



P.O. Box 119
GJOA HAVEN, NU X0B 1J0
TEL: (867) 360-6338
FAX: (867) 360-6369

ᓄᓇᓂᓪ ᐃᓕᓕᓂᓪ ᑲᑎᓕᓂᓪ
NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No.: **1BR-JEN0712**

July 24, 2007

Philip Warren
Environmental Officer
Defense Construction Canada
Constitution Square, Suite 1720
35 Albert Street.
Ottawa, ON K1A 0K3
Email: eva.schulz@uma.aecom.com
Email: Philip.warren@dcc-cdc.gc.ca

RE: NWB LICENCE No. 1BR-JEN0712

Dear Mr. Warren:

Please find attached Licence No. **1BR-JEN0712** issued to Defense Construction Canada by the Nunavut Water Board **Motion #:** **2007-20** 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 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 30 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.

Sincerely,

Original signed by:

Thomas Kabloona
A/Chief Executive Officer

TK/ajw/pb

Enclosure: License No. **1BR-JEN0712**

Cc: Jim Rogers, INAC
Peter Kusugak, INAC
Andrew Keim, INAC
Colette Spagnuolo, INAC
Erin Calder, NWMB
Carson Gillis, NTI
Kevin Tweedle, KIA
Paul Savoie, DFO
Cindy Parker, EC
Earle Baddaloo, GN-DOE
John Dawe, GN
Leslie Payette, NIRB



P.O. Box 119
GJOA HAVEN, NU X0B 1J0
TEL: (867) 360-6338
FAX: (867) 360-6369

ᓄᓇᓂᓪ ᐃᓕᓕᓂᓪ ᑲᑎᓕᓂᓪ
NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

DECISION

LICENCE NUMBER: 1BR-JEN0712

This is the decision of the Nunavut Water Board (NWB) with respect to an application for a Licence dated March 2, 2006 made by:

DEFENCE CONSTRUCTION CANADA

to allow for the use of water and disposal of waste during camp operations and site remediation operations at the CAM-1 DEW Line site (located on the east central side of Jenny Lind Island in the Queen Maud Gulf, approximately 140 km southeast of the community of Cambridge Bay (Ikaluktutiak)), within the Kitikmeot Region, Nunavut (located at the general latitude of 68°40' and general longitude 101°43' W).

DECISION

After having been satisfied that the application was exempt from the requirement for screening by the Nunavut Impact Review Board in accordance with Schedule 12.1, Paragraph 5 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* (NWSRTA) 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 *NWSRTA*, decided to waive the requirement to hold a public hearing and determined that:

Licence Number 1BR-JEN0712 be issued subject to the terms and conditions contained therein. (Motion #: 2007 - 20)

SIGNED this 23rd day of July 2007 at Gjoa Haven, NU.

Original signed by:

Thomas Kabloona
A/Chief Executive Officer

TABLE OF CONTENTS

DECISION	i
TABLE OF CONTENTS	ii
I. INTRODUCTION	1
II. PROCEDURAL HISTORY	1
III. GENERAL CONSIDERATIONS	1
A. Term of the Licence.....	2
B. Water Use.....	2
C. Deposit of Waste.....	2
D. Annual Report.....	3
E. Spill Contingency Planning.....	3
F. Abandonment and Restoration.....	3
IV. LICENCE 1BR-JEN0712 TYPE"B"	4
PART A: SCOPE AND DEFINITIONS	5
PART B: GENERAL CONDITIONS.....	8
PART C: CONDITIONS APPLYING TO WATER USE.....	10
PART D: CONDITIONS APPLYING TO SEWAGE DISPOSAL	10
PART E: CONDITIONS APPLYING TO SOLID WASTE DISPOSAL.....	12
PART F: CONDITIONS APPLYING TO THE UNDERTAKING	12
PART G: CONDITIONS APPLYING TO CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS.....	13
PART H: CONDITIONS APPLYING TO DRILLING OPERATIONS	14
PART I: CONDITIONS APPLYING TO MODIFICATIONS.....	14
PART J: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING.....	14
PART K: CONDITIOND APPLYING TO ABANDONMENT AND RESTORATION ...	15
PART L: CONDITIONS APPLYING TO THE MONITORING PROGRAM.....	15
TABLE I: TIER I AND TIER II DEW LINE CLEAN-UP CRITERIA.....	17

I. INTRODUCTION

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

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

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

The existing site airstrip will be used to access the site, and existing roads will be used for site travel. A temporary camp will be set up at the site to facilitate the site remediation activities. Upon completion of site remediation, all camp facilities, including equipment and excess fuel, will be removed from the site. Long term monitoring of site landfills will be undertaken upon completion of clean-up activities and continue for 25 years, after which these monitoring requirements will be re-evaluated.

II. PROCEDURAL HISTORY

On March 2, 2006, an application for a new water licence was filed with the Nunavut Water Board by Defense Construction Canada, for water use and waste disposal activities, camp operations and site remediation activities at the CAM-1 (Jenny Lind Island) DEW Line site, which is located approximately 140 km southeast of the Community of Cambridge Bay (Ikaluktutiak)), within the Kitikmeot Region, Nunavut (at general latitude 68°40' and general longitude 101°43' W).

III. GENERAL CONSIDERATIONS

A. Term of the Licence

In accordance with the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* S. 45, the NWB may issue a licence for a term not exceeding twenty-five years. The NWB believes that a term of approximately five (5) years is appropriate. The license term will allow the Licensee to properly carry out the terms and conditions of the licence and will ensure that sufficient time is given to permit the Licensee to develop, submit and implement the plans required under the licence to the satisfaction of the NWB.

B. Water Use

The CAM-1 DEW Line site currently receives water from an on-site Water Supply Lake. Water requirements for camp operations during the period of the license were reported to be approximately 12.0 m³ *per* day. Water requirements for construction purposes have been identified as approximately 40 m³ *per* day. Total water usage requested by the Applicant is 52 m³ *per* day.

Based upon the projected requirements of the Licensee, the Board has set the terms and conditions in the water license, which govern water usage. The maximum permitted usage of water by the Licensee, over the term of the water license and for all purposes, has been set at 55 m³ *per* day.

C. Deposit of Waste

Sewage

The Licensee has indicated that camp sewage will be discharged to a two-cell lagoon located a minimum of 100 m from any body of water or any drainage course. Camp greywater will be discharged to, and contained with, a sump located a minimum of 30 m from any body of water or any drainage course. This sump will be backfilled prior to departure from the site.

The Board, having duly considered these issues and the submission of the Applicant, has set the terms and conditions in the water license, which govern the disposal of sewage during the proposed undertaking.

Solid Waste

The Licensee has indicated that camp solid waste will be incinerated and that any non-combustible residual waste will be buried in an on-site landfill. Additionally, pre-existing landfills on the CAM-1 DEW Line site will be remediated in accordance with protocols described in the *“Agreement Between Nunavut Tunngavik Incorporated and Her Majesty the Queen in the Right of Canada, as Represented by the Minister of National Defense for the Clean-*

up and Restoration of Distant Early Warning Sites within the Nunavut Settlement Area-Environmental Provisions” including its preamble and schedules, and any amendments to that agreement made pursuant to it. Non-hazardous waste, as well as contaminated soil, will be placed in appropriately designed engineered landfills. Soils designated as hazardous under the *Canadian Environmental Protection Act* (CEPA; 1999), as well as materials coated with PCP-amended paint, will be disposed of in approved off-site facilities.

The Board, having duly considered these issues and the submission of the Applicant, has set the terms and conditions in the water license, which govern the disposal of solid waste during the proposed undertaking.

D. Annual Report

The 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 under Part B, Item 1, can be downloaded from the NWB ftp site at <http://nunavutwaterboard.org/ftp/> in the administration folder.

E. Spill Contingency Planning

The Board generally requires that all Licensees prepare a comprehensive Spill Contingency Plan to establish a state of readiness to ensure a prompt and effective response to possible spills or system failure events. The site-specific spill contingency plan will assist the Licensee in responding to emergencies such that the impacts to water in particular and the environment and public health in general are minimized. The Plan submitted March 2, 2006 by the Licensee has been approved by the Board.

F. Abandonment and Restoration (A&R)

To ensure that all facilities are reclaimed in an appropriate manner upon abandonment, the NWB requires Licensees to prepare and submit an Abandonment and Restoration Plan. The activities proposed under this Licence are for the remediation of the site. The Plan submitted March 2, 2006 by the Licensee has been approved by the Board. Other conditions for restoration have been included under Part K.

IV. LICENCE 1BR-JEN0712

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)

Of

CONSTITUTION SQUARE, SUITE 1720, 35 ALBERT ST, OTTAWA, ON K1A 0K3

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water for a period subject to restrictions and conditions contained within this licence:

1BR-JEN0712

Licence Number

NUNAVUT 04

Water Management Area

CAM-1 (JENNY LIND ISLAND) DEW LINE SITE, KITIKMEOT REGION, NUNAVUT

Location

WATER USE AND WASTE DISPOSAL

Purpose

INDUSTRIAL – TYPE “B”

Classification of Undertaking

55 CUBIC METRES DAILY

Quantity of Water Not to Exceed

JULY 23, 2007

Date of Licence

DECEMBER 31, 2012

Expiry Date of Licence

Dated this 23rd day of July 2007 at Gjoa Haven, NU.

Original signed by:

Thomas Kabloona
A/Chief Executive Officer

PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. Scope

This Licence allows for the use of water and the disposal of waste for an undertaking classified as Industrial at the CAM-1 (Jenny Lind Island) DEW Line site (located on the south coast of Victoria Island, approximately 140 km southeast of the Community of Cambridge Bay (Ikaluktutiak)), within the Kitikmeot Region, Nunavut (at general latitude 68°40' and general longitude 101°43' W):

- i. 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;
- ii. 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-JEN0712**

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

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

“Chief Administrative Officer” means the Executive Director of the Nunavut Water Board;

“Demolition Rinse Water” means water and associated waste generated by the operation of decontamination and decommissioning activities;

“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

“Final Discharge Point” means the point at which the Licensee no longer exerts care and/or control over the quality and/or quantity of the effluent from a treatment process;

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

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

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

“Licensee” means the individual or organization to which License 1BR- JEN0712 Type “B” is issued or assigned;

“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;

“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;

“Monitoring Program” means a program established to collect data on surface water and groundwater quality to assess impacts to the environment of an appurtenant undertaking, to be undertaken in accordance with the NTI Agreement.

“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;

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

“Sewage Disposal Facility” comprises the area and engineered structures designed to contain and treat sewage, as described in the Application filed by the Applicant on March 2, 2006 and illustrated in Drawing # H-B264/1-9101/101.

“Sewage” means all toilet wastes and greywater;

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

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

“Tier I Soil” means soil containing contaminant concentrations within the types and ranges defined as DCC Tier I in Appendix E of the NTI Agreement, including its preamble and schedules, and any amendments to that agreement made pursuant to it (see Table I);

“Tier II Soil” means soil containing contaminant concentrations within the types and ranges defined as DCC Tier II in Appendix E of the NTI Agreement including its preamble and schedules, and any amendments to that agreement made pursuant to it (see Table I);

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

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

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

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

“Water Supply Facilities” comprises the Water Supply Lake area and associated infrastructure designed to collect and supply water, as described in the Application filed by the Applicant on March 2, 2006 and illustrated in Drawings H-B264/1-9101/101;

“Waste Disposal Facilities” means all facilities designated for the disposal of waste, and includes the Sewage Disposal Facilities, Solid Waste Disposal Facilities, and Landfarm Facility, as described in the Application for Water Licence filed by the Applicant on March 2, 2006.

3. Enforcement

- i. 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*;
- ii. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the *Act*; and
- iii. 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:
 - i. The monthly and annual quantities (in cubic metres) of fresh water obtained from all sources;
 - ii. The monthly and annual quantities (in cubic meters) of sewage generated;
 - iii. The monthly and annual quantities (in cubic metres) of material deposited in Solid Waste Disposal Facilities;
 - iv. A summary of any construction work, modification and major maintenance work (including as-built diagrams) carried out on the Water Supply and Solid Waste Disposal Facilities, including all associated structures;
 - v. Tabular summaries for all data and information generated under the “Monitoring Program”;
 - vi. An analysis of data collected during the “Monitoring Program” and a brief description of any future studies planned by the Licensee;
 - vii. A summary of any abandonment and restoration work undertaken during the year and an outline of any work anticipated for the next year;
 - viii. 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;
 - ix. A list of unauthorized discharges and summary of follow-up actions taken;
 - x. Any revisions to the approved “Abandonment and Restoration Plan”;
 - xi. Any revisions to the approved “Spill Contingency Plan”;
 - xii. 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;

- xiii. A public consultation/participation report describing consultation with local organizations and the residents of the nearby communities;
 - xiv. A brief summary of work done to address concerns or deficiencies listed in the inspection reports and/or compliance reports prepared by an Inspector;
 - xv. An executive summary in English and Inuktitut of all plans, reports, or studies conducted under this Licence; and
 - xvi. Any other details on water use or waste disposal requested by the Board by November 1st of the year being reported
- 2. The Licensee shall notify the NWB of any changes in operating plans or conditions associated with this project at least thirty (30) days prior to any such change.
 - 3. The Licensee shall install flow meters or other such devices, or implement suitable methods required for the measuring of water volumes, to be operated and maintained to the satisfaction of an Inspector.
 - 4. The Licensee shall, within sixty (60) days of issuance of this Licence, post signs in the appropriate area to inform the public of the location of the Water Supply Facility, Solid Waste Disposal Facilities, Landfarm Facility, and the stations of the “Monitoring Program”. All postings shall be in the Official Languages of Nunavut and located and maintained to the satisfaction of an Inspector.
 - 5. 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:

(i) **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

(ii) **Inspector Contact:**
Water Resources Officer
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4298
Fax: (867) 979-6445

6. 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.
7. 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.
8. This Licence is not assignable except as provided in Section 44 of the *Act*.

PART C: CONDITIONS APPLYING TO WATER USE

1. The Licensee shall obtain water for domestic and industrial use from the CAM-1 (Jenny Lind Island) DEW Line Site Water Supply Lake (JEN-1) up to a maximum of 55 cubic meters per day.
2. The Licensee shall equip all water intake hoses with a screen of an appropriate mesh size to ensure that there is no entrainment of fish and shall withdraw water at a rate such that fish do not become impinged on the screen.
3. The Licensee shall not remove any material from below the ordinary high water mark of any water body.
4. 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.
5. The Licensee shall implement sediment and erosion control measures to prevent the deposition of dust and/or sediment into the Water Supply Lake, arising from contractor activities or on-site vehicular travel.

PART D: CONDITIONS APPLYING TO SEWAGE DISPOSAL

1. The Licensee shall direct all sewage to the Sewage Disposal Facility, or as otherwise approved by the Board.
2. All waste discharged from the Final Discharge Point of the Sewage Disposal Facility (JEN-2) shall not exceed the following effluent quality standards at the point of discharge to the receiving water as defined in Part J, Item 1(i):

PARAMETER	MAXIMUM AVERAGE CONCENTRATION
Oil and Grease	no visible sheen
Total Suspended Solids	180 mg/L
BOD	120 mg/L
Faecal Coliforms	10000 CFU/dL
pH	pH between 6.0 and 9.0

3. The Licensee shall collect and temporarily store, in preparation for future disposal, all Demolition Rinse Water from decontamination procedures.
4. All Demolition Rinse Water, water from dewatering contaminated soil areas, contact water within the perimeter of the Landfarm and/or any other liquid effluent shall meet the following wastewater discharge criteria prior to being released onto land:

Parameter	Maximum Allowable Concentration (µg/L)
pH	6 to9
Oil and Grease	5000
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
Phenols	20
Zinc (total)	500

5. If effluent does not meet the Wastewater Discharge Criteria it shall be considered hazardous waste and disposed off-site.
6. The discharge location for all treated effluents described in Part D Items 2 and 4 shall be to the satisfaction of an Inspector and shall at a minimum be located 30 metres from the ordinary high water mark from any water body and where direct flow into a water body is not possible and no additional impacts are created.
7. All pump out water from excavation and borrow pits shall be pumped to an area approved by an Inspector.

PART E: CONDITIONS APPLYING TO SOLID WASTE DISPOSAL

1. The Licensee shall dispose of Tier I soil, Tier II soil, Type A soil, non-hazardous waste and waste generated during site construction and remediation activities in the Solid Waste Disposal Facilities constructed and operated in a manner in accordance with the Plans contained in the application submitted to the Board by the Licensee on March 2, 2006.
2. The Licensee shall treat Type B soil in the Landfarm Facility, constructed and operated in a manner in accordance with the Plans contained in the application submitted to the Board by the Licensee on March 2, 2006.
3. The Licensee shall dispose of any material coated with Polychlorinated Biphenyl (PCB) -amended paints, hazardous materials and soils containing contaminants in excess of Canadian Environmental Protection Agency (CEPA) Guidelines off site at an approved treatment facility, in accordance with the application submitted to the Board by the Applicant on March 2, 2006.

PART F: CONDITIONS APPLYING TO THE UNDERTAKING

1. The Licensee shall ensure that the location and construction parameters of the Tier II contaminated soil and non-hazardous waste landfills, petroleum-impacted soil landfarms, roads including stream crossings, active layer monitoring wells, thermal monitoring sites and any other associated structures conform to the plans submitted to the Board by the Applicant on March 2, 2006.
2. The Licensee shall, if any constructed facilities were to fail, repair such facilities immediately to the satisfaction of an Inspector.
3. The Licensee shall implement proper handling, storage and transportation procedures for hazardous materials during clean-up activities.
4. The Licensee shall minimize disturbance to terrain, permafrost and drainage during extraction of granular material, development and closure of landfills, movement of contractor's equipment and personnel around the site and removal of site debris.
5. The Licensee shall design and construct all stream crossings to minimize erosion and/or deposition of waste into water.
6. The Licensee shall ensure that the existing creek channels are maintained at their normal width and depth to the extent possible, during and after construction.
7. 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 the creek, stream or from any nearby water body.

8. All sites affected by construction or removal 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, to the satisfaction of an Inspector.
9. The Licensee shall restore and stabilize all areas affected by the undertaking upon completion of the work, to the satisfaction of an Inspector.
10. 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.
11. Areas designated for waste disposal shall be located at a minimum of thirty (30) metres from the ordinary high water mark of any body of water, unless otherwise authorized.
12. The Licensee shall dispose of all scrap metal, discarded machinery and parts, and other bulky material in a manner that conforms to the Plans submitted to the Board.

PART G: CONDITIONS FOR CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS

1. The Licensee shall not erect camps or store material on the surface of frozen streams or lakes except what is for immediate use. Camps shall be located such as to minimize impacts on surface drainage.
2. 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. Winter lake and stream crossings, including ice bridges, shall be constructed entirely of water, ice or snow; stream crossings shall be removed or notched prior to spring break-up.
4. With respect to access road, pad construction or other earthworks, the deposition of debris or sediment into any water body is prohibited. These materials shall be disposed of above the ordinary high water mark in such a fashion that they do not enter the water.

PART H: CONDITIONS APPLYING TO DRILLING OPERATIONS

1. The Licensee is authorized to drill and install the monitoring wells as shown in the Project Drawings and Project Specifications.

PART I: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this License and the following requirements are met:
 - i. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - ii. such Modifications do not place the Licensee in contravention of the License or the *Act*;
 - iii. 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
 - iv. the Board has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part I, 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 License within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.

PART J: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

1. The Board has approved the Plan entitled “Spill Contingency Plan for the CAM-1, Jenny Lind Island DEW Line Site” dated February 2006 that was submitted with the Application.
2. The Licensee shall review the Plan referred to in this Part as required by changes in operation and/or technology and modify the Plan accordingly. Revisions to the Plan are to be submitted in the form of an Addendum to be included with the Annual Report, unless directed otherwise by an Inspector.
3. The Licensee shall ensure that any chemicals, petroleum products or wastes associated with the project do not enter water. All sumps and fuel caches shall be located a minimum of thirty (30) 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 facilities associated with this

undertaking.

4. The Licensee shall ensure that any equipment maintenance and servicing be conducted only in designated areas and shall implement special procedures (such as the use of drip pans) to manage fluids, waste and contain potential spills.
5. If during the term of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
 - i. Employ the Approved Spill Contingency Plan;
 - ii. Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the DIAND Water Resources Inspector at (867) 975-4295; and
 - iii. Submit to the DIAND 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 K: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION

1. The Licensee shall undertake the abandonment and restoration of the CAM-1 (Jenny Lind Island) DEW Line site in accordance with the Application filed with the Board on March 2, 2006.
2. The Licensee shall backfill and restore, to the satisfaction of an Inspector, all camp waste disposal sumps to the pre-existing natural contours of the land prior to the expiry of this License to the satisfaction of an Inspector.
3. All disturbed areas shall be stabilized and re-vegetated as required, upon completion of work, and restored as practically as possible to a pre-disturbed state to the satisfaction of an Inspector.

PART L: CONDITIONS APPLYING TO THE MONITORING PROGRAM

1. The Licensee shall measure and record in cubic metres the daily quantities of water utilized for camp operations, for all purposes at the intake of the Water Supply Facility (JEN-1).

2. The Licensee shall determine 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.
3. 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.
4. The Licensee shall monitor compliance with respect to Part D Item 2, by collecting one representative composite sample at the Final Discharge Point of the Sewage Treatment Facility (JEN-2):
 - a. Upon initial release; and
 - b. At or near the end of the discharge period.
5. The Licensee shall monitor compliance with respect to Part D Item 4, by collecting a representative composite sample from a minimum of 5% of the total volume to be released from the Final Discharge Point of the Demolition Rinse Area (JEN-3).
6. The Licensee shall monitor compliance with respect to Part D Item 4, by collecting a representative composite sample from a minimum of 5% of the total volume to be released from the Final Discharge Point of the Landfarm Facility (JEN-4).
7. The Licensee shall monitor compliance with respect to Part D Item 4, by collecting a representative composite sample from a minimum of 5% of the total volume to be released from the Final Discharge Point of the Demolition Rinse Area (JEN-5).
8. An Inspector may impose additional monitoring requirements.
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.
10. The Licensee shall submit to the Board for approval thirty (30) days prior to releasing any effluent a revised the Quality Assurance/Quality Control Plan that conforms to the guidance document "*Quality Assurance (QA) and Quality Control (QC) Guidelines For Use by Class "B" Licensees in Collecting Representative Water Samples in the Field and for Submission of a QAQC Plan*" INAC (1996).
11. The Licensee shall undertake post-closure monitoring of the Solid Waste Disposal Facilities in accordance with the Monitoring Program contained within the Application filed with the Board on March 2, 2006, as outlined in the provisions and requirements of the NTI Agreement.

**Table I: Tier I and Tier II
DEW Line Clean-up Criteria**

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