

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 CHESTERFIELD INLET

(Licensee)

GENERAL DELIVERY

of CHESTERFIELD INLET, NORTHWEST TERRITORIES XOC OBO
(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>N6L4-1538</u>
Licence Type	<u>"B"</u>
Water Management Area	<u>NORTHWEST TERRITORIES 06</u>
Location	<u>CHESTERFIELD INLET, N.W.T.</u>
Purpose	<u>WATER USE AND WASTE DISPOSAL</u>
Description	<u>FOR MUNICIPAL PURPOSES</u>
Quantity of Water Not to be Exceeded	<u>20,000 CUBIC METRES PER YEAR</u>
Rate of Use of Water Not to be Exceeded	<u>NOT APPLICABLE</u>
Effective Date of Licence	<u>AUGUST 1, 1993</u>
Expiry Date of Licence	<u>JULY 31, 1998</u>

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

NORTHWEST TERRITORIES WATER BOARD

Pamela R. Lefebvre
Witness

W E Arden
Vice-Chairman

PART A: SCOPE AND DEFINITIONS

1. Scope

- a) This Licence allows for water use and waste disposal for municipal purposes at the Hamlet of Chesterfield Inlet, Northwest Territories.
- b) Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of other Federal and Territorial legislation.

2. Definitions

In this Licence: N6L4-1538

"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(1) 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;

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

"Average Concentration" means the discrete average of any 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 Inspector in accordance with the sampling and analysis requirements specified in the "Surveillance Network Program";

"Average Concentration for Fecal Coliforms" means the running geometric mean of any four consecutive analytical results submitted to the Inspector in accordance with the sampling and analysis requirements specified in the "Surveillance Network Program";

"Pumpout Sewage" means all toilet wastes, greywater and commercial wastewater collected by means of a vacuum truck for disposal at an approved facility;

"Sewage" means all toilet waste, and greywater;

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

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

"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 Waste Disposal Facilities;

"Water Supply Facilities" comprises the area and associated intake infrastructure designed to collect, treat, store and distribute water for municipal purposes and includes, but is not limited to, those facilities described in Map #1 of Excerpt #1 titled "Chesterfield Inlet Planning Study Water, Sewer and Solid Waste First Draft Submission", dated May 1982;

"Sewage Disposal Facilities" comprises the area and engineered structures designed to contain sewage;

"Solid Waste Disposal Facilities" comprises the area and associated structures designed to contain solid wastes located approximately three kilometres from the community; and

"Bagged Toilet Waste Disposal Facilities" comprises the area and associated structures designed to contain bagged toilet wastes (honey bags) located adjacent to the Solid Waste Disposal Facilities.

PART B: GENERAL CONDITIONS

1. The Licensee shall file a report pursuant to Section 15 of the Regulations not later than March 31st of the year following the calendar year reported which shall contain the following information:
 - a) tabular summaries of all data generated under the "Surveillance Network Program" including, but not limited to:
 - i) the monthly quantities of water in cubic metres obtained from each and all sources; and
 - ii) the monthly quantities in cubic metres of each and all fluid wastes discharged;
 - b) a summary of modifications and major maintenance work carried out on the Water Supply and Waste Disposal Facilities, including all associated structures and facilities;
 - c) a summary of abandonment or restoration work done;
 - d) a summary of unauthorized discharges;
 - e) the results of any studies conducted and a brief description of further studies planned;
 - f) updates or revisions to the sewage and solid waste Operation and Maintenance Plans; and
 - g) any other details on water use or waste disposal requested by the Board by November 1st of the year being reported.
2. 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 deposit 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 statute 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.
3. 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.
4. The "Surveillance Network Program" and compliance dates specified in the Licence may be modified at the discretion of the Board.

5. The Licensee shall, within sixty (60) days of the issuance of this Licence, post and maintain 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 the Inspector.
6. The Licensee shall install meters or such devices, or use such methods as approved by the Inspector for measuring the volumes of water used and waste disposed. The meters and measuring devices or methods shall be operated and maintained to the satisfaction of the Inspector.
7. The Licensee shall, within sixty (60) days of the issuance of this Licence, post and maintain the necessary signs to identify the stations of the "Surveillance Network Program" to the satisfaction of the Inspector.
8. The Licensee shall immediately report to the Inspector via 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 area of the Waste Disposal Facilities. A detailed report of each such event shall be submitted to the Inspector not later than thirty (30) days after the spill is detected.

PART C: CONDITIONS APPLYING TO WATER USE

1. The Licensee shall obtain all fresh water from ^{First} ~~Fish~~ Lake for the purpose of supplying the rock reservoir as described in Map #1 of Excerpt #1 titled "Chesterfield Inlet Planning Study Water, Sewer and Solid Waste First Draft Submission", dated May 1982.
2. The annual quantity of water used for all purposes shall not exceed 20,000 cubic metres.
3. Withdrawal of water from First Lake shall be completed by September 15 of each year in which water is drawn for the purpose of filling the water reservoir.
4. A screened intake shall be used when drawing water from First Lake.
5. The Licensee shall maintain the Water Supply Facilities in a manner to the satisfaction of the Inspector.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensee shall direct all piped and pumpout sewage to the Sewage Disposal Facilities.
2. The Licensee shall, submit to the Board for approval, a proposal for upgrading of the Sewage Disposal Facilities. The proposal shall be submitted within one (1) year of the issuance of this Licence and shall include but not be limited to:
 - a) site drawings and plans for the proposed Sewage Disposal Facilities;
and

- b) plans to meet the following effluent quality standards at "Surveillance Network Program" Station Number 1538-4:

Parameters	Maximum Average Concentration
BOD ₅	80 mg/L
Suspended Solids	100 mg/ L
Fecal Coliform	1x10 ⁴ CFU/dL
Oil and Grease	5 mg/L

The waste discharged shall have a pH between 6 and 9 and there shall be no visible sheen of oil and grease.

3. The Licensee shall implement the proposal specified in Part D, Item 2 as and when approved by the Board.
4. Upon completion of the construction of the Sewage Disposal Facilities proposed in Part D, Items 2 and 3, the Licensee shall ensure that:
 - a) a minimum of 0.5 metres of freeboard is maintained at all dykes and earthfill structures associated with the proposed Sewage Disposal Facilities;
 - b) the sewage lagoon is maintained and operated in such a manner as to prevent structural failure; and
 - c) the Sewage Disposal Facilities be maintained to the satisfaction of the Inspector.
5. The Licensee shall, within one (1) year of the issuance of this Licence, submit to the Board for approval a proposal for upgrading of the Solid Waste Disposal Facilities. The proposal shall include but not be limited to the following:
 - a) an evaluation of alternate methods of waste oil use designed to reduce and, ultimately, eliminate it's disposal at the dumpsite; and
 - b) site drawings and plans for the proposed Solid Waste Disposal Facilities.
6. The Licensee shall implement the proposal specified in Part D, Item 5 as and when approved by the Board.
7. All bagged toilet wastes (honey bags) shall be disposed of at the Bagged Toilet Waste Disposal Facilities. The bagged sewage shall be disposed of to the satisfaction of the Inspector.
8. The Licensee shall dispose of all solid waste at the Solid Waste Disposal Facilities.
9. The Licensee shall, within one (1) year of the issuance of this Licence, submit a study of existing abandoned waste disposal sites which shall include but not be limited to the following:
 - a) an assessment of the risk to public health and environment posed by these sites in their present condition; and
 - b) measures to be taken to reduce or eliminate any assessed risk to an acceptable level.

10. The Licensee shall implement the measures identified in Part D, Item 9 b) as and when approved by the Board.
11. Prior to abandoning any Waste Disposal Facilities, the Licensee shall submit to the Board for approval an abandonment and restoration plan. This plan shall include but not be limited to:
 - a) contaminated site remediation;
 - b) leachate prevention;
 - c) implementation schedule;
 - d) maps delineating all disturbed areas, borrow material locations, and site facilities;
 - e) consideration of altered hydrology;
 - f) type and source of cover materials;
 - g) future area use; and
 - h) hazardous wastes.
12. The Licensee shall implement the plan identified in Part D, Item 11 as and when approved by the Board.

PART E: CONDITIONS APPLYING TO MODIFICATIONS

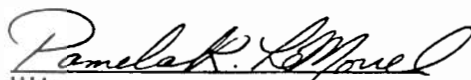
1. The Licensee may, without written consent from the Board, carry out modifications to the Water Supply and Waste Disposal Facilities provided that such modifications are consistent with the terms of this Licence and the following requirements are met:
 - a) the Licensee has notified the Board in writing 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 the Licence or the Act;
 - c) the Board has not, during the sixty (60) days following the notification of the proposed modifications, informed the Licensee that review of the proposal will require more than the 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 consent from the Board.
3. The Licensee shall provide as-built plans and drawings of the modifications referred to in this Licence within ninety (90) days of completion of the modification. These plans and drawings shall be submitted to the Board on material that will reproduce with the use of a standard printer.
4. The Licensee shall, prior to the use of any new Waste Disposal Facilities or change in operation of the existing Waste Disposal Facilities, submit to the Board for approval a plan which includes:


- a) the proposed location;
- b) a description of the change in the operation;
- c) plans to meet the water quality criteria specified by the "Guidelines for Municipal Type Wastewater Discharges in the Northwest Territories"; and
- d) a revised Operation and Maintenance Plan.

PART F: CONDITIONS APPLYING TO OPERATION AND MAINTENANCE

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

NORTHWEST TERRITORIES WATER BOARD


Witness


Vice-Chairman

NORTHWEST TERRITORIES WATER BOARD

LICENSEE: HAMLET OF CHESTERFIELD INLET

LICENCE NUMBER: N6L4-1538

EFFECTIVE DATE OF LICENCE: AUGUST 1, 1993

EFFECTIVE DATE OF
SURVEILLANCE NETWORK PROGRAM: AUGUST 1, 1993

SURVEILLANCE NETWORK PROGRAM

A. Location of Surveillance Stations

<u>Station Number</u>	<u>Description</u>
1538-1	Raw water supply from First Lake.
1538-2	Treated water supply from reservoir.
1538-3	Raw sewage from the pumpout truck(s).
1538-4	Run-off directly below the Sewage Disposal Facilities.
1538-5	Run-off directly below the Solid Waste Disposal Facilities.

B. Sampling and Analysis Requirements

1. Water at Station Number 1538-4 shall be sampled monthly during periods of discharge, and analyzed for the following parameters:

BOD ₅	Fecal Coliform
pH	Suspended Solids
Sodium	Total Phosphate
Magnesium	Sulphate
Potassium	Oil and Grease
Total Phenols	Total Organic Carbon
Conductivity	Nitrate and Nitrite
Ammonia Nitrogen	Calcium
Total Arsenic	Total Lead
Total Nickel	Total Chromium
Total Cadmium	Total Iron
Total Mercury	Total Copper
Total Zinc	

2. Water at Station Number 1538-5 shall be sampled twice annually, during the months of August and September, and the leachate analyzed for the following parameters:

pH	Suspended Solids
Sodium	Total Phosphate
Magnesium	Sulphate
Potassium	Oil and Grease
Total Phenols	Total Organic Carbon
Conductivity	Nitrate and Nitrite
Ammonia Nitrogen	Calcium
Total Arsenic	Total Lead
Total Nickel	Total Chromium
Total Cadmium	Total Iron
Total Mercury	Total Copper
Total Zinc	

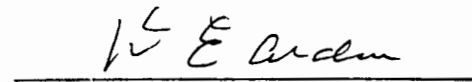
3. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of "Standard Methods for the Examination of Water and Wastewater", or by such other methods approved by the Analyst.
4. All analyses shall be performed in a laboratory approved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

C. Flow and Volume Measurement Requirements

1. The monthly quantities of water pumped from the Surveillance Network Program Station Number 1538-1 and 1538-2 for drinking purposes shall be measured and recorded in cubic metres.
2. The monthly quantities of effluent discharged to the Sewage Disposal Facilities at Station Number 1538-3 shall be measured and recorded in cubic metres.

NORTHWEST TERRITORIES WATER BOARD


Witness


Vice-Chairman

C. Flow and Volume Measurement Requirements

1. The monthly and annual quantities of water pumped from Surveillance Network Program Station Number 0087-1 for municipal purposes shall be measured and recorded in cubic metres.
2. The annual quantity of Sewage solids removed from the Sewage disposal facility shall be measured and recorded.

NORTHWEST TERRITORIES WATER BOARD

Rene Lap. LeMay
Witness

Gordon Dwyer
Chairman