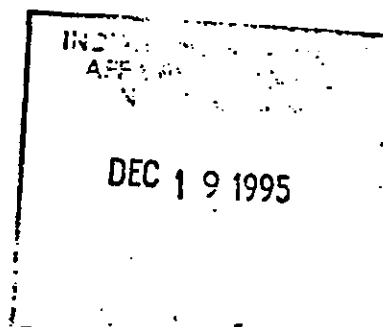




WATER REGISTER NO: N4L3-0640

December 18, 1995

H. Boychuk
Senior Administrative Officer
Hamlet of Broughton Island
BROUGHTON ISLAND, NT XOA 0B0



0640
NUNAVUT
DIS

Dear Mr. Boychuk:

RE: ISSUANCE OF A "B" TYPE LICENCE - WATER REGISTER NO: N4L3-0640

Attached is a duplicate of Licence No. N4L3-0640 granted to the Hamlet of Broughton Island 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 the Hamlet of Broughton Island is anticipated.

Sincerely,

for: Gordon Wray
Chairman
N.W.T. Water Board

Attachments (2)

**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. N4L3-0640 is located in the Nunavut 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. N4L3-0640 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 Hamlet of Broughton Island would be in contravention of the Northwest Territories Waters Act. It is suggested that an application for renewal of Licence No. N4L3-0640 be made at least eight months in advance of the Licence expiry date.
5. If, for some reason, Licence No. N4L3-0640 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 four (4) months or more depending on the scope of the amendment requested.

The Surveillance Network Program annexed to the Licence can be modified at the discretion of the Board and does not require a public hearing. A request for any proposed change to the Surveillance Network Program should be forwarded to the Board in writing, including a rationale for the change.

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: (403) 920-8191
Fax No: (403) 873-9572

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: (403) 920-8129
Fax No: (403) 873-9300

INSPECTOR: Inspector
Nunavut District Office
Northern Affairs Program
Department of Indian Affairs
and Northern Development
P.O. Box 100
IQALUIT, NT X0A 0H0

Phone No: (819) 979-4405
Fax No: (819) 979-6445

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

HAMLET OF BROUGHTON ISLAND
(Licensee)
BROUGHTON ISLAND, NORTHWEST TERRITORIES XOA 0B0
(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	<u>N4L3-0640 (RENEWAL)</u>
Licence Type	<u>"B"</u>
Water Management Area	<u>NORTHWEST TERRITORIES 04</u>
Location	<u>BROUGHTON ISLAND, NORTHWEST TERRITORIES</u>
Purpose	<u>WATER USE AND WASTE DISPOSAL</u>
Description	<u>FOR MUNICIPAL UNDERTAKINGS</u>
Quantity of Water Not to be Exceeded	<u>30,000 CUBIC METRES PER YEAR</u>
Effective Date of Licence	<u>JANUARY 1, 1996</u>
Expiry Date of Licence	<u>DECEMBER 31, 2000</u>

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

NORTHWEST TERRITORIES WATER BOARD

Pamela R. LeMoine
Witness

John Day
Chairman

PART A: SCOPE AND DEFINITIONS

1. Scope

- a) This Licence allows for the use of water and disposal of Waste for municipal purposes at the Hamlet of Broughton Island, Northwest Territories, (67° 33' N. Latitude and 64° 02' W. Longitude);
- 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: N4L3-0640

"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;

"Regulations" means 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;

"Average Concentration" means the discrete average of four consecutive analytical results, or if less than four analytical results, the discrete average of the analytical results collected during a batch decant, and as submitted to the Board in accordance with the sampling and analysis requirements specified in the "Surveillance Network Program";

"Average Concentration For Faecal Coliform" means the running geometric mean of any four consecutive analytical results submitted to the Board in accordance with the sampling and analysis requirements specified in the "Surveillance Network Program";

"Bagged Toilet Waste Disposal Facilities" comprises the area and associated structures designed to contain bagged Toilet Wastes (honeybags) as described in a Drawing titled "Broughton Island Sewage Lagoon Dump Sites and Access Road", dated July, 1991;

"Commercial Waste Water" means water and associated Waste generated by the operation of a commercial enterprise, but does not include Toilet Wastes or greywater;

"Freeboard" means the vertical distance between water line and crest on a dam or dyke's upstream slope;

"Grab Concentration" means the concentration of any one analytical result submitted to the Board in accordance with the sampling and analysis requirements specified in the "Surveillance Network Program";

"Greywater" means all liquid Wastes from showers, baths, sinks, kitchens and domestic washing facilities, but does not include Toilet Wastes;

"Pumpout Sewage" means all Toilet Wastes and/or Greywater collected by means of a vacuum truck for disposal at an approved facility;

"Sewage" means all Toilet Wastes and Greywater;

"Sewage Disposal Facilities" comprises the area and engineered structures designed to contain Sewage as identified in a Drawing titled "Broughton Island Sewage Lagoon Dump Sites and Access Road", dated July, 1991;

"Solid Waste Disposal Facilities" comprises the area and associated structures designed to contain solid Wastes as described in a Drawing titled "Broughton Island Sewage Lagoon Dump Sites and Access Road", dated July, 1991;

"Toilet Wastes" means all human excreta and associated products, but does not include Greywater;

"Waste Disposal Facilities" means all facilities designated for the disposal of Waste, and includes the Sewage Disposal Facilities, Solid Waste Disposal Facilities, and Bagged Toilet Wastes Disposal Facilities; and

"Water Supply Facilities" comprises the area and associated intake infrastructure as identified in Drawing Number 77-4901-01-3 titled "Broughton Island Water Distribution Point", dated March, 1979, and Drawing Number 82-7010-C-1, titled "Broughton Island Water Supply System, dated February, 1984.

PART B: GENERAL CONDITIONS

1. The Licensee shall file an Annual Report with the Board not later than March 31st of the year following the calendar year reported which shall contain the following information:
 - a) the monthly and annual quantities in cubic metres of fresh water obtained from all sources;
 - b) the monthly and annual quantities in cubic metres of all Sewage Waste discharged;
 - c) the monthly and annual quantities of Sewage solids removed from the Sewage Disposal Facilities for disposal as a result of dredging;
 - d) a summary of modifications and/or major maintenance work carried out on the Water Supply and Waste Disposal Facilities, including all associated structures;
 - e) tabular summaries of all data generated under the "Surveillance Network Program";
 - f) a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;

- g) 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;
 - h) a list of unauthorized discharges;
 - i) updates or revisions to the approved Sewage and solid Waste Operation and Maintenance Plans; and
 - j) 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 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.
 - 3. The "Surveillance Network Program" and compliance dates specified in the Licence may be modified at the discretion of the Board.
 - 4. 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.
 - 5. The Licensee shall, within sixty (60) days of the issuance of this Licence, post the necessary signs, where possible, to identify the stations of the "Surveillance Network Program". All postings shall be located and maintained to the satisfaction of an Inspector.
 - 6. The Licensee shall, within sixty (60) days of issuance of this Licence, post signs in the appropriate areas to inform the public of Water Supply and Waste Disposal Facilities. All postings shall be located and maintained to the satisfaction of an Inspector.
 - 7. The Licensee shall immediately report to the 24 Hour Spill Report Line (403-920-8130) any spills of Waste, which are reported to or observed by the Licensee, within the municipal boundaries or in the areas of the water supply or Waste Disposal Facilities.

8. The Licensee shall ensure a copy of this Licence is maintained at the municipal office at all times.

PART C: CONDITIONS APPLYING TO WATER USE

1. The Licensee shall obtain all fresh water from the Tulugak River using the Water Supply Facilities or as otherwise approved by the Board.
2. The annual quantity of water used for all purposes shall not exceed 30,000 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 direct all piped and Pumpout Sewage to the Sewage Disposal Facilities or as otherwise approved by the Board.
2. All Sewage effluent discharged from the Sewage Disposal Facilities at "Surveillance Network Program" Station Number 0640-4 shall meet the following effluent quality standards:

Parameter	Maximum Average Concentration	Maximum Grab Concentration
BOD ₅	360 mg/	720 mg/L
Suspended Solids	300 mg/L	600 mg/L

The Waste discharged shall have a pH between 6 and 9, and no visible sheen of oil and grease.

3. A Freeboard limit of 1.0 metre shall be maintained at all times or as recommended by a qualified geotechnical engineer registered in the Northwest Territories and as approved by the Board.
4. The Licensee shall advise an Inspector at least ten (10) days prior to initiating the decant of the Sewage lagoon.

5. The Sewage lagoon shall be maintained and operated in such a manner as to prevent structural failure.
6. The Licensee shall maintain the Sewage Disposal Facilities to the satisfaction of an Inspector.
7. All bagged Toilet Wastes (honey bags) shall be disposed of at the Bagged Toilet Waste Disposal Facilities to the satisfaction of an Inspector.
8. The Licensee shall dispose of all solid Wastes at the Solid Waste Disposal Facilities or as otherwise approved by the Board.

PART E: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written approval from the Board, carry out modifications to the Water Supply 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 either the Licence or the Act;
 - c) the Board has not, during the sixty (60) days following notification of the proposed modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
 - d) the Board has not rejected the proposed modifications.
2. Modifications for which all of the conditions referred to in Part E, 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 site plans of the modifications referred to in Part E, Item 1 within ninety (90) days of completion of the modifications.

PART F: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION

1. The Licensee shall submit to the Board for approval an Abandonment and Restoration Plan at least six (6) months prior to abandoning any Waste Disposal Facilities. The Plan shall include, but not be limited to:
 - a) contaminated site remediation;
 - b) leachate prevention;
 - c) an implementation schedule;
 - d) maps delineating all disturbed areas, borrow material locations, and site facilities;
 - e) consideration of altered drainage patterns;
 - f) type and source of cover materials;
 - g) future area use; and
 - h) hazardous Wastes.
2. Licensee shall implement the plan specified in Part F, Item 1 as and when approved by the Board.
3. The Licensee shall, by January 1, 1997, submit to the Board for approval an abandonment and restoration plan for the abandoned Waste Disposal Facilities.
4. The plan specified in Part F, Item 3 shall be implemented as and when approved by the Board.


PART G: CONDITIONS APPLYING TO CONSTRUCTION

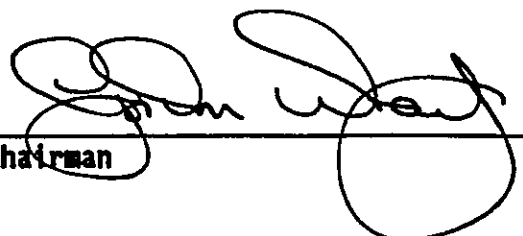
1. Prior to construction of any dams, dykes or structures intended to contain, withhold, divert or retain water or Wastes, the Licensee shall submit to the Board for approval design drawings stamped by a qualified engineer registered in the Northwest Territories.
2. Construction of designed structures shall be carried out as approved by the Board.

PART H: CONDITIONS APPLYING TO OPERATION AND MAINTENANCE

1. The Licensee shall, within six (6) months of the issuance of this Licence, submit to the Board for approval, a plan for the Operation and Maintenance of the Waste Disposal Facilities. The plan shall include but not be limited to the following:
 - a) frequency of inspection of dams, dykes and drainage courses;
 - b) removal of floating materials from the Sewage Disposal Facilities;
 - c) controlling effluent discharge quality;
 - d) runoff and drainage control within and around the facility, and restoration of erosion;
 - e) treatment of contaminated drainage;
 - f) prevention of windblown debris;
 - g) managing hazardous Waste;
 - h) segregation of domestic, metal and recyclable Waste materials;
 - i) method and frequency of site maintenance, including burning where permitted; and
 - j) alternatives designed to reduce burning.
2. The Licensee shall implement the plan specified in Part H, Item 1 as and when approved by the Board.

NORTHWEST TERRITORIES WATER BOARD


Witness


Chairman

NORTHWEST TERRITORIES WATER BOARD

LICENSEE:	Hamlet of Broughton Island
LICENCE NUMBER:	N4L3-0640
EFFECTIVE DATE OF LICENCE RENEWAL:	January 1, 1996
EFFECTIVE DATE OF AMENDED SURVEILLANCE NETWORK PROGRAM:	January 1, 1996

SURVEILLANCE NETWORK PROGRAM

A. Location of Surveillance Stations

<u>Station Number</u>	<u>Description</u>
0640-1	Raw water supply intake at the Tulugak River.
0640-2	Raw water supply intake at the reservoir truckfill station.
0640-3	Raw Sewage from pump-out truck.
0640-4	Run-off below the abandoned Sewage disposal area prior to discharge to ocean.
0640-5	Ocean water 5 metres from point where effluent enters ocean.
0640-6	Run-off from the Sewage Disposal Facilities.
0640-7	Run-off from the Solid Waste Disposal Facilities.

B. Sampling and Analysis Requirements

1. Water at Station Number 0640⁻⁶ shall be sampled once per year during periods of open water and analyzed for the following parameters:

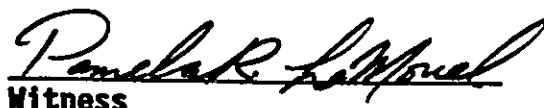
BOD ₅	Faecal Coliform
Suspended Solids	pH
Conductivity	COD
Oil and Grease	Phenol
Magnesium	Calcium
Sodium	Potassium
Chloride	Sulphate
Total Hardness	Total Alkalinity
Ammonia Nitrogen	Nitrate-Nitrite
Orthophosphate	Aluminum

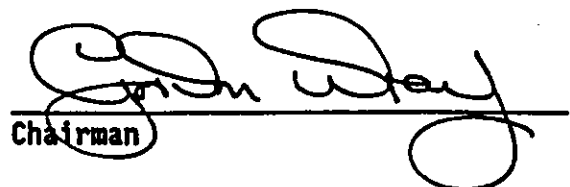
2. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of "Standard Methods for the Examination of Water and Wastewater", or by such other methods approved by an Analyst.
3. All analyses shall be performed in a laboratory approved by an Analyst.

C. Flow and Volume Measurement Requirements

1. The monthly and annual quantities of water pumped from Surveillance Network Program Station Number 0640-1 for municipal purposes shall be measured and recorded in cubic metres.
2. The monthly and annual quantities of Sewage solids removed from the Sewage disposal facility shall be measured and recorded.

NORTHWEST TERRITORIES WATER BOARD


Witness


Chairman