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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No.: 1BR-FRA1016

October 26, 2010

Douglas Craig, Environmental Officer
Defence Construction Canada
Constitution Square, Suite 1720
350 Albert St.
Ottawa, ON, K1A 0K0
E-mail: douglas.craig@dcc-cdc.gc.ca

RE: NWB LICENCE No. 1BR-FRA1016

Dear Mr. Craig:

Please find attached Licence No. **1BR-FRA1016** issued to Defence Construction Canada by the Nunavut Water Board **Motion #: 2010-17-L15** 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. 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.¹

Sincerely,



Thomas Kabloona
Nunavut Water Board
Chair

TK/tla/pb

Enclosure: Licence No. **1BR-FRA1016**
Comments

Cc: Kitikmeot Distribution List
Eva Schulz, AECOM Canada Ltd.

¹ Government of Nunavut – Department of Community, Language, Elders and Youth, December 14, 2009; Indian and Northern Affairs Canada, December 9, 2009; Government of Nunavut Department of Environment, December 18, 2009.



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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

DECISION

LICENCE NO.: 1BR-FRA1016

This is the decision of the Nunavut Water Board (NWB) with respect to an application, dated June 9, 2009, for the renewal of a Licence made by:

DEFENCE CONSTRUCTION CANADA

to allow for the implementation of a Post Construction Monitoring Plan at the PIN-3 Lady Franklin Point Distant Early Warning (DEW) Line Site, located on Victoria Island within the Kitikmeot Region, Nunavut generally located at the geographical coordinates as follows:

Latitude: 68°28'10"N Longitude: 113°13'11"W

DECISION

After having been satisfied that the application falls outside an area with an approved land use plan and is exempt² from the requirement for Nunavut Impact Review Board screening under Article 12 of the *Nunavut Land Claims 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 (NWNSTRA)* 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 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 *NWNSTRA*, decided to waive the requirement to hold a public hearing and determined that:

Licence Number 1BR-FRA1016 be issued subject to the terms and conditions contained therein. (Motion #: 2010-17-L15)

SIGNED this 26th day of October 2010 at Gjoa Haven, NU.

Thomas Kabloona
Nunavut Water Board, Chair

² NIRB Email dated June 28, 2010 from Tara Arko of NIRB to Don Carr of the NWB.

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I. INTRODUCTION

The former PIN-3 (Lady Franklin Point) DEW Line Site is located approximately 150 km northeast of Kugluktuk on the southwest shore of Victoria Island near the Dolphin and Union Strait and the Coronation Gulf, within the Kitikmeot Region, Nunavut (at general latitude of 68°28'10"N and general longitude 113°13'11"W).

The PIN-3 site is located approximately 15 metres above sea level. Surface drainage is directed down from the PIN-3 station towards the sea. Water supply lake, which is the largest body of water on the peninsula, is located immediately east of the station.

The PIN-3 site began operation in 1955 and was modernized in 1985 as a North Warning System Long Range Radar Site. Due to a fire, the site has not been operational since January, 2000.

An abandonment and reclamation project for the PIN-3 site was completed in 2004 and included the following activities:

- Demolition and removal of existing facilities not required for the North Warning System;
- Removal or remediation of contaminated soils;
- Remediation of landfills;
- Cleanup of surface debris;
- Construction, operation and closure of a landfarm;
- Construction, operation and closure of a sewage lagoon;
- Construction of a Tier II Soil Disposal Facility;
- Construction of a Non-Hazardous Waste Landfarm;
- Installation of Monitoring Wells and Thermistors; and
- Restoration of disturbed areas to a stable condition, shaped to match existing terrain.

Long term monitoring of the reclamation measures undertaken at PIN-3 began in 2005. The monitoring program occurs in phases. Phase I monitoring, which took place annually on site from 2005 to 2009, consisted of monitoring of the reclaimed landfills. Less frequent Phase II monitoring will begin in 2011. Phase II monitoring aims to verify equilibrium conditions established in the landfills over the course of the Phase I monitoring period. The monitoring frequency in Phase II is downgraded from Phase I and will be carried out according to the following schedule, year 7, year 10, year 15 and year 25. 2010 marks year 6 of the monitoring scheme. Year 25, or 2029, marks the end of Phase II monitoring.

II. PROCEDURAL HISTORY

The Nunavut Water Board (NWB or Board) issued a one-year water licence (NWB5FRA0101) to Defence Construction Canada (DCC or Licensee) on July 20, 2001 for water use and waste

disposal activities required to undertake a site investigation at the PIN-3 site in order to evaluate contaminants and development a reclamation plan. The licence expired October 31, 2001.

DCC submitted an application for licence renewal on November 9, 2001 in order to carry out reclamation plans. The Licence renewal was issued by the NWB as NWB5FRA0209 on May 30, 2002 with an expiry date of May 30, 2009. The Licence covered reclamation activities, which were completed in 2004 and also Phase I monitoring, which was completed in 2009.

On June 9, 2009 DCC applied to renew its water licence in order to undertake long term monitoring of reclamation measures at the PIN-3 site. Following an internal review of the application information the Board posted notice of the renewal application with a comment deadline of December 17, 2009. Comments were received from Indian and Northern Affairs Canada, Government of Nunavut – Department of Culture, Language, Elders and Youth and Government of Nunavut – Department of Environment. Following a review of the application and comments received, the Board has renewed licence NWB5FRA0209 as Licence no. 1BR-FRA1016. The scope of the Licence renewal is limited to the landfill monitoring activities.

III. GENERAL CONSIDERATIONS

A. Term of the Licence

In accordance with the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (Act)* S. 45, the NWB may issue a licence for a term not exceeding twenty-five (25) years. In determining an appropriate licence term, The NWB has taken into consideration the Post-Construction Monitoring Program timeframe submitted by the applicant and also notes the applicant's request for a twenty (20) year licence term. The Licensee completed Phase I monitoring in 2009 and Phase II monitoring is scheduled to begin in 2011.

The NWB understands that the proposed twenty (20) year term would allow the Licensee to complete Phase II monitoring, which is scheduled to end in 2029. However, at this time, prior to the analysis and synthesis of all Phase I monitoring data, which is designed to confirm the establishment of chemical and thermal stability in the reclaimed landfills, the NWB finds that a six (6) year term is more appropriate. This shorter Licence term is intended to ensure that all necessary closure conditions are on track and functioning as designed early on in Phase II monitoring. The six (6) year term will allow the Licensee to complete the evaluation of Phase I monitoring data and will also allow for two Phase II verification monitoring event in 2011 and 2014. The Licence term takes into account the additional time needed to synthesize the first part of Phase II monitoring into the program and make recommendations as may be necessary moving forward. Finally, the licence term will also allow the NWB and interested parties an opportunity to consider the results prior to renewing the Licence before Phase II close-out.

B. Annual Report

The annual reporting requirements imposed on the Licensee in this licence are for the purpose of ensuring that the NWB has an accurate annual update of water use and depositions of waste during a calendar year. This information is maintained on the public registry and is available to any interested persons upon request. The requirements of this Annual Report can be found in Part B, Item 1. A standard form for annual reporting can be downloaded from the NWB ftp site at <http://nunavutwaterboard.org/ftp/> in the administration folder.

The NWB notes that there are no annual reports on file for 2007, 2008 and 2009. The NWB anticipates that this issue will be addressed by the Licensee for the duration of the renewal Licence. In addition, the NWB reminds the Licensee of the previous decision issued by the NWB with respect to this project in which the Licensee was notified of the reporting requirement to provide an executive summary of reports in Inuktitut. This is an important requirement that has been previously overlooked by the Licensee.

C. Water Use

The previous licence authorized thirty (30) cubic metres of water per day. There was no request made to modify this amount and no comments were received concerning the volume of water permitted. However, the Licensee did indicate that only minimal water would be required for domestic purposes in camp and that bottled water would be brought to site for consumption. Given that on-site activity is significantly reduced during the long term monitoring and that only 5 to 8 people will be accommodated at camp, the NWB has reduced the volume of water permitted to five (5) cubic metres per day.

D. Deposit of Waste

The NWB understands that the PIN-3 site has been reclaimed and that during on-site monitoring, the Licensee is proposing that camp sewage and greywater be disposed of in pits and then buried. Latrine pits and sumps must be at least thirty one (31) metres from the nearest ordinary high water mark. All other wastes generated through the monitoring activities are to be backhauled for proper disposal at a licensed facility. The NWB notes that the Licensee proposes to backhaul all other wastes from site.

G. Modifications

The remediation activities at the PIN-3 Lady Franklin DEW Line site have been completed. In order to ensure that the NWB has an accurate record of the reclaimed facilities, final as-built drawings are an important part of the public record. Part G, Item 4 requires the submission of

Final As-built drawings for the reclaimed facilities. As-built drawings shall be stamped and signed by a professional Engineer and submitted to the NWB for the public registry.

I. Abandonment and Restoration

The NWB notes that an Abandonment and Restoration (A&R) Plan was provided in accordance with Part I, Item I of the previous licence and that it was approved by the Board on October 8, 2004. However, given that the scope of on-site operations have changed significantly, the Licensee is requested to revise the plan to reflect the abandonment and restoration measures required for the 5 to 8 person camp used to support the monitoring program. The plan shall be submitted to the NWB for review.

J. Monitoring

The remediation activities at the PIN-3 site were completed in 2004. Monitoring of remaining facilities will be on-going for at least twenty five years ending in 2029.

The monitoring to be carried out under this licence shall be conducted in accordance with the approved Plan entitled "Post-Construction Landfill Monitoring Program: Lady Franklin Point DEW Line Site" dated June 2009. All monitoring results are to be provided to the NWB with an analysis/interpretation of results as part of the Annual Reports.

The NWB notes that the monitoring program does not include information regarding monitoring of the landfarm located on site. The 2005 Annual Report identified that the Landfarm was decommissioned, however no details were provided for remediated soil or the structure itself. This information should include a photographic record, drawings, disposal details for Landfarm soil with testing data confirming the level of treatment.

The NWB notes that there is no monitoring of the decommissioned landfarm described in the program. The NWB requests, in accordance with Part J, Item6, that the Licensee provide a plan to monitor the reclaimed landfarm. The plan shall be submitted to the NWB for approval at least three (3) months prior to on site monitoring in 2011.

Finally, the NWB has included a requirement for the Licensee to submit a Preliminary Phase II Monitoring Summary Report as part of an application to renew this Licence in 2016. The Report shall be prepared by a geotechnical Engineer to summarize data collected during Phase I and II monitoring, and assesses the integrity of the Waste Disposal Facilities. The Report shall address whether the facilities have performed as expected, whether they are encased in permafrost and shall include an assessment of how the facilities are expected to perform over the long term and provide additional recommendations where may be necessary. This requirement is detailed under Part J, Item 5 and will help the NWB and interested parties assess the effectiveness of both the reclamation and monitoring measures undertaken.



NUNAVUT WATER BOARD WATER LICENCE

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)

CONSTITUTION SQUARE, SUITE 1720, 350 ALBERT ST., OTTAWA, ON, K1A 0K0

(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 renewal:

Licence Number/Type: 1BR-FRA1016 TYPE "B"

Water Management Area: NUNAVUT 07

Location: PIN-3, LADY FRANKLIN POINT, FORMER DEW LINE SITE
KITIKMEOT REGION, NUNAVUT (68°28'10"N, 113°13'11"W)

Classification: INDUSTRIAL UNDERTAKING

Purpose: DIRECT USE OF WATER, DISPOSAL OF WASTE & CLOSURE
MONITORING

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

Date of Licence Issuance: OCTOBER 26, 2010

Expiry of Licence: OCTOBER 30, 2016

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 disposal of waste during the implementation of a Post Construction Monitoring Plan, an Industrial Undertaking, at the PIN-3, Lady Franklin Point Distant Early Warning (DEW) Line site located approximately 150 km northeast of Kugluktuk on Victoria Island, within the Kitikmeot Region, Nunavut (at general latitude of 68°28'10"N and general longitude 113°13'11"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

In this Licence: **1BR-FRA1016**

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

“Appurtenant Undertaking” means an undertaking in relation to which a use of waters 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*;

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

“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;

“Historical Landfills” means the North Landfill, NWS Landfill and South Landfill Area as described in the application for renewal dated June 9, 2009 and in Figures PIN-3.3, PIN-3.4 and PIN-3.5;

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

“Landfarm” means the Landfarm constructed in 2002 for the remediation of Type B soil and decommissioned in 2005;;

“Licensee” means the individual or organization to which Licence 1BR-FRA1016 Type “B” is issued or assigned;

“Main Landfill” means the main landfill including monitoring wells and thermistors as described in the application for renewal dated June 9, 2009 and in Figure PIN-3.2;

“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 the plan entitled “Post-Construction Landfill Monitoring Program: Lady Franklin Point DEW Line Site” dated June 9, 2009.

“Non-Hazardous Waste Landfill” comprises the landfill and adjacent monitoring wells constructed in 2003 and closed in 2004 to contain Tier 1 Soil, Type A Soil, non-hazardous demolition debris, non-hazardous site debris, creosote treated timbers wrapped in polyethylene sheeting and bagged asbestos as described in the application for renewal dated June 9, 2009 and in Figure PIN-3.7;

“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;

“Sewage” means all Toilet Wastes and Greywater;

“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);

“Tier II Soil Disposal Facility” means the facility constructed and closed in 2003 and described in the 2003 Annual report, containing approximately 4,923 cubic metres of Tier II contaminated soil defined as per Table No. 1 and includes adjacent monitoring wells and thermistors described in the application for renewal dated June 9, 2009 and in Figure PIN-3.6;

“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 waste as defined in Section 85 (1) of the *Act*; and

“Waste Disposal Facilities” means the facilities designed to retain wastes including the Historical Landfills, Main Landfill, Tier II Soil Disposal Facility, the Non-Hazardous Waste Landfill and Landfarm;

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. Licensee shall file an Annual Report on the appurtenant undertaking with the Board no later than March 31st of the year following the calendar year being reported, which shall contain the following information:
 - a. Tabular summaries for all data and information generated under the Monitoring Program;
 - b. A review and analysis of data collected during the Monitoring Program 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 Program 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; and
 - l. For the first Annual Report following issuance of the Licence, include disposal information for soil treated in the Landfarm and details on the abandonment and restoration the Landfarm.
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 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

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

4. 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.
5. 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.
6. This Licence is assignable as provided for in Section 44 of the *Act*.
7. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.

PART C: CONDITIONS APPLYING TO WATER USE

1. The Licensee is authorized to use water for domestic use and for the purpose of obtaining monitoring samples for the Monitoring Program. Water withdrawn for domestic use shall come from Water Supply Lake or as otherwise approved by the Board in writing. Water use shall not exceed five (5) cubic metres per day.
2. The Licensee shall not remove any material from below the ordinary high water mark of any water body.
3. The Licensee shall not do anything 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 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 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 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.
3. 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.
4. The Licensee shall not practice on-site land filling of domestic waste, unless otherwise approved by the Board in writing.
5. 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.
6. The Licensee shall backhaul and dispose of all solid Waste generated through the course of the operation at a licensed waste disposal site.
7. 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.
8. 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.

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 body of water 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 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. Licensee shall not deposit any Waste in any body of water, or on the banks thereof.

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 including the immediate banks except what is for immediate use. Camps shall be located such as to minimize impacts on surface drainage.
2. All activities shall be conducted 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.
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 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. the Board has not, during the sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will

- d. require more than sixty (60) days; and
the Board has not rejected the proposed Modifications.
- 2. Modification 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.
- 4. The Licensee shall submit to the Board for review, as part of the 2010 Annual Report, final As-Built drawings stamped and signed by an Engineer for the Waste Disposal Facilities.

PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

- 1. 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. All sumps and fuel caches shall be located a minimum of thirty one (31) metres above the ordinary high water mark of any adjacent water body and inspected on a regular basis. The Licensee is encouraged to use some form of secondary containment on fuel and chemical storage associated with this undertaking.
- 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 INAC Manager of Field Operations at (867) 975-4295; and
 - c. Submit to the INAC Water Resources Inspector on each occurrence, a detailed report including the GPS location, no later than thirty (30) days after initially reporting the event.

PART I: CONDITIONS APPLYING TO ABANDONMENT, RESTORATION AND CLOSURE

- 1. The Licensee shall submit to the Board for review, as part of the 2010 annual report, a revised Abandonment and Restoration Plan for on site activities associated with the Monitoring Program including the camp.

2. Any areas disturbed as a result of the undertaking are 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 PROGRAM

1. The NWB has approved the Post Construction Monitoring Plan entitled “Post-Construction Landfill Monitoring Program: Lady Franklin Point DEW Line Site” dated June 9, 2009.
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 Licensee shall include in the Annual Report, required under Part B, Item 1, all monitoring results and information required by this Part.
5. In addition to the Annual Reporting requirements, the Licensee shall submit a Preliminary Phase II Monitoring Summary Report as part of an application to renew this Licence in 2016. The Report shall be prepared by a geotechnical Engineer and summarize data collected during Phase I and II monitoring, and assesses the integrity of the Waste Disposal Facilities. The Report shall address whether the facilities have performed as expected, whether they are encased in permafrost and shall include an assessment of how the facilities are expected to perform in the long term and provide additional recommendations where necessary.
6. The Licensee shall submit to the Board for approval, at least three (3) months prior to on site monitoring activities in 2011, a Landfarm Monitoring Plan to verify the stability of the closed facility.

Table No.1
(From INAC Abandoned Military Site Remediation Protocol)
DEW Line Clean-up Criteria (DCC)^a

Substance	DCC Tier I^{bc} (mg/L)	DCC Tier II^d (mg/L)
Arsenic	-	30
Cadmium	-	5.0
Chromium	-	250
Cobalt	-	50
Copper		100
Lead	200	500
Mercury	-	2.0
Nickel	-	100
Zinc	-	500
PCB's	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.