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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No.: **1BR-NIR1419**

February 17, 2014

Natalie Plato, P. Eng.
Director, Lands & Contaminated Sites
Department of Indian Affairs and Northern Development
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Iqaluit, NU X0A 0H0
E-mail: natalie.plato@aandc-aandc.gc.ca
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RE: NWB Licence No. 1BR-NIR1419

Dear Ms. Plato:

Please find attached Licence No. **1BR-NIR1419** issued to the Department of Indian Affairs and Northern Development (DIAND) or Aboriginal Affairs and Northern Development Canada (AANDC) 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 Land Claims Agreement or NLCA)*. 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 Land Claims 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.

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 from interested person(s) on issues identified. This information is attached for your consideration¹

Sincerely,



Thomas Kabloona
Nunavut Water Board, Chair

TK/sa/mp

Enclosure: Licence No. **1BR-NIR1419**
Comments – AANDC

Cc: Qikiqtani Distribution List

¹ Aboriginal Affairs and Northern Development Canada (AANDC), October 3, 2012.

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DECISION

LICENCE NUMBER: 1BR-NIR1419

This is the decision of the Nunavut Water Board (NWB) with respect to an application dated July 26, 2013 for a new water licence made by the:

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

to allow for the implementation of a remedial action plan at Nottingham Island Site Remediation Project, located on Nottingham Island within the South Baffin Region of Nunavut, at the geographical coordinates as follows:

Project Extents:

| | | |
|--------------------------|----|--------------------------|
| Latitude: 63° 6' 38" N | to | Latitude: 63° 6' 50" N |
| Longitude: 77° 56' 30" W | to | Longitude: 77° 55' 45" W |

Camp Extents:

| | | |
|--------------------------|----|--------------------------|
| Latitude: 63° 6' 39" N | to | Latitude: 63° 6' 43" N |
| Longitude: 77° 55' 46" W | to | Longitude: 77° 56' 21" W |

DECISION

After having been satisfied that the application was for a location that falls outside of an area with an approved Land Use Plan¹ and subject to a 12.4.4(a) Screening Decision by the Nunavut Impact Review Board² 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, 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 No. 1BR-NIR1419 be issued subject to the terms and conditions contained therein. (Motion #: 2013-B1-049)

Signed this 17th day of February, 2014 at Gjoa Haven, NU.



Thomas Kabloona
Nunavut Water Board, Chair

TK/sa/mp

¹ NPC Conformity Determination, July 8, 2013.

² NIRB Screening Decision, October 22, 2013.

Background

The Nottingham Island Site Remediation Project (the Project) is located approximately 40 kilometres south of Cape Dorset, Nunavut, and 80 kilometres north of Ivujivik, Quebec, within the Qikiqtaaluk Region of Nunavut.

Nottingham Island site operated as a former Department of Transport (DOT) weather station and radio transmitter station, built in 1927 and decommissioned in 1970. The Island has been used historically for hunting and fishing by the surrounding Inuit communities. The site consists of 17 structures, two empty above- ground storage tanks, a number of antennae and a large amount of scattered debris. Off-site features include debris piles, a roadway, a communication tower and nearby lakes/surface water features. Most if not all of the above-mentioned facilities and infrastructure would be included as part of the remediation activities proposed by Department of Indian and Northern Development.

Environmental Site Assessments (ESA) completed at the Nottingham Island site during 2007, 2010 and 2012 identified the nature and extent of contamination on the site. The contaminants of concern identified include: metals impacted soils (~165 cubic meters); Type B Petroleum Hydrocarbon (PHC) impacted soils (~2350 cubic meters); metals and Type B PHC impacted soils (co-contaminated soil) (~216 cubic meters); hazardous materials (e.g. lead and polychlorinated biphenyl (PCB) amended painted materials, asbestos containing materials, and PCB containing materials) (~680 cubic meters); and non-hazardous wastes (e.g. demolition wastes, debris and drums) (~1,312 cubic meters).

Based on the findings of the ESAs, a Remedial Action Plan (RAP) was developed for implementation during clean-up of the Nottingham Island site. Following the development of the RAP, community consultations, in the form of public meetings, were held at Cape Dorset (January 28, 2013), Ivujivik (January 29, 2013) and Salluit (January 29, 2013).

The remediation activities proposed in the RAP for the Project include but are not limited to the following:

- Mobilization of equipment, materials and personnel to site;
- Enhancement of site access routes (if required);
- Site roads improvement;
- Sealift landing site (if required);
- Camp set-up and operation;
- Hazardous material removal, handling and transportation;
- Temporary storage on-site for hazardous materials, equipment and fuels (if required);
- Building and infrastructure demolition;
- Debris consolidation and disposal;
- Excavation and relocation of PHC contaminated soils to the Land farm cell (if on-site rather than offsite disposal of PHC contaminated soils is considered);
- Excavation and removal of metals and PCB contaminated soils from site;
- Quarrying of gravel and overburden materials;
- Land farm cell construction (if required) & decommissioning (after soil is remediated to INAC 2009 Abandoned Military Sites Remediation Protocol);
- Site grading;

- Demobilization of equipment, materials/wastes and personnel; and
- Construction, operation, and decommissioning of sewage lagoon.

Although Nottingham Island lies within a region that is jointly owned by the Inuit of Nunavut and the Inuit of Nunavik (as covered by article 40, Part 2 of Nunavut Land Claim Agreement (NLCA) and Article 27 of Nunavik Inuit Land Claim Agreement (NILCA), the actual weather/radio station site proposed to be remediated is located on Crown Land. All remediation activities will be conducted on Crown Land. Consequently, no regulatory permissions are required from local Inuit organizations.

PROCEDURAL HISTORY

The NWB received on July 26, 2013 the following documents as part of the Water Licence Application (Application) submitted by the Department of Indian Affairs and Northern Development (DIAND) in support of the Nottingham Island Site Remediation Project:

- Cover Letter, dated July 12, 2013;
- Section 1 – General Water Use Licence Application Form (Completed);
- Section 2 – Exploration/ Remote Camp Supplementary Questionnaire;
- Table of Contents;
- Appendix A1 – Executive Summary – English;
- Appendix A2 – Executive Summary – Nunavut Inuktitut;
- Appendix A3 – Executive Summary – Nunavik Inuktitut;
- Appendix A4 – Executive Summary – French;
- Appendix B – Nottingham Island Phase III Environmental Site Assessment Report;
- Appendix C – Nottingham Island Remedial Action Plan (RAP);
- Appendix D – Current Project Schedule;
- Appendix E – Spill Contingency Plan;
- Appendix F – Site Maps – Site Location Map; Map of Current Site Features and NTS Map Sheet;
- Appendix G – Environmental (Impact) Assessment (Screening) Report;
- Appendix H – Nunavut Planning Commission (NPC) Determination (NPC Letter – Conformity Check not required);
- Appendix I – Communications with Makivik Corporation and Paul Fraser;
- Appendix J1 – NIRB Part 1 Form (English);
- Appendix J2 – NIRB Part 1 Form (Nunavut Inuktitut);
- Appendix J3 – NIRB (Part 1 Form (Nunavik Inuktitut);
- Appendix J4 – NIRB (Part 1 Form (French).

On July 8, 2013, the Nunavut Planning Commission confirmed that the application was for a project that falls outside of the areas of an approved land use plan; therefore, a conformity determination was not required. On October 22, 2013, the Nunavut Impact Review Board (NIRB) issued its screening determination for the project.

The NWB issued notice of and distributed the application on September 3, 2013. Comments were received from Aboriginal Affairs and Northern Development Canada – Water Resources Division. Following a review of the application documents and the intervener's submission, the Board decided to issue Licence No. 1BR-NIR1419 for the Project.

GENERAL CONSIDERATIONS

A. Term of the Licence

In accordance with s. 45 of the Nunavut Waters and Nunavut Surface Rights Tribunal Act, the NWB may issue a licence for a term not exceeding twenty-five years. The NWB has taken into consideration the Long Term Monitoring Program put forward by the applicant, the five (5) year term requested in the application, and the comments provided by the intervening party, in determining that the requested term is appropriate for the undertaking. This duration is expected to allow the Licensee adequate time to achieve the objectives identified in its Remedial Action Plan.

B. Annual Report

Annual reporting requirements included in this licence are for the purposes of ensuring that the NWB has an accurate annual update of water use and waste disposal activities during each reporting year. The NWB makes this information available through its public registry or to interested persons upon request. Requirements pertaining to Annual Reports can be found in Part B, Item 1 of this licence. To ensure that the Licensee addresses the minimum annual reporting requirements, the NWB has included on its ftp site a standard annual reporting form that can be accessed using the following link (in the administration folder): <ftp://nunavutwaterboard.org/ADMINISTRATION/Standardized%20Forms/>.

C. Water Use

The Licensee has requested the use of twenty (20) cubic metres per day of water in support of camp operations, construction, and miscellaneous activities. The NWB believes that the amount of water requested is appropriate for the nature of the undertaking and has therefore set the quantity of water allowed under Part C, Item 1 of this licence to twenty (20) cubic metres per day. Water use and amount shall be limited to the sources identified in the water licence application unless otherwise approved by the Board in writing.

D. Waste Deposit

Hydrocarbon Impacted Soil

The supporting information provided with the application indicates that approximately 2,350 m³ of Petroleum Hydrocarbon (PHC) Impacted Soil has been identified at the project site. Conditions have been included under Part D, Item 5 in the licence to allow for the Licensee, if required, to construct, operate and decommission an on-site landfarm treatment facility to treat the impacted soil. Alternatively, the Licensee may transport the soil to an appropriate licenced facility in the south for treatment or managed in a manner that is acceptable to the Board.

Sewage Treatment Facility

The Licensee has proposed to construct a Sewage Treatment Facility (lagoon) consisting of two (2) independently operated cells to treat the Sewage generated by personnel associated with the Nottingham Island Site Remediation Project. Criteria governing the quality of the effluent discharged from the lagoon into the receiving environment have been included under Part D, Item 21 in this Licence.

Miscellaneous Wastes

The Licensee has proposed to package and ship to appropriate licensed disposal facilities in southern Canada the following types of waste: non-combustible solid waste, all hazardous waste including asbestos, cylinders, items painted with lead-based paint, organic liquids, Tier II contaminated soils and PHC – metals co-contaminated soils. The NWB has therefore included conditions under Part D in the licence to ensure that all Hazardous Wastes are managed in accordance with applicable regulations including the *Transportation of Dangerous Goods Regulations* and the *Government of Nunavut's Environmental Guidelines for the General Management of Hazardous Waste* (2010).

Potential Waste Associated with Granular Material

Information in the application indicates that quarries/borrow sources will be developed for the purposes of supplying aggregates required for backfilling of open excavations and for project-related construction activities including the maintenance of site roads and the construction of the above-mentioned Landfarm Facility if required. As part of the geotechnical investigation conducted in 2012, three (3) potential borrow areas were investigated within the vicinity of the Project area. To ensure that all granular material used for project-related activities are free of acid-generating and/or metal leaching properties, the NWB has included requirements under Part E, Item 2 in the Licence that all aggregates used by the project be obtained from approved sources only. Further, the Licensee is required to implement adequate drainage control measures at the location of quarry and borrow sources to prevent or minimize sediment loading into any nearby freshwater bodies.

E. Design Drawings and Operations and Maintenance Manual

The Applicant is required to provide to the Board, within ninety (90) days following the construction of dams, dykes or structures to contain, withhold, divert or retain water or waste, including facilities or systems for the treatment and disposal of hydrocarbon contaminated soil, respective design drawings and construction reports. In addition as-built drawings, documentation of field decisions that deviate from original plans and any data used to support these decisions must also be provided. These plans and drawings shall be stamped by an Engineer.

Further, the Licensee is required to submit to the Board for approval, at least sixty (60) days prior to commissioning, an Operation and Maintenance Manual for the Wastewater Treatment Facility, and the Landfarm Facility as indicated under Part E, Item 3 and Part E, Item 4, respectively.

F. Spill Contingency Planning

The Board has approved, under Part I, Item 1, the Plan entitled “Fuel and Hazardous Material Spill Contingency Plan, Former Nottingham Island Radio/Weather Station Site, Nunavut” dated July, 2013 that was submitted as additional information with the Application. The Plan is required to be updated throughout the life of the project to reflect relevant changes in operating conditions and scope of activities associated with the project.

G. Abandonment and Restoration

The Board has approved, under Part J, Item 1 of the Licence, the Remedial Action Plan for the Former Weather Station at Nottingham Island, Nunavut that was submitted as additional information with the application. The Licensee is required to submit to the Board for review, any revisions to the Plan at any stage of the project. In addition, conditions have been included under Part J, Item 3 of the Licence to ensure that the Licensee removes from the Project site, all infrastructure and site materials, including fuel caches, drums, barrels, material and equipment prior to the expiry of this Licence.

H. Monitoring

Conditions have been included in the Licence, under Part K, Item 3, requiring the Licensee to install general Monitoring Stations at the Water Supply Facility, Sewage Treatment Facility, and at the Landfarm Facility.

The Board had decided that CCME Canadian Water Quality Guidelines for the Protection of Aquatic Life (CCME WQG) for surface water reception shall be applied to effluent discharged from the Landfarm. As such, the Board has set Effluent quality limits in Part D Item 6 of this Licence for pH, oil and grease, benzene, toluene, and ethylbenzene that are consistent with the CCME Guidelines. The Application does not provide information about the groundwater; however, the Board recommends that the groundwater within the Project's footprint be monitored and compared to appropriate CCME WQG.

A preliminary surface water monitoring program performed at site during the Phase III ESA (EBA, January 2013) had indicated water concentrations above natural background levels and in exceedance of the CCME guidelines for water. The identified exceedances (copper, aluminium, lead, selenium, zinc, silver, fluoride and chloride) are based upon a single limited data set and are potentially a result of naturally occurring background conditions, or may be a result from Site operations. The NWB considers that further surface water monitoring shall be conducted to determine the origin of this impact. Thus, the Board has included conditions to the Licensee, under Part K, Item 2 to submit for approval a proposal for the development of a Surface Water Monitoring Plan (SWMP).

Water quality data developed through this SWMP shall be evaluated against the Canadian Water Quality Guidelines (CWQG) for the Protection of Aquatic Life (Freshwater and Marine water). In addition, all sampling procedures shall be in accordance with the standards contained in the CCME Guidance Manual on Sampling, Analysis and Data Management for Contaminated Sites Volume I & II.

Also, under Part K, Item 11 of the Licence, the Applicant is required to submit to the Board for review, at least 30 days prior to the first release, a Quality Assurance/Quality Control (QA/QC) Plan. The Plan must be approved by an accredited laboratory so as to confirm that the plan is acceptable.

The Board, having considered the Application, intervener's submission and requirements associated of the undertaking, has accordingly set terms and conditions in this Licence to govern water use and the waste deposit for the Nottingham Island Site Remediation Project.



**NUNAVUT WATER BOARD
WATER LICENCE**

Licence No. 1BR-NIR1419

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

DEPARTMENT OF INDIAN AND NORTHERN AFFAIRS CANADA

(Licensee)

P.O. BOX 2200, IQALUIT, NU 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-NIR1419 TYPE "B"

Water Management Area: HUDSON STRAIT WATERSHED (65)

Location: QIKIQTANI REGION, NUNAVUT

Classification: INDUSTRIAL UNDERTAKING

Purpose: DIRECT WATER USE AND DEPOSIT OF WASTE

Quantity of Water use not
to Exceed: TWENTY (20) CUBIC METRES PER DAY

Date of Licence Issuance: FEBRUARY 17, 2014

Expiry of Licence: FEBRUARY 16, 2019

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 implementation of a remedial action plan at the Nottingham Island Site Remediation Project (Project) for an Industrial undertaking, classified as per Schedule 1 of the *Regulations* for the Nottingham Island Site Remediation Project, which is located approximately 140 kilometres south of Cape Dorset and 80 kilometres north of Ivujivik, Quebec within the Qikiqtani Region, Nunavut.

- a. This Licence is issued subject to the conditions contained herein with respect to the taking of water and the 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-NIR1419**

“**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, landfarm or a treatment plant;

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

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

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

“High Water Mark” means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. *Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities*);

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

“Landfarm Facility” means the facility designed and constructed to remediate PHC soils at the *Nottingham Island Site Remediation Project, Nunavut*;

“Licensee” means the holder of this Licence;

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

“Nunavut 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;

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

“Sewage” means all toilet wastes and greywater;

“Sewage Disposal Facility” means the two temporary and independently operated sewage lagoons design and constructed as described in the application documents received July 27, 2013;

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

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

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

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

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

“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;

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

“Waste Disposal Facilities” means all facilities designated for the disposal of waste including temporary and permanent storage and sorting areas, Sewage Treatment Plant, Landfarms and others;

“Water” or “Waters” means waters as defined in section 4 of the *Act*;

“Water Supply Facility” means the reservoir designed to hold water and associated intake structure described in the Application for Water Licence.

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 of the year following the calendar year being reported, it shall contain the following information:
 - a. The monthly and annual quantities (in cubic metres) of fresh water withdrawn from all sources;
 - b. The monthly and annual quantities (in cubic metres) of material deposited at any Landfarm Facility constructed at the Project site;
 - c. Characterization of the soils placed in any Landfarm Facility for treatment;
 - d. The monthly and annual quantities (in cubic metres) of effluent discharged from any Landfarm Facility;
 - e. The monthly and annual quantities (in cubic metres) of any rinse water discharged from activities associated with the project;
 - f. The monthly and annual quantities (in cubic meters) of treated sewage discharged from the Sewage Treatment Facility;
 - g. A summary of all waste backhauled for disposal, including hazardous waste at approved facilities under Part D, Item 15;
 - h. A summary of any construction work, modification and major maintenance work (including as-built drawings) carried out on the Sewage Disposal Facility, Landfarm Facility, and other infrastructure or facilities associated with the project;

- i. Tabular summaries for all data and information generated under the “Monitoring Program”;
 - j. An analysis of data collected during the “Monitoring Program” and a brief description of any future studies planned by the Licensee;
 - k. A summary of remediation work undertaken during the year and an outline of work anticipated for the following year;
 - l. 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;
 - m. A list of unauthorized discharges and a summary of follow-up actions taken;
 - n. Any revisions to the approved plan entitled “Remedial Action Plan Former Weather Station Nottingham Island, Nunavut, dated April 2013;
 - o. Any revisions to the approved Spill Contingency Plan dated July 2013;
 - p. 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;
 - q. If applicable, a public consultation/participation report describing consultation with local organizations and the residents of the nearby communities;
 - r. A brief summary of work done to address concerns or deficiencies listed in the inspection reports and/or compliance reports prepared by an Inspector;
 - s. An executive summary in English, French and Inuktitut of all plans, reports, or studies conducted under this Licence; and
 - t. Any other details on water use or 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 K, Item 4.
 4. 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.

5. The Licensee shall, for all Plans submitted under this Licence, implement the Plans as approved by the Board in writing.
6. The Licensee shall review the Plans referred to in this Licence, as required by changes in operation and/or technology, and modify the Plan accordingly. Revisions to the Plans shall be submitted in the form of an Addendum to be included with the Annual Report.
7. 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.
8. The Licensee shall, within thirty (30) days of arrival on site, post signs in the appropriate areas identifying the locations of the Water Supply Facility, Landfarm Facility, Sewage Disposal Facility, and the “Monitoring Program Stations”. All postings shall be in the official languages of Nunavut.
9. 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, AANDC
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4295
Fax: (867) 979-6445
10. 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 English and Inuktitut.
11. 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.
12. This Licence is assignable as provided for in Section 44 of the *Act*.

PART C: CONDITIONS APPLYING TO WATER USE

1. The Licensee shall obtain all water for domestic camp use from sources described in the Application unless otherwise approved by the Board in writing. Total camp water use shall not exceed seven (7) cubic metres per day. Water for construction and miscellaneous purposes shall be obtained from sources outlined in the application or as otherwise approved by the board in writing and shall not exceed thirteen (13) cubic metres per day. The volume of water for the purposes of this Licence shall not exceed twenty (20) cubic meters per day.
2. Streams cannot be used as a water source unless authorized and approved by the Board in writing.
3. The Licensee shall submit to the Board for approval in writing, at least thirty (30) days prior to the use of water in a sufficient volume that the source water body may be drawn down, the following information: volume required, hydrological overview of the water body, details of impacts, and proposed mitigation measures.
4. The Licensee shall equip all water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw water at a rate such that fish do not become impinged on the screen.
5. The Licensee shall not remove any material from below the ordinary high water mark of any water body unless authorized.
6. The Licensee shall not cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion.
7. The Licensee shall implement sediment and erosion control measures prior to and during the undertaking to prevent entry of sediment into water.
8. The Licensee shall not deposit or permit the deposit of sediments into any water body.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensee shall locate areas designated for waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any water body such that the quality, quantity or flow of water is not impaired, unless otherwise approved by the Board in writing.
2. The Licensee shall not practice on-site land filling of domestic waste, unless otherwise approved by the Board in writing.
3. The Licensee is authorized to dispose of all acceptable food waste, paper waste and unpainted wood waste by controlled burning on site.

4. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by the Board in writing.
5. The Licensee is authorized to treat Petroleum Hydrocarbon (PHC) impacted soils on site to meet the appropriate remediation objectives at an engineered, on-site Landfarm Facility or to transport the PHC impacted soils to a licensed facility or as otherwise authorized by the Board in writing.
6. Surface contact water and seepage collected from the perimeter of the Landfarm Facility shall not exceed the following Effluent discharge criteria at Monitoring Station NIR-4 prior to being released at least thirty-one (31) metres away into the receiving freshwater environment:

| Parameter | Maximum Allowable Concentration (mg/L) |
|----------------|---|
| pH | 6 to 9 (pH units) |
| Oil and Grease | no visible sheen |
| Total Lead | 0.001 |
| Benzene | 0.370 |
| Toluene | 0.002 |
| Ethylbenzene | 0.090 |

7. The Licensee shall, for the purpose of monitoring, install ground water monitoring wells, at least one up-gradient and two down-gradient of the Landfarm Facility.
8. The Licensee shall, prior to the use of any treated soil, confirm with the Government of Nunavut, Environmental Protection Service that the soils have been treated to meet all legislatively-required treatment objectives.
9. The Licensee shall not mix or blend PHC contaminated soils with non-contaminated soils for the expressed purpose of achieving the Treatment Objective.
10. The Licensee shall dispose of treated soils containing contaminants in excess of the Landfarm Treatment Objectives off site at an approved treatment facility.
11. The Licensee shall conduct confirmatory sampling of base and walls of open excavations/adjacent soil boundaries to ensure that all Petroleum Hydrocarbons impacted soil, metal impacted soil and co-contaminated soil has been removed.
12. Contact water, including demolition rinse water, associated with the storage and cleaning of contaminated areas and equipment at monitoring station NIR-3 shall not exceed the following Effluent discharge criteria at Monitoring Station NIR-3 prior to releasing at least thirty-one (31) metres into the receiving freshwater environment:

| Parameter | Maximum Allowable Concentration (µg/L) |
|----------------------|--|
| pH | 6 to 9 |
| Oil and Grease | no visible sheen |
| Arsenic (total) | 100 |
| Cadmium (dissolved) | 10 |
| Chromium (dissolved) | 100 |
| Cobalt (dissolved) | 50 |
| Copper (dissolved) | 200 |
| Lead (dissolved) | 50 |
| Mercury (total) | 0.6 |
| Nickel (dissolved) | 200 |
| PCB (total) | 1000 |
| Zinc (total) | 500 |
| Benzene | 370 |
| Toluene | 2 |
| Ethylbenzene | 90 |

13. The Licensee shall provide to the Board documented authorization from all communities in Nunavut receiving wastes from the Nottingham Island Site Remediation Project prior to backhauling and disposal of any wastes to those communities.
14. The Licensee shall transport materials coated with Polychlorinated Biphenyl (PCB) - amended paints or lead painted products, hazardous materials, Tier II Contaminated Soils, Petroleum Hydrocarbon Contaminated Soils that do not meet incineration criteria to the appropriate off-site licensed facilities for treatment.
15. The Licensee shall maintain records of all waste backhauled and records of confirmation of proper disposal of backhauled waste and include this information within the Annual Report, under Part B, Item 1. These records shall be made available to an Inspector upon request.
16. The Licensee shall ensure that a waste manifest accompanies the shipment of all waste oil/grease and is registered with the Government of Nunavut Department of Environment (GN-DoE).
17. The Licensee shall ensure that an export manifest or the appropriate transportation of dangerous goods (TDG) documentation accompany all potential hazardous samples and/or materials that are transported off-site.
18. During camp setup and the construction of the sewage lagoons, the Licensee may contain all camp Sewage in a sump. The sump shall be located at a distance of at least thirty-one (31) meters 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. The location shall be included in the Annual Report, as per Part B Item 1.

19. The Licensee shall provide notice to an Inspector at least ten (10) days prior to initiating discharge from the Sewage Disposal Facility.
20. The Licensee shall direct all sewage to the Sewage Disposal Facilities as described in the application or as otherwise approved by the Board in writing.
21. All waste discharged from the Final Discharge Point of the Sewage Disposal Facilities at Monitoring Program Stations NIR-2a and NIR-2b shall not exceed the following effluent quality limits:

| Parameter | Maximum Allowable Concentration |
|------------------------|---------------------------------|
| BOD | 120 mg/L |
| Total Suspended Solids | 180 mg/L |
| Fecal Coliforms | 1×10^4 CFU/100 mL |
| pH | 6.0 to 9.0 |
| Oil and Grease | no visible sheen |

22. The discharge for all treated effluents described in Part D, Item 21, shall be located at a minimum of thirty-one (31) metres from the ordinary high water mark of any water body and where direct flow into a water body is not possible and no additional impacts are created.
23. If the Effluent associated with Part D, Items 6, 12 and 21 exceed applicable discharge criteria; it shall be considered hazardous waste and be disposed off-site at a licensed facility or as otherwise approved by the Board in writing.

PART E: CONDITIONS APPLYING TO THE UNDERTAKING

1. The Licensee may use aggregates for the purposes specified in the “Remedial Action Plan Former Weather Station Nottingham Island Nunavut” dated April 2013 provided that the aggregate sources are approved by an Inspector, free of contaminants and satisfy the requirement of Part E, Item 2 of this Licence.
2. The Licensee shall use aggregates for construction from approved sources that have been demonstrated to not possess acid generating and metal leaching properties.
3. The Licensee shall submit to the Board for approval, within sixty (60) days prior to commissioning, an Operations and Maintenance Plan for the Sewage Disposal Facility that includes but is not limited to following:
 - a. As-built, engineered drawings of the Sewage Disposal Facility stamped and signed by an Engineer;
 - b. Final discharge locations NIR-2a and NIR-2b identified on a map;

- c. Monitoring Program;
 - d. Sludge management plan; and
 - e. Abandonment and Restoration information.
4. The Licensee shall submit to the Board for review within sixty (60) days prior to commissioning any landfarm facility constructed under this Licence, a Landfarm Operations and Maintenance Plan (O&MP). The Landfarm O&MP shall include, but not be limited to the following:
- a. Description of the property;
 - b. As-built, engineered drawings of the landfarm facility stamped and signed by an Engineer;
 - c. Soil Quality Remediation Objectives;
 - d. Treatment Details;
 - e. Operation and maintenance protocols;
 - f. Runoff management, mitigation measures;
 - g. Monitoring program information; and
 - h. Eventual uses or fate of remediated soil.
5. The Licensee shall provide to the Board, within ninety (90) days of completion of the construction of any dams, dykes or structures to contain, withhold, divert or retain water or waste, including facilities or system for the treatment and disposal of hydrocarbon contaminated soil, all respective design drawings and construction reports, including all as-built drawings, documentation of field decisions that deviate from original plans and any data used to support these decisions. These plans and drawings shall be stamped by and Engineer.
6. The Licensee shall, upon the failure of any constructed facilities, repair such facilities immediately to the appropriate standards as recommended by an Engineer.
7. The Licensee shall implement proper handling, storage and transportation procedures for hazardous materials during clean-up activities.
8. The Licensee shall minimize disturbance to terrain, permafrost and drainage during extraction of granular material, movement of contractor's equipment and personnel around the site and removal of site debris.

9. The Licensee shall not cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion.
10. Sediment and erosion control measures shall be implemented prior to and maintained during the operation to prevent entry of sediment into water.
11. The Licensee shall design and construct all stream crossings to minimize erosion and/or deposition of waste into water.
12. The Licensee shall ensure that existing creek channels are maintained at their normal width and depth to the extent possible, during and after site remediation.
13. Granular materials and rock rip-rap used for any temporary stream crossings, approaches or as may be required for bank stabilization must be obtained from a source approved by an Inspector, and be clean and free of contaminants. Such material must not be removed or gathered from below the ordinary high water mark of a creek, stream or from any water body.
14. All sites affected by remediation activities shall be backfilled, stabilized, landscaped as necessary, and suitable erosion control measures implemented to minimize sediment deposition into watercourses located on or adjacent to the site.
15. The Licensee shall restore and stabilize all areas affected by the undertaking upon completion of the work.
16. The Licensee shall not deposit any waste in any body of water, or on the banks thereof, which may impair the quality, quantity, or flow of water.

PART F: CONDITIONS FOR CAMPS, CONSTRUCTION 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 on gravel, sand or other durable land, 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. The Licensee shall construct all winter lake and stream crossings, including ice bridges, entirely of water, ice or snow. The Licensee shall minimize disturbance by locating ice bridges in an area that requires the minimum approach grading and the shortest crossing route. Stream crossings shall be removed or the ice notched prior to spring break-up.

4. 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 of 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.
5. The Licensee shall not mobilize heavy equipment or vehicles for trenching or other activities unless the ground surface is capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles shall be suspended if rutting occurs.

PART G: CONDITIONS APPLYING TO DRILLING OPERATIONS

1. No drilling is allowed except for the purposes of installing monitoring wells and/or instrumentation required for monitoring the Waste Disposal Facilities associated with the Project.

PART H: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply Facility and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - a. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - b. such Modifications do not place the Licensee in contravention of the Licence or the *Act*;
 - c. such Modifications are consistent with the NIRB Screening Decision;
 - d. the Board has not, during the sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
 - e. the Board has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part H, Item 1 have not been met can be carried out only with written approval from the Board.
3. The Licensee shall provide to the Board for review, within sixty (60) days prior to the construction of the Landfarm Facility and the Sewage Treatment Facility, complete for-construction engineering design drawings, signed and stamped by an Engineer. These designs shall consider siting, operation, monitoring, sampling and analytical methods, decommissioning and closure options and plans for the proposed Facilities.

4. The Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence within sixty (60) days of completion of the Modifications. These plans and drawings shall be stamped by an Engineer.

PART I: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

1. The Board has approved the Plan entitled “Fuel and Hazardous Material Spill Contingency Plan, Former Nottingham Island Radio/Weather Station Site, Nunavut” dated July, 2013 that was 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 conduct any equipment maintenance and servicing in designated areas and shall implement special procedures (such as the use of drip pans) to manage motor fluids and other waste and contain potential spills.
4. If during the term of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
 - a. Employ the approved Spill Contingency Plan;
 - b. Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and
 - c. For each spill occurrence, submit to the Inspector, no later than thirty (30) days after initially reporting the event, a detailed report that will include the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.
5. The Licensee shall, in addition to Part I, Item 4, regardless of the quantity of releases of harmful substances, report to the NWT/NU Spill Line if the release is near or into a Water body.

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

1. The Board has approved the Plan entitled “Remedial Action Plan Former Weather Station Nottingham Island, Nunavut” dated April, 2013 that was submitted as additional information with the Application.

2. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee's operations.
3. 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.
4. The Licensee shall backfill and restore all sumps to the pre-existing natural contours of the land.
5. All roads shall be re-graded to match natural contours to reduce erosion.
6. 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.
7. The Licensee shall contour and stabilize all disturbed areas to a pre-disturbed state upon completion of work.

PART K: CONDITIONS APPLYING TO THE MONITORING PROGRAM

1. The Licensee shall submit to the Board for approval, at least sixty (60) days prior to initiating Long-Term Monitoring for the project, a Post-closure Monitoring Plan for the site that includes information on Long-Term Monitoring of the Waste Disposal Facilities and that addresses water quality monitoring, stability of the site and the need for thermal and ground water monitoring.
2. The Licensee shall submit to the Board, for approval, at least sixty (60) days prior to initiating the monitoring, a proposal for the development of a Surface Water Monitoring Plan (SWMP). The proposal for the SWMP shall have objectives and requirements directed to determine if surface water exceedances are due to site activities or natural conditions at site.
3. The Licensee shall maintain Monitoring Program Stations at the following locations:

| Monitoring Station ID | Description | Status |
|-----------------------|---|-----------------------------------|
| NIR-1 | Station for fresh water intake | Active (volume) |
| NIR-2a | Station at the Sewage Treatment Facility – Lagoon Cell No. 1 discharge point | Active (volume and water quality) |
| NIR-2b | Station at the Sewage Treatment Facility – Lagoon Cell No 2 discharge point | Active (volume and water quality) |
| NIR-3 | Station installed at the discharge point of demolition waste rinse water collection area. | Active (volume and water quality) |

| | | |
|-------|--|-----------------------------------|
| NIR-4 | Monitoring Station installed at the discharge point of the surface water collection system for the Landfarm Facility | Active (Volume and Water Quality) |
| NIR-5 | Monitoring well installed down-gradient of the Landfarm Facility | Active (Water Quality) |
| NIR-6 | Monitoring well installed down-gradient of the Landfarm Facility | Active (Water Quality) |
| NIR-7 | Monitoring well installed up-gradient of the Landfarm Facility | Active (Water Quality) |

4. The Licensee shall measure and record, in cubic metres, the daily quantities of water utilized for camp and other purposes from Monitoring Station NIR-1 and quantity of effluent discharged from the Waste Disposal Facilities at Monitoring Program Station IDs NIR-2a, NIR-2b, NIR-3 and NIR-4.
5. The Licensee shall sample prior to discharge at Monitoring Program Stations NIR-4 and analyze for the following parameters:

| | |
|--|-------------------------|
| pH | Conductivity |
| Total Suspended Solids | Ammonia Nitrogen |
| Nitrate – Nitrite | Oil and Grease (visual) |
| Total Phenols | Sulphate |
| Total Hardness | Total Alkalinity |
| Sodium | Potassium |
| Magnesium | Calcium |
| Chloride | Total Cadmium |
| Total Copper | Total Chromium |
| Total Iron | Total Lead |
| Total Mercury | Total Nickel |
| Total Zinc | Total Phosphorous |
| Total Aluminum | Total Arsenic |
| Total Manganese | Total Cobalt |
| Total Petroleum Hydrocarbons (TPH) | |
| Polycyclic Aromatic Hydrocarbons (PAH) Benzene, Toluene, Ethylbenzene, Xylene (BTEX) | |
6. The Licensee shall provide the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where sources of water are utilized for all purposes.
7. The Licensee shall determine the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where wastes associated with camp operations are deposited.

8. The Licensee shall sample soil being treated in the Landfarm twice per year, in the spring-summer following thaw and prior to freeze-up in the fall, for the period of active land treatment to monitor contaminant levels until analytical results indicate acceptable levels and are meeting the Treatment Objective. Remediation objectives shall be consistent with those established by the Abandoned Military Site Remediation Protocol (AMSRP), Indian and Northern Affairs Canada, 2008.
9. 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.
10. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
11. The Licensee shall submit to the Board for review, at least 30 days prior to the first release of effluent, a Quality Assurance/Quality Control (QA/QC) Plan. The Plan shall include up-to-date sampling methods to all applicable standards and acceptable to an accredited laboratory as required by Part K, Item 10. The submission shall include a covering letter from the accredited laboratory that confirms acceptance of the Plan for analyses to be performed under this Licence.
12. Additional monitoring requirements may be requested by the Inspector.
13. The Licensee shall include in the Annual Report required under Part B, Item 1 all monitoring results and information required by this Part.

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

| Substance | DCC Tier I^{bc} | DCC Tier II^a |
|------------------|--------------------------------|--------------------------------|
| 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.