WATER REGISTER: N7L3-1619

October 27, 2004

Mr. Tom Caines Senior Administrative Officer Hamlet of Paulatuk P.O. Box 98 PAULATUK, NT X0E 1N0

Dear Mr. Caines:

ISSUANCE OF A "B" TYPE LICENCE - PAULATUK

Attached is a duplicate of Licence No. N7L3-1619 granted to the Hamlet of Paulatuk 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 Paulatuk is anticipated.

Sincerely,

Eddie T. Dillon Vice Chairman

N.W.T. Water Board

Attach.

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

- 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. N7L3-1619 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. N7L3-1619 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. N7L3-1619 be made at least eight months in advance of the Licence expiry date.
- 5. If, for some reason, Licence No. N7L3-1619 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.

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

P.O. Box 1326

YELLOWKNIFE, NT X1A 2N9

Phone No: (867) 765-0106

Fax No: (867) 765-0114

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

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

INCORPORATED HAMLET O	DF PAULATUK
P.O. Box 98 of PAULATUK, NORTHWEST Mailing Address)	
to the restrictions and conditions contained	to alter, divert or otherwise use water subject ed in the Northwest Territories Waters Act and et to and in accordance with the conditions
Licence Number	N7L3-1619 (RENEWAL)
Licence Type	"B"
Water Management Area	NORTHWEST TERRITORIES 07
Location	Lat. 69°21' North and Long. 124°04' West, NORTHWEST TERRITORIES
Purpose	WATER USE AND WASTE DISPOSAL
Description	FOR MUNICIPAL UNDERTAKINGS
Quantity of Water Not to be Exceeded	10,000 CUBIC METRES PER YEAR
Effective Date of Licence	OCTOBER 31, 2004
Expiry Date of Licence	OCTOBER 30, 2006
This Licence issued and recorded at Yello conditions.	owknife includes and is subject to the annexed
1	NORTHWEST TERRITORIES WATER BOARD
1-12	201-01

Vice Chairman

Witness

PART A: SCOPE AND DEFINITIONS

Scope

- a) This Licence allows for the use of water and disposal of waste for municipal purposes at the Incorporated Hamlet of Paulatuk, Northwest Territories, (Latitude 69°21' N. and Longitude 124°04' 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; 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.

Definitions

In this Licence: N7L3-1619

"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" 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:

- "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;
- "Geotechnical Engineer" means a professional engineer registered with the Association of Professional Engineers, Geologists, and Geophysics of the Northwest Territories and those principal field of specialization is the design and construction of earthworks in a permafrost environment;
- "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;
- "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 identified in Drawing Number PSW_P8, titled "Paulatuk Solid Waste Disposal Site and Sewage Lagoon", dated March 11, 1994;
- "Solid Waste Disposal Facilities" comprises the area and associated structures designed to contain solid wastes identified in Drawing Number PSW_P8, titled "Paulatuk Solid Waste Disposal Site and Sewage Lagoon", dated March 11, 1994;
- "<u>Toilet Wastes</u>" mean all human excreta and associated products, but does not include greywater;
- "Waste Disposal Facilities" mean 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 designed to collect, treat, and supply water for municipal purposes.

PART B: GENERAL CONDITIONS

- 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:
 - the monthly and annual quantities in cubic metres of fresh water obtained from all sources;
 - the monthly and annual quantities in cubic metres of each and all waste discharged;
 - a summary of Modifications and/or major maintenance work carried out on the water supply and Waste Disposal Facilities, including all associated structures;
 - tabular summaries of all data generated under the "Surveillance Network Program";
 - e) a list of unauthorized discharges;
 - a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;
 - 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;
 - any other details on water use or waste disposal requested by the Board by November 1st of the year being reported;
 - the monthly and annual quantities of solid waste removed from the sewage facilities for disposal; and
 - i) updates or revisions to the approved sewage and solid waste Operation and Maintenance Plans.
- 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.
- The "Surveillance Network Program" and compliance dates specified in the Licence may be modified at the discretion of the Board.

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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

- The Licensee shall obtain all fresh water from New Water Lake using the Water Supply Facilities or as otherwise approved by the Board.
- The Licensee may obtain water from an 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.
- The annual quantity of water used for all purposes shall not exceed 10,000 cubic metres.

 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 (2.54mm).

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

- The Licensee shall direct all piped and pumpout sewage to the Sewage Disposal Facilities or as otherwise approved by the Board.
- All sewage effluent discharged from the Sewage Disposal Facilities at "Surveillance Network Program" Station Number 1619-2 shall meet the following effluent quality standards:

PARAMETER	MAXIMUM AVERAGE CONCENTRATION
Biological Oxygen Demand (BOD ₅)	360 mg/L
Total Suspended Solids (TSS)	300 mg/L

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

- A freeboard limit of 1.0 metre shall be maintained at all times or as recommended by a qualified geotechnical engineer and as approved by the Board.
- All bagged toilet wastes (honeybags) shall be disposed of at the Bagged Toilet Waste Disposal Facilities to the satisfaction of an Inspector.
- The sewage lagoon shall be maintained and operated in such a manner as to prevent structural failure.
- The Licensee shall maintain the Sewage Disposal Facilities to the satisfaction of an Inspector.
- 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

- 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:
 - the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - such Modifications do not place the Licensee in contravention of either the Licence or the Act;
 - 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.
- 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.
- 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

- The Licensee shall submit to the Board for approval an Abandonment and Restoration Plan at least six (6) months prior to abandoning any sewage or Solid Waste Disposal Facilities. The Plan shall include, but not be limited to:
 - a) contaminated site remediation;
 - b) leachate prevention;
 - an implementation schedule;
 - 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.
- Licensee shall implement the Plan specified in Part F, Item 1 as and when approved by the Board.

PART G: CONDITIONS APPLYING TO CONSTRUCTION

- 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

 The Licensee will maintain a copy of the approved Operation and Maintenance Plan onsite in a readily available location, to the satisfaction of an Inspector.

NORTHWEST TERRITORIES WATER BOARD

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NORTHWEST TERRITORIES WATER BOARD

LICENSEE:

INCORPORATED HAMLET OF

PAULATUK

LICENCE NUMBER:

N7L3-1619

EFFECTIVE DATE OF LICENCE:

OCTOBER 31, 2004

EFFECTIVE DATE OF

SURVEILLANCE NETWORK PROGRAM: OCTOBER 31, 2004

SURVEILLANCE NETWORK PROGRAM

Location of Surveillance Stations A.

Station Number

Description

1619-1

Raw water supply from New Water Lake.

1619-2

Outlet of sewage lagoon before entering

Darnley Bay.

B. Sampling and Analysis Requirements

1. Water at Station Number 1619-2 shall be sampled biweekly during periods of flow and analyzed for the following parameters:

BOD,

Suspended Solids

Oil and Grease

PH

Ammonia-Nitrogen

- 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.
- 3. All analyses shall be performed in a laboratory approved by the Analyst.

C. Flow and Volume Measurement Requirements

- The monthly and annual quantities of water pumped from Surveillance Network Program Station Number 1619-1 for municipal purposes shall be measured and recorded in cubic metres.
- The monthly and annual quantities of sewage solids removed from the Sewage Disposal Facilities shall be measured and recorded.

D. Reports

 The Licensee shall, unless otherwise requested by an Inspector, include all of the data and information required by the "Surveillance Network Program" in the Licensee's Annual Report, which report shall be submitted to the Board on or before March 31st of the year following the calendar year being reported.

NORTHWEST TERRITORIES WATER BOARD

Witness

Chairman