

NORTHWEST
TERRITORIES
WATER BOARD



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WATER REGISTER: N7L1-1784

June 12, 2002

Defence Construction Canada
Place de Ville, Tower B, 17 Floor
112 Kent Street
OTTAWA, ON K1A 0K3

Attn: Suzanne Belanger-Fontaine

Dear Ms Belanger-Fontaine:

ISSUANCE OF A "B" TYPE LICENCE - CAPE PARRY

Attached is a duplicate of Licence No. N7L1-1784 granted to Defence Construction Canada by the Northwest Territories Water Board in accordance with the *Northwest Territories Waters Act*. The other original of this Licence has been filed with the Department of Indian Affairs and Northern Development in Yellowknife, Northwest Territories. Also attached are general procedures for the administration of licences in the Northwest Territories. I request that you review these and address any questions to the Board's office.

In conclusion, please be advised that this letter with attached procedures, all inspection reports, and correspondence related thereto are part of the public Water Register, and are intended to keep all interested parties informed of the manner in which the Licence requirements are being met. All Water Register material will be considered when the Licence comes up for renewal or amendment.

The full cooperation of Defence Construction Canada is anticipated.

Sincerely,

Gordon Wray
Chairman
N.W.T. Water Board

Attach.

c.c.: E. Schulz, UMA Engineering

P.O. Box 1500, Yellowknife, NT, X1A 2R3, 2nd Floor Goga Cho Building
Phone: (867) 669-2772 Fax: (867) 669-2719

6. Specific clauses of your Licence make reference to the Board, Analyst or Inspector. The contact person, address, phone and fax number of each is:

BOARD: Executive Assistant
Northwest Territories Water Board
Box 1500
YELLOWKNIFE, NT X1A 2R3
Phone No: (867) 669-2772
Fax No: (867) 669-2719

ANALYST: Analyst
Water Laboratory
Northern Affairs Program
Department of Indian Affairs
and Northern Development
Box 1500, 4601 - 52nd Avenue
YELLOWKNIFE, NT X1A 2R3
Phone No: (867) 669-2780
Fax No: (867) 669-2718

INSPECTOR: Inspector
North Mackenzie-Inuvik District Office
Northern Affairs Program
Department of Indian Affairs
and Northern Development
P.O. Box 2100
INUVIK, NT X0E 0T0
Phone No: (867) 777-3361
Fax No: (867) 777-2090

**GENERAL PROCEDURES FOR THE ADMINISTRATION OF LICENCES
ISSUED UNDER THE NORTHWEST TERRITORIES WATERS ACT
IN THE NORTHWEST TERRITORIES**

1. At the time of issuance, a copy of the Licence is placed on the Water Register in the Office of the Northwest Territories Water Board in Yellowknife, and is then available to the public.
2. To enforce the terms and conditions of the Licence, the Minister of Indian Affairs and Northern Development has appointed Inspectors in accordance with Section 35(1) of the *Northwest Territories Waters Act*. The Inspectors coordinate their activities with officials of the Water Resources Division of the Department of Indian Affairs and Northern Development. The Inspector responsible for Licence No. N7L1-1784 is located in the North Mackenzie -Inuvik District Office.
3. To keep the Water Board and members of the public informed of the Licensee's conformity to Licence conditions, the Inspectors prepare reports which detail observations on how each item in the Licence has been met. These reports are forwarded to the Licensee with a covering letter indicating what action, if any, should be taken. The inspection reports and covering letters are placed on the public Water Register, as are any responses received from the Licensee pertaining to the inspection reports. It is therefore of prime importance that you react in all areas of concern regarding all inspection reports so that these concerns may be clarified.
4. If the renewal of Licence No. N7L1-1784 is contemplated it is the responsibility of the Licensee to apply to the Water Board for renewal of the Licence. The past performance of the Licensee, new documentation and information, and points raised during a public hearing, if required, will be used to determine the terms and conditions of any Licence renewal. Please note that if the Licence expires and another has not been issued, then water and waste disposal must cease, or you, the Licensee, would be in contravention of the *Northwest Territories Waters Act*. It is suggested that an application for renewal of Licence No. N7L1-1784 be made at least eight months in advance of the Licence expiry date.
5. If, for some reason, Licence No. N7L1-1784 requires amendment, then a public hearing may be required. You are reminded that applications for amendments should be submitted as soon as possible to provide the Water Board with ample time to go through the amendment process. The process may take up to six (6) months or more depending on the scope of the amendment requested.

NORTHWEST TERRITORIES WATER BOARD

Pursuant to the *Northwest Territories Waters Act* and Regulations the Northwest Territories Water Board, hereinafter referred to as the Board, hereby grants to

DEFENCE CONSTRUCTION CANADA

(Licensee)

Place de Ville, Tower B, 17th Floor
112 Kent Street

of

OTTAWA, ONTARIO K1A 0K3

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water subject to the restrictions and conditions contained in the *Northwest Territories Waters Act* and Regulations made thereunder and subject to and in accordance with the conditions specified in this Licence.

Licence Number

N7L1-1784

Licence Type

"B"

Water Management Area

NORTHWEST TERRITORIES 07

Location

PIN-M Cape Parry
Latitude 70°10' N.
Longitude 124°43' W.
ARCTIC COAST AREA, N.W.T.

Purpose

TO USE WATER AND DISPOSE OF
WASTE FOR INDUSTRIAL
UNDERTAKINGS

Description

SITE REMEDIATION

Quantity of Water Not to be Exceeded

100 CUBIC METRES DAILY

Effective Date of Licence

JUNE 15, 2002

Expiry Date of Licence

DECEMBER 31, 2003

This Licence issued and recorded at Yellowknife includes and is subject to the annexed conditions.

NORTHWEST TERRITORIES WATER BOARD


Witness


Chairman

PART A: SCOPE AND DEFINITIONS

1. Scope

- a) This Licence entitles Defence Construction Canada to use water and dispose of waste for industrial undertakings in the remediation of the former Cape Parry (PIN-M) DEW Line site on the Arctic Coast at Latitude 70°10' N., and Longitude 124°43' W., Northwest Territories;
- b) This Licence is issued subject to the conditions contained herein with respect to the taking of water and the depositing of waste of any type in any waters or in any place under any conditions where such waste or any other waste that results from the deposits of such waste may enter any waters. Whenever new Regulations are made or existing Regulations are amended by the Governor in Council under the *Northwest Territories Waters 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 automatically amended to conform with such Regulations; and
- c) Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

2. Definitions

In this Licence: **N7L1-1784**

"Act" means the *Northwest Territories Waters Act*;

"Analyst" means an Analyst designated by the Minister under Section 35 (1) of the *Northwest Territories Waters Act*;

"Board" means the Northwest Territories Water Board established under Section 10 of the *Northwest Territories Waters Act*;

"Inspector" means an Inspector designated by the Minister under Section 35(1) of the *Northwest Territories Waters Act*;

"Licensee" means the holder of this Licence;

"Minister" means the Minister of Indian Affairs and Northern Development;

"Project Description" refers to the report titled "Project Description for the Clean Up of Three Landfills at the PIN-M Cape Parry DEW Line Site", (which includes the DEW Line Clean Up Protocol and criteria) prepared by Defence Construction Canada for the Department of National Defence, dated March 2002.

"Regulations" mean Regulations proclaimed pursuant to Section 33 of the *Northwest Territories Waters Act*;

"Waste" means waste as defined by Section 2 of the *Northwest Territories Waters Act*; and

"Waters" mean waters as defined by Section 2 of the *Northwest Territories Waters Act*.

PART B: GENERAL CONDITIONS

1. The Licensee shall file an Annual Report with the Board not later than March 31 of the year following the calendar year reported which shall contain the following:
 - a) the total quantities in cubic metres of fresh water obtained from each source;
 - b) the total quantities in cubic metres of each and all waste discharged;
 - c) the results of sampling carried out under the Surveillance Network Program;
 - d) a list of any spills and unauthorised discharges; and
 - e) any other details on water use or waste disposal requested by the Board within forty-five (45) days before the annual report is due.
2. All monitoring data shall be submitted in printed form and electronically in spreadsheet format on a diskette or other electronic forms acceptable to the Board.
3. All reports shall be submitted to the Board in printed format accompanied by an electronic copy in a common word processing format on diskette or other electronic forms acceptable to the Board.

4. The Licensee shall comply with the "Surveillance Network Program" annexed to this Licence, and any amendment to the said "Surveillance Network Program" as may be made from time to time, pursuant to the conditions of this Licence.
5. The "Surveillance Network Program" and compliance dates specified in the Licence may be modified at the discretion of the Board.
6. Meters, devices or other such methods used for measuring the volumes of water used and waste discharged shall be installed, operated and maintained by the Licensee to the satisfaction of an Inspector.
7. The Licensee shall, within thirty (30) days of the issuance of this Licence, post the necessary signs, to identify the stations of the "Surveillance Network Program". All postings shall be installed, operated and maintained by the Licensee to the satisfaction of an Inspector.
8. The Licensee shall ensure a copy of this Licence is maintained at the site of operation at all times.

PART C: CONDITIONS APPLYING TO WATER USE

1. The Licensee shall obtain water from the Water Supply Lake, as shown on the drawing entitled: "Overall Site Plan / Project Layout", in Appendix II of the Project Description, or as otherwise approved by an Inspector.
2. The daily quantity of water used for all purposes shall not exceed 100 cubic metres.
3. The water intake hose used on the water pumps shall be equipped with a screen with a mesh size sufficient to ensure no entrainment of fish.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensee shall ensure that no grey water sludges are disposed of within 100 metres of any water bodies.

2. The Licensee shall ensure that all sewage waste is directed to the temporary sewage lagoon as described in the Project Description, for treatment prior to discharge, or as otherwise approved by the Inspector.
3. All sewage effluent discharged by the Licensee from the temporary sewage lagoon at "Surveillance Network Program" Station Number 1784-1 shall meet the following effluent quality requirements:

Parameter	Maximum Average Concentration
BOD ₅	30.0 mg/L
Total Suspended Solids	35.0 mg/L
Faecal Coliforms	250 CFU/dL
Oil and Grease	5.0 mg/L

The Waste discharged shall have a pH between 6.0 and 9.0.

4. All wash water and water collected from the dewatering of contaminated soil areas shall meet the following effluent quality parameters prior to disposal to the environment:

Parameter	Maximum Average Concentration	Maximum Concentration of Any Grab Sample
Benzene	3.0 mg/L	6.0 mg/L
Dissolved Cadmium	0.01 mg/L	0.02 mg/L
Dissolved Cobalt	0.05 mg/L	0.1 mg/L
Dissolved Copper	0.2 mg/L	0.4 mg/L
Dissolved Lead	0.05 mg/L	0.1 mg/L
Dissolved Nickel	0.2 mg/L	0.4 mg/L
Ethylbenzene	7.0 mg/L	14.0 mg/L
Oil and Grease	no visible sheen	
Phenols	0.02 mg/L	0.04 mg/L
Toluene	0.2 mg/L	0.4 mg/L
Total Arsenic	0.1 mg/L	0.2 mg/L
Total Chromium	0.1 mg/L	0.2 mg/L
Total Mercury	0.0006 mg/L	0.0012 mg/L
Total Zinc	1.0 mg/L	2.0 mg/L

The Waste discharged shall have a pH between 6.0 and 9.0.

5. The Licensee shall dispose of all non hazardous solid wastes on site in the Station Area Landfill extension, in a manner acceptable to an Inspector. Domestic non-hazardous waste shall be incinerated prior to disposal in the landfill, or as approved by an Inspector.
6. Any hazardous wastes produced during operation and reclamation activities, shall be removed from the site for disposal at a properly licensed facility, to the satisfaction of an Inspector, and/or in accordance with the provisions of the *Transportation of Hazardous Goods Act*.

PART E: CONDITIONS APPLYING TO CONTINGENCY PLANNING

1. If, during the period of this Licence, an unauthorised discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
 - a) employ the approved contingency plan;
 - b) report the incident immediately via the 24 Hour Spill Report Line. The current telephone number is (867) 920-8130; and
 - c) submit to an Inspector a detailed report on each occurrence not later than thirty (30) days after initially reporting the event.

PART F: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION

1. Upon completion of all required decommissioning activities, the Licensee shall ensure that all equipment and materials are removed from the site, and that all affected sites are re-graded in such a manner as to minimize erosion and the natural drainage pattern is restored to the extent possible. Other final restoration activities as may be outlined in the Project Description should be implemented to the satisfaction of an Inspector.

2. The Licensee shall monitor the Station Area Landfill Extension as stated in Section 2.4.1 of the Project Description. Any revisions to the monitoring plan shall be submitted to the Board for approval prior to implementation.

NORTHWEST TERRITORIES WATER BOARD


Witness


Chairman

NORTHWEST TERRITORIES WATER BOARD

LICENSEE: Defence Construction Canada

LICENCE NUMBER: N7L1-1784

EFFECTIVE DATE OF LICENCE: June 15, 2002

EFFECTIVE DATE OF
SURVEILLANCE NETWORK PROGRAM: June 15, 2002

SURVEILLANCE NETWORK PROGRAM

A. Location of Sampling Stations

Station Number

Description

1784-1

Treated Sewage Lagoon Effluent at the point
of discharge

B. Sampling and Analysis Requirements

1. Effluent at "Surveillance Network Program" Station Number 1767-1, shall be sampled every monthly, during camp operations, and analyzed for the following parameters.

BOD₅
Oil and Grease
Ammonia

Total Suspended Solids
Faecal Coliforms

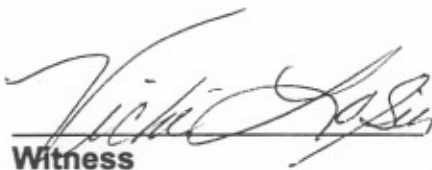
2. Additional or more frequent sample collection may be required at the request of an Inspector.

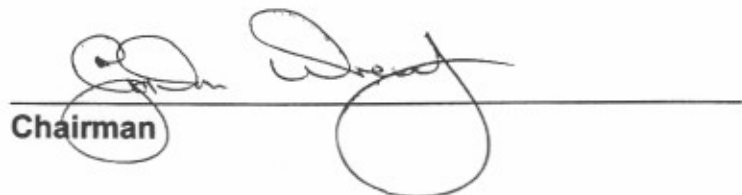
3. All sampling, sample preservation, and analyses shall be conducted in accordance with methods prescribed in the current edition of "Standard Methods for the Examination of Water and Wastewater", or by such other methods approved by an Analyst.
4. All analyses shall be performed in a laboratory approved by an Analyst.
5. The Licensee shall submit to an Analyst within two (2) months of the issuance of this Licence a Quality Assurance/Quality Control (QA/QC) Plan.
6. The Plan referred to in Part B, Item 6 shall be implemented as approved by an Analyst.

C. Reports

1. The Licensee shall, within thirty (30) days following the month being reported, submit to the Board all data and information required by the "Surveillance Network Program" including the results of the approved Quality Assurance Plan.

NORTHWEST TERRITORIES WATER BOARD


Witness


Chairman