-1 Dew Line site.

## **II. PROCEDURAL HISTORY**

The original Licence, which was issued to Defence Construction Canada (DCC) on June 20, 2001, expired on October 31, 2001. The scope of that Licence allowed for the use of water and deposit of waste in support of activities associated with site investigation. A renewed Licence was issued on April 11, 2002, expired December 31, 2003. The scope of the Licence was to allow water use and waste disposal associated with Camp facilities and site investigation. Subsequent to the renewal, on July 23, 2007, the Board renewed the Licence and set the expiry date to December 31, 2012. The scope of the renewed Licence allows for water use and waste disposal activities, camp operations and site remediation activities.

## **Current Application**

The NWB received a water licence application from DCC on December 20, 2012 for the renewal/amendment of Licence 1BR-JEN0712 to support the on-going long-term landfill monitoring program for the CAM-1, Jenny Lind Island DEW Line Site with a decrease of amount of water to be used under the renewed licence. The application consisted of the following documents:

- Cover Letter;
- Application for water Licence Renewal Amendment;
- Exploration/Remote Camp Questionnaire;
- Appendix A: Landfarming information;
- Jenny Lind Island Landfill Monitoring Report;
- Spill Contingency Plan;
- NIRB Screening Report; and
- Project Summaries, English, Inuktitut.

Following the review of the application and the Applicant's submission of outstanding information, the NWB acknowledged receipt and distributed the application, on February 21, 2013, to the public for a thirty (30) day comment and review period with the deadline for comments being set for March 31, 2013. Submissions were received from Aboriginal Affairs and Northern Development Canada (AANDC), Environment Canada (EC) and Fisheries and Oceans Canada (DFO). None of the intervening parties objected, in principle and no public concern was expressed during the notice period. Therefore, the NWB waived the requirement to hold a public hearing and proceeded with the application process.

On March 4, 2013, the Nunavut Impact Review Board (NIRB) informed the Nunavut Water Board (NWB) that the application was exempt from the requirement for screening by the NIRB as described within schedule 12.1 (5) in accordance with Article 12 of the *Nunavut Land Claim Agreement (NLCA)*. Based upon the results of the detailed assessment of the Application, including consideration of any potential accidents, malfunctions, or impacts to water that the overall project might have in the area, the Board has approved the Application and has renewed 1BR-JEN0712 Water Licence as 1BR-JEN1323.

## **III. GENERAL CONSIDERATIONS**

### **Term of Licence**

In accordance with Section 45 of the Act, the NWB may issue a licence for a term not exceeding twenty-five (25) years. The Applicant has requested a twenty three (23) year renewal Licence under which it plans to monitor, assess and confirm the stability of the landfills at the project site at specific intervals during the monitoring program. Given the current stage of the program, the Board has decided to issue the licence for a term of ten (10) years during which details pertaining to any significant changes that might be required to the monitoring program would be provided for consideration under the application for a potentially longer term renewal in the future. The ten (10) year term will also allow the Licensee to complete the

evaluation of Phase I monitoring data and to complete two (2) stages of Phase II verification monitoring events in 2016 and 2019.

### **Annual Report**

Under the reporting section in the Licence, Part B, Item 1, the Licensee is required to submit to the Board for information, on an annual basis, a report that pertains to possible deposition of wastes. The NWB maintains the annual reporting information on its public registry. The information is also made available to interested persons upon request.

### **Water Use**

Water requirements for long term monitoring of the site will be minimal. The Licensee has indicated that small temporary camp facilities will be established on site; bottle water will be brought to site for drinking purposes and if required for potential camp operations, additional water will be extracted from the water supply lake, no other water use will be required under the project except for the purposes of sampling in accordance with the monitoring requirements in the licence. Accordingly, the NWB has authorized the use of Water under the terms and conditions of this licence to a maximum of 10 m<sup>3</sup> per annum.

### **Disposal of Waste**

The Licensee has indicated that black and grey water from a small temporary camp will be directed to a sump. Other potential waste includes empty fuels drums which will be removed from the site at the end of each monitoring event. Other Conditions for waste disposal have been included under Part D.

### **Monitoring**

The Monitoring program under this licence and potentially successive renewal Licences is scheduled to last up to 2036. The Phase I monitoring started in 2009. The Phase I monitoring program may be extended, if required, to provide sufficient data to establish equilibrium conditions. Phase II monitoring is designed to verify equilibrium conditions established in Phase I. The monitoring frequency in Phase II will be carried out according to the following schedule: year 7, 10, 15 and 25. Year 25 marks the end of Phase II monitoring. The NWB has included a requirement for the Licensee to submit a Preliminary Phases II Monitoring Summary Report as part of the application to renew this Licence in 2023. The Report shall be prepared by a Geotechnical Engineer to summarize data collected during phase I and II Monitoring, and should assess the integrity of the Waste Disposal Facilities. The Report shall address whether the facilities have performed as expected and how they are expected to perform over the long term. In addition, relevant recommendations should be included as deemed necessary. The Report will help the NWB and interested parties in assessing the effectiveness of closure and monitoring program and the requirement of the DND-NTI agreement. The requirement is detailed under Part J, Item 7 of the Licence.

### **Spill Contingency Planning**

The Board acknowledges that a revised Spill Contingency Plan (SCP) was submitted by the Licensee with the application which addresses the current status of the Project where demolition and site clean-up activities have been completed with post-construction and long-term monitoring occurring since 2009.

### **Abandonment and Restoration**

According to information provided by the licensee, the abandonment and restoration activities for the site have been completed since 2009. The Licensee initiated the post-construction monitoring program in 2009 and plans to continue doing so for a period of 23 years. Under the terms and conditions in the Licence applying to abandonment and restoration, the Licensee is required to remove all equipment and any facilities associated with the project upon completion.





## NUNAVUT WATER BOARD WATER LICENCE RENEWAL

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

DEFENCE CONSTRUCTION CANADA

(Licensee)

101 COLONEL BY DRIVE, OTTAWA, ON KIA 0K2

(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-JEN1323 / TYPE "B"

Water Management Area: SOUTHERN VICTORIA ISLAND - 38

Location: CAM – 1 (JENNY LIND ISLAND) DEW LINE SITE,  
KITIKMEOT REGION, NUNAVUT

Classification: INDUSTRIAL UNDERTAKING

Purpose: DIRECT WATER USE AND DEPOSIT OF WASTE

Quantity of Water use not  
to Exceed: TEN (10) CUBIC METRES PER ANNUM

Date of Licence Issuance: OCTOBER 10, 2013

Expiry of Licence: OCTOBER 9, 2023

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

**Thomas Kabloona,  
Nunavut Water Board  
Chair**

## **PART A: SCOPE, DEFINITIONS AND ENFORCEMENT**

### **1. Scope**

This Licence allows for the use of water and the disposal of waste for an undertaking classified as industrial as per Schedule I of the *Regulations* at the CAM-1 (Jenny Lind Island) DEW Line Site Remediation Project, located approximately 140km southeast of the community of Cambridge Bay within the Kitikmeot Region, Nunavut.

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

### **2. Definitions**

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

“**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 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 or a treatment facility;

“**Engineer**” means a professional engineer registered to practice in Nunavut in accordance with the *Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2*

and the *Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12*;

**“Grab Sample”** means a single water or wastewater sample taken at a time and place representative of the total discharge;

**“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*;

**“Landfarm Facility”** means an area designed to biologically treat Type B soils, as described in the Application for Water Licence filed by the Applicant on March 2, 2006 and illustrated in Drawings H-B264/1-9101-111;

**“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;

**“Monitoring Program”** means a program established to collect data on surface water and groundwater quality to assess impacts to the environment of an appurtenant undertaking, to be undertaken in accordance with the NTI Agreement and as described in the documents entitled “ Water Use Licence Amendment and Renewal CAM-1 Jenny Lind Island Landfill Monitoring”, dated December 2012;

**“NTI Agreement”** means the “*Agreement Between Nunavut Tunngavik Incorporated and Her Majesty the Queen in the Right of Canada, as Represented by the Minister of National Defense for the Clean-up and Restoration of Distant Early Warning Sites within the Nunavut Settlement Area-Environmental Provisions*” including its preamble and schedules, and any amendments to that agreement made pursuant to it.

**“Nunavut Land Claims Agreement (NLCA)”** 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;

**“Post Construction Plan”** means the Plan entitled “Water Use Licence Amendment and Renewal CAM-1 Jenny Lind Island Landfill Monitoring”, dated December 2012.

**“Regulations”** means the *Northwest Territories Water Regulations SOR 2013/69 18th April, 2013*;

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

**“Solid Waste”** means non-hazardous waste, Type A soil, Tier I soil and Tier II soil;

**“Solid Waste Disposal Facility”** comprises the area and associated structures designed to contain solid waste and to permanently isolate the contents of the disposal facility from the environment, as described in the Application for Water Licence filed by the Applicant on March 2, 2006 and illustrated in Drawings H-B264/1-9101/101-122.

**“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;

**“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 I);

**“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 I);

**“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;

**“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;

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

**“Waste”** means waste as defined in Section 85 (1) of the *Act*;

**“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 31<sup>st</sup> of the year following the calendar year being reported, containing the following information:
  - a. The monthly and annual quantities (in cubic metres) of fresh water obtained from all sources;
  - b. The monthly and annual quantities (in cubic meters) of treated wastewater discharged;
  - c. A summary of any construction work, modification and major maintenance work (including as-built diagrams) carried out on all new and existing waste handling facilities associated with this Licence;
  - d. Tabular summaries for all data and information generated under the post construction monitoring program;
  - e. The results of a review conducted and recommendations regarding any changes to the Monitoring Plan;
  - f. A summary of any abandonment and restoration work undertaken during the year 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;
  - g. A list of unauthorized discharges and a summary of follow-up actions taken;
  - h. Any revisions to the Spill Contingency Plan;
  - 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. A summary of all information requested and results of the Monitoring Program, an analysis and interpretation of the results, and any follow-up measures that may be required; and
  - l. Any other details on Waste disposal requested by the Board by November 1 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 install flow meters or other such devices, or implement suitable methods required for the measuring of water volumes as required under Part J, Item 1.
4. The Licensee shall comply with the Monitoring Program described in this Licence, and any amendments to the Monitoring Program as may be made from time to time, pursuant to the conditions of this Licence.

5. The Monitoring Program and compliance dates specified in the Licence may be modified at the discretion of the Board.
6. The Licensee shall post signs in the appropriate areas to identify the stations of the Monitoring Program and to inform the public of the location of the Landfills. All signage postings shall be in the Official Languages of Nunavut.
7. 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.
8. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
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 complete with a revisions record detailing where significant content changes are made.
10. 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.
11. 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@nunavutwaterboard.org](mailto:licensing@nunavutwaterboard.org)

**(b) Inspector Contact:**

Manager of Field Operations, AANDC  
Nunavut District, Nunavut Region  
P.O. Box 100  
Iqaluit, NU X0A 0H0  
Telephone: (867) 975-4295  
Fax: (867) 979-6445

12. The Licensee shall submit one (1) paper copy and one (1) 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.
13. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the Board is received and acknowledged by the Manager of Licensing.
14. This Licence is assignable as provided for in Section 44 of the *Act*.

**PART C: CONDITIONS APPLYING TO WATER USE**

1. The Licensee is allowed to withdraw up to a maximum of ten (10) cubic meters per annum of water to support a small temporary camp required for the post construction monitoring activities as outlined in the application and shall come from water supply lake.
2. The Licensee shall not remove any material from below the ordinary high water mark of any water body.
3. The Licensee shall not conduct any activity that will cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion.
4. 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.
5. Equipment used should be well cleaned and free of oil and grease and maintained free of fluid leaks. The Licensee shall ensure that pollutants from machinery used during construction do not enter 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 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.
4. The Licensee shall contain all greywater in a sump located at a distance of at least thirty one (31) metres above the ordinary high water mark of any water body, at a site where

direct flow into a water body is not possible and no additional impacts are created, unless otherwise approved by the Board in writing.

5. The Licensee shall provide to the Board documented authorization from all communities in Nunavut receiving wastes from the CAM-1 Jenny Lind Island monitoring program prior to any backhauling and disposal of wastes to those communities.
6. The Licensee shall backhaul and dispose of all hazardous wastes, waste oil and non-combustible waste generated through the course of the operation at a Licenced waste disposal site.
7. The Licensee shall maintain records of all waste backhauled and records of confirmation of proper disposal of backhauled waste. These records shall be made available to an Inspector upon request.
8. The Licensee shall contain all greywater in a sump located at a distance of at least thirty one (31) metres above the ordinary high water mark of any water body, at a site where direct flow into a water body is not possible and no additional impacts are created, unless otherwise approved by the Board in writing.
9. The Licensee shall contain all toilet wastes in latrine pits. Latrine pits shall be located at a distance of at least thirty one (31) metres above the ordinary high water mark of any water body, treated with lime and covered with native material to achieve the pre-existing natural contours of the land prior to abandonment.

#### **PART E: CONDITIONS APPLYING TO 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 corrective measures in the event of any impacts on surface drainage.
2. 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.
3. 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.
4. The Licensee shall not cause erosion to the banks of any body of Water and shall provide necessary controls to prevent such erosion.
5. The Licence shall not deposit any waste in any body of Water, or on the banks thereof.
6. The Licensee shall, if any constructed facilities were to fail, repair such facilities immediately to the satisfaction of an Inspector.



**PART F:        CONDITIONS FOR CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS**

1. The Licensee shall not erect camps or store material on the surface of frozen streams or lakes except what is for immediate use. Camps shall be located such as to minimize impacts on surface drainage.
2. The Licensee shall conduct all activities in such a way as to minimize impacts on surface drainage and the Licensee shall immediately undertake corrective measures in the event of any impacts on surface drainage.
3. 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.
4. With respect to access road, pad construction or other earthworks, the deposition of debris or sediment into 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.

**PART G:        CONDITIONS APPLYING TO MODIFICATIONS**

1. The Licensee may, without written consent from the Board, carry out Modifications to the 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 revised Spill Contingency Plan entitled “Spill Contingency Plan”, dated June 01, 2013 that was originally approved by the Board and submitted as additional information with the Application.
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 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.
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 Spill Contingency Plan;
  - b. Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the AANDC Manager of Field Operations 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.

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

1. The Licensee shall backfill and restore all sumps to the pre-existing natural contours of the land.
2. The Licensee shall remove from the site, all infrastructure and site materials, including all fuel caches, drums, barrels, buildings and contents, docks, Water pumps and lines, material and equipment prior to the expiry of this Licence.
3. All roads and airstrip, if any, shall be re-graded to match natural contour to reduce erosion.
4. 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
5. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee’s operations.

6. 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.
7. 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, January 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.
8. All disturbed areas shall be contoured and stabilized upon completion of work and restored to a pre-disturbed state.
9. The Licensee shall complete all restoration work prior to the expiry of this Licence.

**PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM**

1. The NWB has approved the Monitoring Plan entitled "Water Use Licence Amendment and Renewal Cam-1, Jenny Lind Island Landfill Monitoring" dated December 2012 that was submitted as additional information with the application.
2. The Licensee shall submit with the annual review of the Licence, an Addendum to the Plan referred to in Part J, Item 1, to address comments received by the parties to include or address the following:
  - a. Inconsistencies noted by AANDC and missing information under section 2 of the monitoring plan document.
  - b. Inclusion of criteria and limits to be included in the monitoring plan as recommended by AANDC.
3. 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.
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 include in the Annual Report, required under Part B, Item 1, all monitoring results and information required by this Part.
6. The Licensee shall ensure that tabular summaries for all data and information generated under the "Monitoring Program", as well as an analysis of data collected during the "Monitoring Program," are provided to the Board in the Annual Report, in accordance with Part B, Item 1.

7. The Licensee shall submit a Preliminary Phase II Monitoring Summary Report as part of an application to renew this Licence in 2023. The Report shall be prepared by a Geotechnical Engineer and shall summarize data collected during Phase I and II monitoring, and include information on the integrity of the Waste Disposal Facilities. The Report shall also address whether the facilities have performed as expected and encased in permafrost. The report must include an assessment of how the facilities are expected to perform in the long term as well as appropriate recommendations.
8. Additional monitoring requirements may be imposed by the Inspector.

**Table 1: DEW Line Clean-up Criteria**

**Table No.1**  
(From INAC Abandoned Military Site Remediation Protocol)  
**DEW Line Clean-up Criteria (DCC)<sup>a</sup>**

Substance	Units	DCC Tier I <sup>bc</sup>	DCC Tier II <sup>d</sup>
Arsenic	ppm	-	30
Cadmium	ppm	-	5.0
Chromium	ppm	-	250
Cobalt	ppm	-	50
Copper	ppm	-	100
Lead	ppm	200	500
Mercury	ppm	-	2.0
Nickel	ppm	-	100
Zinc	ppm	-	500
PCB's	ppm	1.0	5.0

a. These criteria were adopted specifically for the cleanup of Arctic DEW Line Sites from the 1991 versions of the Quebec Soil Contamination Indicators and the Canadian Council of Ministers of the Environment Interim Canadian Environmental Criteria for Contaminated Sites.

b. Soil criteria are given in parts per million, ppm.

c. Soils containing lead and/or PCBs at concentrations in excess of DCC I, but less than DCC II, may be landfilled,

d. Soils containing one or more substrates in excess of DCC II must be containerized - i.e. removed in a manner which precludes contact with the Arctic ecosystem.