



WATER LICENCE G99L3-004

Pursuant to the *Mackenzie Valley Resource Management Act*, the *Northwest Territories Waters Act and Regulations*, the **Gwich'in Land and Water Board** (hereinafter referred to as the Board) hereby grants to:

The Charter Community of Tsiighehtchic, NT
(hereinafter referred to as the Licencee)

General Delivery, Tsiighehtchic, NT, X0E 0B0
(Mailing Address)

the right to watercourse training subject to the restrictions and conditions contained in the *Mackenzie Valley Resource Management Act*, the *Northwest Territories Waters Act and Regulations* made thereunder and subject to and in accordance with the conditions specified in this Licence.

Licence Number: **G99L3-004**

Licence Type: **"B"**

Location: **Tsiighehtchic in the Northwest Territories**
Latitude 67 degrees 26' N
Longitude 133 degrees 45' W

Purpose: **Municipal Water Use and Disposal of Waste**

Quantity of Water Not to be Exceeded: **20 000 Cubic Metres Per Year**

Effective Date of Licence: **April 18, 2000.**

Expiry Date of Licence: **April 30, 2005.**

This Licence, issued and recorded at Inuvik NT, includes and is subject to the annexed conditions, and shall be kept on site at all times. If you have any questions, please call the Gwich'in Land and Water Board at (867) 777-4954.

Morris Blake
Chair

Witness

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 Charter Community of Tsiigehtchic, Northwest Territories, (67°26'N and 133°45'W).
- 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.
- 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: **G99L3-004**

"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 Gwich'in Land and Water Board established under Section 54 of the Mackenzie Valley Resource Management 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 arithmetic 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";

"Average Concentration For Faecal Coliform" means the 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);

"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;

"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 Drawing Number 49025-100, titled "Project No. 86.3060";

"Solid Waste Disposal Facilities" comprises the area and associated structures designed to contain solid wastes as described in Project No. 86.3060;

"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.

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) Tabular summaries of all data generated under the "Surveillance Network Program";
 - c) a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year; and
 - d) 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 shall be installed, operated and maintained by the Licensee to the satisfaction of an Inspector.
5. The Licensee shall immediately report to the 24 Hour Spill Report Line (867-920-8130) 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.

6. 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 Tso Lake supply using the Water Supply Facilities or as otherwise approved by the Board.
2. The Licensee may obtain water from alternate water supply for use on an emergency basis upon approval of the Board, when it is not possible to obtain water from the source described in Part C, Item 1.
3. The annual quantity of water used for all purposes shall not exceed 20,000 cubic metres.
4. 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 **1557-4** shall meet the following effluent quality standards:

Parameter	Maximum Average Concentration
Faecal Coliform	10 ⁶ CFU/100 ml
BOD ₅	120 mg/L
Suspended Solids	180 mg/L

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

3. The Licensee shall maintain the Sewage Disposal Facilities to the satisfaction of an Inspector.

4. All bagged toilet Wastes (honey bags) shall be disposed of at the Bagged Toilet Waste Disposal Facilities to the satisfaction of an Inspector.
5. 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 as-built plans and drawings 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.

PART G: CONDITIONS APPLYING TO OPERATION AND MAINTENANCE

1. The Licensee shall, within six (6) months of the issuance of this license, submit to the Board for approval, a plan for the Operation and Maintenance for the Waste Disposal Facilities. The plan shall include but not limited to the following:
 - a. runoff and drainage control within and around the facility, and restoration of erosion;
 - b. prevention of windblown debris;
 - c. managing hazardous waste;
 - d. segregation of domestic, metal and recyclable waste materials;
 - e. method and frequency of site maintenance, including burning where permitted.

2. The Licensee shall implement the plan specified in Part 1, Item 1 as and when approved by the Board.

GWICH'IN LAND AND WATER BOARD



Witness



Chairman

GWICH'IN LAND AND WATER BOARD

LICENSEE: Charter Community of Tsiigehtchic

LICENCE NUMBER: G99L3-004

EFFECTIVE DATE OF LICENCE
ISSUANCE: April 18, 2000.

EFFECTIVE DATE OF
SURVEILLANCE NETWORK PROGRAM: April 30, 2005.

SURVEILLANCE NETWORK PROGRAM

A. Location of Surveillance Stations

<u>Station Number</u>	<u>Description</u>
1557-3	Raw water supply, Tso Lake.
1557-4	Sewage effluent from E-Lake (at point of outflow).

B. Sampling and Analyses Requirements

1. Water at Surveillance Network Program Station Number **1557-4**, shall be analysed immediately after break-up of the Lake E Sewage Lagoon, and once prior to freeze up, and analysed for the following parameters:

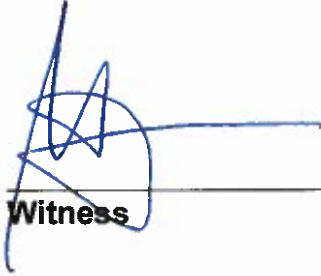
pH	Suspended Solids
Total Mercury	Total Cadmium
Total Chromium	Total Cobalt
Total Copper	Total Manganese
Total Nickel	Total Lead
Total Iron	Total Zinc
Phenol	Nitrate/Nitrite
Faecal Coliform	
BOD ₅	

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 **1557-3** for municipal purposes shall be measured and recorded in cubic metres.

GWICH'IN LAND AND WATER BOARD



Witness



Chairman