

Attention: Debbie Gordon-Ruben, SAO Hamlet of Paulatuk P.O. Box 89 Paulatuk, NT X0E 1N0

November 23, 2009

Dear Ms. Gordon-Ruben,

Attached is Water Licence N7L3-1619 granted to the Hamlet of Paulatuk by the Northwest Territories Water Board (the Board) in accordance with the *Northwest Territories Waters Act*. Copies of this Licence have been filed in the Public Registry at the Northwest Territories Water Board offices in Inuvik and Yellowknife, as well as with Indian and Northern Affairs Canada - Water Resources Division.

Water Licence N7L3-1619 has been approved for a period of 6 years commencing November 30<sup>th</sup>, 2009 and expiring November 20<sup>th</sup>, 2015. Included with the attached Licence are the general procedures for the administration of Licences in the Northwest Territories. Please review the procedures and the Licence carefully and address any questions to the Board's office.

This letter, with attached procedures, all Inspection Reports and correspondence related thereto are part of the Public Registry and are intended to keep all interested parties informed of the manner in which the Licence requirements are being met. All Public Registry material will be considered if an amendment to the Licence is requested.

The full cooperation of the Hamlet of Paulatuk is expected and appreciated. Should you have any further questions or concerns, please telephone the Northwest Territories Water Board at (867) 678-2942.

Yours sincerely,

Eddie Dillon, Chair

Northwest Territories Water Board

P.O. Box 2531

Inuvik, NT X0E 0T0

Attachments

Copied to:

Conrad Baetz, North Mackenzie District Office – INAC

Carole Mills, Water Resources Division - INAC

Distribution list of reviewers

Inuvik Office: P.O Box 2531, Inuvik, NT X0E 0T0 • Phone: (867) 678-2942 • Fax: (867) 678-2943
Yellowknife Office: P.O. Box 1326, Yellowknife, NT X1A 2N9 • Phone (867) 765-0106 • Fax: (867) 765-0114
www.nwtwb.com info@nwtwb.com

# 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. 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.

....2

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 Director** 

Northwest Territories Water Board

Box 2531

INUVIK, NT X0E 0T0

Phone No: (867) 678-2942

Fax No:

(867) 678-2943

Executive Director

Northwest Territories Water Board

Box 1326

YELLOWKNIFE, NT X1A 2N9

Phone No: (867) 765-0106

Fax No:

(867) 765-0114

ANALYST:

Analyst

Taiga Water Laboratory Department of Indian Affairs and Northern Development Box 1500, 4601 - 52nd Avenue YELLOWKNIFE, NT X1A 2R3

> Phone No: (867) 669-2780 (867) 669-2718 Fax No:

INSPECTOR: Inspector

North Mackenzie-Inuvik District Office

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

Hamlet of Paulatu	ık
Licensee) P.O. Box 98	
of Paulatuk NT X0E	<u> 1N0                                    </u>
Mailing Address)	
subject to the restrictions and condit	right to alter, divert or otherwise use water ions contained in the Northwest Territories ereunder and subject to and in accordance cence.
icence Number	N7L3-1619 (RENEWAL)
_icence Type	"B"
Water Management Area	NORTHWEST TERRITORIES 07
_ocation	Latitude 69° 21'N and Longitude 124° 04' W Paulatuk, NORTHWEST TERRITORIES
Purpose	MUNICIPAL WATER USE AND WASTE DISPOSAL
Quantity of Water Not Fo Be Exceeded	12,000 cubic metres annually
Effective Date of Licence	November 30, 2009
Expiry Date of Licence	November 20, 2015
This Licence issued and recorded annexed conditions.	at Inuvik includes and is subject to the
	NORTHWEST TERRITORIES WATER BOARD
Smc King	She (Dillow) Chair

#### PART A: SCOPE AND DEFINITIONS

#### 1. Scope

- a. This Licence entitles the Hamlet of Paulatuk to use water and dispose of Waste for municipal undertakings at Paulatuk, latitude 69°21' North and longitude 124°04" West, 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 conforming to 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.
- d. This Licence is issued subject to the conditions contained herein with respect to the Use of Waters as prescribed in Section 8 of the Act and the Deposit of Waste to any Waters as prescribed in Section 9 of the Act.

#### 2. **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:

"Average Concentration" means the discrete average of up to four consecutive analytical results, and as submitted to the Board in accordance with the sampling and analysis requirements specified in the "Surveillance Network Program";

- "Average Concentration For Faecal Coliforms" means the running geometric mean of up to four consecutive analytical results, and as 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 Waste (honey bags);
- "Board" means the Northwest Territories Water Board established under Section 10 of the Northwest Territories Waters Act;
- "Greywater" means all liquid Waste from showers, baths, sinks, kitchens and domestic washing facilities, but does not include Toilet Waste;
- "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;
- "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;
- "Pump-out Sewage" means all Toilet Wastes and/or Greywater collected by means of a vacuum truck for disposal at an approved facility;
- "Regulations" means Regulations proclaimed pursuant to Section 33 of the Northwest Territories Waters Act;
- "Sewage" means all Toilet Wastes and Greywater;
- "<u>Sewage Disposal Facilities</u>" 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 Waste identified in Drawing Number PSW\_P8, titled "Paulatuk Solid Waste Disposal Site and Sewage Lagoon, dated March 11, 1994;

- "<u>Toilet Wastes</u>" means all human excreta and associated products, but does not include Greywater;
- "<u>Waste</u>" 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 Sewage Disposal Facilities, Solid Waste Disposal Facilities, and Bagged Toilet Wastes Disposal Facilities;
- "<u>Water Supply Facilities</u>" means all facilities designed to collect, treat and supply water for municipal purposes; and
- "<u>Waters</u>" means any 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 every year, not later than April 30<sup>th</sup> 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 of each and all Wastes discharged;
  - c. a summary of the monthly and annual quantities of hazardous Waste stored on site and transported off site;
  - d. the monthly and annual quantities of solid Waste (e.g. sludge) removed from the Sewage Disposal Facilities for disposal;
  - e. any problems, Modifications or repairs done to the Water Supply and Waste Disposal Facilities, including all associated structures;
  - f. tabular summaries of all data generated under the "Surveillance Network Program";
  - g. a list of spills and unauthorized discharges;
  - h. an outline of any spill training and/or other operator training carried out;

- i. a summary of any closure and remediation work completed during the year and an outline of any work anticipated for the next year;
- j. 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;
- k. updates and/or revisions to the approved Spill Contingency Plan, Municipal Solid Waste Operations and Maintenance Plan, and Sewage Treatment Plan; and,
- I. any other details on Waste disposal or water use requested by the Board by November 1<sup>st</sup> of the year being reported.
- 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. The Licensee shall, within 60 days of the issuance of this Licence, submit to the Board for approval a map or drawing indicating the location of all Surveillance Network Program sampling stations.
- The Licensee shall, within 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.
- Meters, devices or other such methods used for measuring the volumes of water obtained and Waste disposed and discharged shall be installed, operated and maintained by the Licensee to the satisfaction of an Inspector.
- 7. 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.
- 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 water for human consumption from New Water Lake using the Water Supply Facilities or as otherwise approved by the Board.
- 2. The Licensee may obtain water from an alternate water supply for use on an emergency basis upon approval of an Inspector, when it is not possible to obtain water from the source stated in Part C, Item 1.
- 3. The annual quantity of water used for all purposes shall not exceed 12,000 cubic metres.

#### PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

- 1. The Licensee shall direct all Pump-out 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 1619-2 shall meet the following effluent quality standards:

Parameter	Maximum Average Concentration				
Faecal Coliforms	1 x 10⁴ CFU/100mL				
Biological Oxygen Demand	100 mg/L				
(BOD <sub>5</sub> )					
Oil and Grease	5 mg/L				
Total Suspended Solids	120 mg/L				
(TSS)					

The Waste discharged shall have a pH between six (6) and nine (9) and no visible sheen of oil and grease.

- 3. The Licensee shall ensure that the Sewage Disposal Facilities' lagoon is maintained and operated in such a manner as to prevent structural failure.
- 4. The Licensee shall maintain the Sewage Disposal Facilities to the satisfaction of an Inspector.
- All Bagged Toilet Wastes (honey bags) shall be disposed of at the Bagged Toilet Waste Disposal Facilities to the satisfaction of an Inspector.

- 6. The Licensee shall dispose of all solid Waste at the Solid Waste Disposal Facilities or as otherwise approved by the Board.
- 7. The Licensee shall notify an Inspector when any contaminated soil is deposited at the Solid Waste Disposal Facilities.
- 8. The Licensee shall contain all contaminated soil in such a manner as to minimize the potential for migration of contaminants into any Waters, to the satisfaction of an Inspector.
- 9. The Licensee shall segregate and store hazardous Waste in a temporary storage area, to the satisfaction of an Inspector.
- 10. The Licensee shall not open burn solid or liquid Waste, with the exception of paper products, paperboard packaging and untreated wood in accordance with the guideline *Municipal Solid Wastes Suitable for Open Burning*, developed by the GNWT Department of Environment and Natural Resources.
- 11. The Licensee shall ensure that any unauthorized Wastes associated with the municipal undertaking do not enter any Waters.

#### PART E: CONDITIONS APPLYING TO OPERATION AND MAINTENANCE

- 1. The Licensee shall submit to the Board for approval by November 30, 2010, a Spill Contingency Plan in accordance with the *Guidelines for Spill Contingency Planning*, *April 2007* developed by INAC-Water Resources Division.
- 2. The Licensee shall submit to the Board for approval by November 30, 2011, a Sewage Treatment Plan that includes the following:
  - a) specifications of the Sewage Treatment Facilities including engineering drawings and design performance standards;
  - b) operations, maintenance and monitoring programs for the Sewage Treatment Facility including maintenance schedules (e.g. frequency of inspection of dams, dykes and drainage courses);
  - c) sludge management program including the disposal of sludge generated at the Sewage Treatment Facility; and
  - d) operator training standards and plans.

- 3. The Licensee shall submit to the Board for approval by November 30, 2010 an updated Municipal Solid Waste Operations and Maintenance Plan in accordance with the Guideline for the Planning, Design, Operations and Maintenance of Modified Solid Waste Sites in the Northwest Territories, April 2003 developed for The Department of Municipal and Community Affairs, Government of the Northwest Territories.
- 4. The Licensee shall implement the Spill Contingency Plan, the Sewage Treatment Plan, and the Municipal Solid Waste Operations and Maintenance Plan as and when approved by the Board.
- 5. The Licensee shall review the Spill Contingency Plan, the Sewage Treatment Plan, and the Municipal Solid Waste Operations and Maintenance Plan annually, and shall modify the plans as necessary to reflect changes in operation and technology or any other changes that may be required by an Inspector. The proposed changes shall be submitted to the Board for approval.

#### PART F: CONDITIONS APPLYING TO MODIFICATIONS

- 1. The Licensee may, without written approval from the Board, carry out Modifications to the Water Supply Facilities or 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 the conditions referred to in Part F, Item 1 have not been met may be carried out only with written approval from the Board or an Inspector.
- The Licensee shall provide to the Board site plans of the Modifications referred to in Part F, Item 1 within ninety (90) days of completion of the Modifications.

#### PART G: CONDITIONS APPLYING TO CONSTRUCTION

- 1. Prior to any new construction related to the Water Supply Facilities or Waste Disposal Facilities, other than as contemplated in an approved Spill Contingency Plan, the Licensee shall submit to the Board a rationale and design drawings.
- 2. Construction of designed structures as described in Part G, Item 1, shall be carried out as approved by the Board.
- As-built drawings of the dams, dykes or structures shall be stamped by a qualified engineer registered in the Northwest Territories and submitted to the Board within ninety (90) days of completion of construction.
- 4. Any fill material used in the construction of any structures as described in Part G, Item 1, must be clean and free of contaminants.

#### PART H. 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 Water Supply, Sewage or Solid Waste Disposal Facilities. The Plan shall include, but not be limited to, the following:
  - a. contaminated site remediation;
  - b. the potential for groundwater contamination (leachate prevention);
  - c. consideration of altered drainage patterns;
  - d. type and source of cover materials;
  - e. future area use;
  - f. hazardous Waste removal, transportation and disposal;
  - g. an implementation schedule;
  - h. maps delineating all disturbed areas, borrow material locations, and site facilities; and,
  - i. a restoration monitoring plan.

2.	<ol> <li>The Licensee shall implement the Plan specific</li> </ol>	ed in	ı Part H,	Item <sup>*</sup>	1 as	and	when
	approved by the Board.						

**NORTHWEST TERRITORIES WATER BOARD** 

Chair (10/16)

Witness

#### NORTHWEST TERRITORIES WATER BOARD

LICENSEE:

Incorporated

Hamlet of

Paulatuk

LICENCE NUMBER:

N7L3-1619

**EFFECTIVE DATE OF LICENCE:** 

November 30, 2009

**EFFECTIVE DATE OF** 

**SURVEILLANCE NETWORK PROGRAM:** 

November 30, 2009

#### SURVEILLANCE NETWORK PROGRAM

#### Α. **Location of Sampling Stations**

Station Number 1619-1

Description

Raw water supply

1619-2

Outflow of Sewage Lagoon before entering

adjacent wetland

1619-3

Run-off from Solid Waste

Disposal

Facilities

#### В. Sampling and Analysis Requirements

1. Water at Station Number 1619-2 shall be sampled twice annually, once immediately after break-up and once prior to freeze-up during periods of open water and analysed for the following parameters:

BOD<sub>5</sub>

CBOD<sub>5</sub>

TSS

Hq

Faecal Coliforms

Oil and Grease

2. Water at Station Number 1619-3 shall be sampled annually when run-off is observed and analysed for the following parameters:

pН

**Total Suspended Solids** 

Total Mercury

**Total Cadmium** 

Total Chromium

**Total Cobalt** 

**Total Copper** 

**Total Manganese** 

Total Nickel

**Total Lead** 

Total Iron

Total Zinc

- Water at Station Numbers 1619-2 and 1619-3 shall be inspected monthly during periods of flow for the presence of an oily sheen. If a sheen is detected, then a sample shall be collected and analyzed for the presence of oil and grease.
- 4. More frequent sample collection may be required at the request of an Inspector.
- 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.
- 6. All analyses shall be performed in a laboratory approved by an Analyst.

## C. Flow Measurement and Recording Requirements

- The Licensee shall measure and record in cubic metres the monthly and annual quantities of Sewage discharged to the Sewage Disposal Facilities' lagoon.
- The Licensee shall measure and record in cubic metres the monthly and annual quantities of water pumped from SNP Station Number 1619-1 for municipal purposes.

#### D. Reports

1. The Licensee shall submit all of the information generated by Part B and Part C of the Surveillance Network Program in the Annual Report as specified in Part B, Item 1 of the Licence.

NORTHWEST TERRITORIES WATER BOARD

Chair

Witness