

I. INTRODUCTION

Following an application filed by the Hamlet of Pelly Bay on November 12, 1997 to the Nunavut Water Board, the Board conducted an initial assessment of the Hamlet's request for a municipal water licence for water use and waste disposal activities within the Hamlet. The assessment was conducted so that the Nunavut Water Board could make a fully informed decision on the application. The application was referred for review and comments to Fisheries and Oceans Canada, Environment Canada, Indian and Northern Affairs, the Renewable Resources Department, Municipal and Community Affairs and the Kitikmeot Health Board for the (G.N.W.T.), and the Hunters and Trappers Association of Pelly Bay. Based upon the results of this initial assessment and the technical review, including consideration of any potential accidents, malfunctions, or cumulative environmental effects that the overall project might have in the area, the Board concluded that this application was complete and could go through the regulatory process.

In accordance with Article 13 of the Nunavut Land Claims Agreement, public notice of the application was posted locally. No public concerns were expressed, and the NWB waived the requirement to hold a public hearing for the application. Authority to approve the application was delegated to the Executive Director pursuant to S. 13.7.5 of the Agreement. After considering and reviewing the comments submitted by interested parties, the NWB has issued licence NWB3PEL9803.

II. GENERAL CONSIDERATIONS

Term of the Licence

Consistent with the powers of the Northwest Territories Water Board under the Northern Inland Waters Act, the NWB may issue a licence for a term not exceeding twenty-five years. The NWB believes that a term of five years is appropriate. Because this is the first licence issued to the Hamlet, a 5-year licence will allow enough time for the Hamlet to establish a consistent compliance record. The 5- year licence will allow the licensee to properly carry out the terms and conditions of the licence and to ensure that sufficient time is given to permit the licensee to develop, submit, and implement the plans required under the licence to the satisfaction of the NWB.

Annual Report

The requirements imposed on the licensee in this licence are for the purpose of ensuring that the NWB has an accurate annual update of municipal activities during a calendar year. This information is maintained on the public registry and is available to any interested parties upon request.

Operation and Maintenance Manual (O&M)

The purpose of an Operation and Maintenance Manual is to assist Hamlet staff in the proper operation and maintenance of their waste disposal facilities. The manual should demonstrate to the Nunavut Water Board that the Hamlet is capable of operating and maintaining their waste disposal sites adequately.

Abandonment and Restoration (A&R)

To ensure that all future abandoned facilities are reclaimed in an appropriate manner, the NWB has imposed the requirement for the submission of Abandonment and Restoration Plans. The Nunavut Water Board has requested that the Hamlet prepare a report which identifies all abandoned facilities within the municipal boundaries. This study shall also document ownership of the facilities. The study shall attempt to ascertain accountability for reclamation of existing abandoned facilities.

Surveillance Network Program

The Surveillance Network Program is a monitoring program established to collect data on water quality to assess the effectiveness of treatment for protection of public health and to assess potential impacts to the environment associated with the municipal facilities.

III. LICENCE NWB3PEL9803

Pursuant to the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

HAMLET OF PELLY BAY

(Licensee)

of

PELLY BAY, NORTHWEST TERRITORIES, X0A 0L0

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water for a period subject to restrictions and conditions contained within this licence:

NWB3PEL9803

Licence Number _____

NORTHWEST TERRITORIES 07

Water Management Area _____

PELLY BAY, NORTHWEST TERRITORIES

Location _____

WATER USE AND WASTE DISPOSAL

Purpose _____

MUNICIPAL UNDERTAKINGS

Description _____

25,000 CUBIC METRES ANNUALLY

Quantity of Water Not to be Exceeded _____

NOVEMBER 1, 1998

Date of Licence _____

OCTOBER 31, 2003

Expiry Date of Licence _____

Dated this 20th of October 1998 at Gjoa Haven, NT.


Philippe di Pizzo
Executive Director

PART A: SCOPE AND DEFINITIONS

1. Scope

- a. This Licence allows for the use of water and the disposal of waste for municipal undertakings at the Hamlet of Pelly Bay, Northwest Territories, (68°32'N, 89°49'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 amended by the Governor in Council under a future Nunavut 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: **NWB3PEL9803**

"Average Concentration" means the concentration as determined in Part B, Item 6 of the "Surveillance Network Program" 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 any four consecutive analytical results submitted to the Board in accordance with the sampling and analysis requirements specified in the "Surveillance Network Program";

"Board" means the Nunavut Water Board established under the Nunavut Land Claims Agreement;

"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 Sample" means a single water or wastewater sample taken at a time and place representative of the total discharge;

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

"Inspector" means an Inspector designated by the Department of Indian and Northern Affairs Canada in a manner consistent with the Memorandum of Understanding between the Department of Indian and Northern Affairs and the Board;

"Licensee" means the holder of this Licence;

"Nunavut Land Claims Agreement" (NLCA) means the "Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada," including its preamble and schedules, and any amendments to that agreement made pursuant to it;

"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;

"Solid Waste Disposal Facilities" comprises the area and associated structures designed to contain solid;

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

"Waste" means any substance that, by itself or in combination with other substances found in water, would have the effect of altering the quality of any water to which the substance is added to an extent that is detrimental to its use by people or by any animal, fish or plant, or any water that would have that effect because of

the quantity or concentration of the substance contained in it or because it has been treated or changed, by heat or other means;

"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;

"Water Supply Facilities" comprises the area and associated intake infrastructure at Kugurdjuk River; and

"Honey Bags" A plastic or heavy paper bag that fits into a bucket toilet used to contain toilet waste.

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. tabular summaries of all data generated under the "Surveillance Network Program";
 - b. the monthly and annual quantities in cubic metres of fresh water obtained from all sources;
 - c. the monthly and annual quantities in cubic metres of each and all waste discharged;
 - d. a summary of modifications and/or major maintenance work carried out on the Water Supply and Waste Disposal Facilities, including all associated structures and facilities;
 - e. a list of unauthorized discharges and summary of follow-up action taken;
 - 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. any other details on water use or waste disposal requested by the Board by November 1st of the year being reported; and

- i. updates or revisions to the approved Operation and Maintenance Plans.
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 by October 31, 1999, 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 by October 31, 1999, post signs in the appropriate areas to inform the public of the location of the 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 (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 fresh water from Kugurdjuk River using the Water Supply Facilities or as otherwise approved by the Board.
2. The Licensee shall insure that the freshwater obtained from Kugurdjuk River meets the requirements of the Guidelines for Canadian Drinking Water Quality in accordance with the parameters outlined in the Surveillance Network Program.
3. The annual quantity of water used for all purposes shall not exceed 25,000 cubic metres.
4. The Licensee shall maintain the Water Supply Facilities to the satisfaction of the Inspector.

5. 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 PEL-3 shall meet the following effluent quality standards:

Parameter	Maximum Average Concentration
Faecal Coliforms	1×10^4 CFU/100 ml
BOD ₅	120 mg/L
Total 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. A Freeboard limit of 1.0 metre, or as recommended by a qualified geotechnical engineer and as approved by the Board, shall be maintained at all dykes and earthfill structures associated with the Sewage Disposal Facilities.
4. All honey bags shall be disposed of to the satisfaction of an Inspector.
5. The Licensee shall advise an Inspector at least ten (10) days prior to initiating the decant of the sewage lagoon.
6. The sewage lagoon shall be maintained and operated in such a manner as to prevent structural failure.
7. The Licensee shall maintain the Sewage Disposal Facilities to the satisfaction of an Inspector.
8. The Licensee shall dispose of and contain 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 the Licence;
 - 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 may 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 this Licence within ninety (90) days of completion of the modifications.

PART F: 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 G: 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 Sewage and Solid Waste Disposal Facilities in accordance with *"Guidelines for preparing an Operation and Maintenance Manual for Sewage and solid Waste Disposal Facilities"* October 1996.
2. The Licensee shall implement the plan specified in Part G, Item 1 as and when approved by the Board.

3. If, during the period of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
 - a. employ the appropriate contingency plan as provided for in the Operation and Maintenance Plan;
 - b. report the incident immediately via the 24 Hour Spill Reporting Line. Currently the number is (867) 920-8130; and
 - c. submit to an Inspector a detailed report on each occurrence not later than thirty (30) days after initially reporting the event.

PART H: 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 facilities. The Plan shall include, but not be limited to:
 - a. the water intake facilities;
 - b. the water treatment and waste disposal sites and facilities;
 - c. the petroleum and chemical storage areas;
 - d. any site affected by waste spills;
 - e. leachate prevention;
 - f. an implementation schedule;
 - g. maps delineating all disturbed areas, and site facilities;
 - h. consideration of altered drainage patterns;
 - i. type and source of cover materials;
 - i. future area use;
 - j. hazardous wastes; and
 - k. a proposal identifying measures by which restoration costs will be financed by the Licensee upon abandonment.

2. The Licensee shall implement the plan specified in Part H, Item 1 as and when approved by the Board.
3. The Licensee shall revise the Plan referred to in Part H, Item 1 if not approved. The revised Plan shall be submitted to the Board for approval within six (6) months of receiving notification of the Board's decision.
4. The Licensee shall complete the restoration work within the time schedule specified in the Plan, or as subsequently revised and approved by the Board.
5. The Licensee shall submit to the Board by September 1, 1999, a report describing all existing abandoned waste facilities including ownership thereof (if applicable).

NUNAVUT WATER BOARD

LICENSEE: Hamlet of Pelly Bay

LICENCE NUMBER: NWB3PEL9803

**EFFECTIVE DATE OF LICENCE
ISSUANCE:** October 1, 1998

SURVEILLANCE NETWORK PROGRAM

A. Location of Surveillance Stations

<u>Station Number</u>	<u>Description</u>
PEL-1	Raw Water supply prior to treatment
PEL-2	Runoff from the Solid Waste Disposal Facilities (if present)
PEL-3	Runoff discharge from the Sewage Lagoon just prior to entering the ocean

B. Sampling and Analysis Requirements

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

pH	Conductivity
Total Suspended Solids	Ammonia Nitrogen
Nitrate-Nitrite	Oil and Grease (Visual)
Total Phenols	Sulphate
Sodium	Potassium
Magnesium	Calcium
Total Arsenic	Total Cadmium
Total Copper	Total Chromium
Total Iron	Total Lead

Total Mercury
Total Zinc

Total Nickel

2. Water at Station Number PEL-3 shall be sampled annually during periods of flow and analyzed for the following parameters:

BOD
pH
Total Suspended Solids
Nitrate-Nitrite
Total Phenols
Sodium
Magnesium

Faecal Coliform
Conductivity
Ammonia Nitrogen
Oil and Grease (visual)
Sulphate
Potassium
Calcium

3. Additional sampling and analysis may be requested by an Inspector.
4. 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 Board.
5. All analyses shall be performed in a laboratory approved by the Board.

C. Flow and Volume Measurement Requirements

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

D. Reports

1. 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.

E. Modifications To The SNP

1. Modifications to the Surveillance Network Program may be made only upon written approval of the Board.

SCHEDULE II - LICENSING CONSIDERATIONS

I. APPLICATIONS FOR LICENCE AMENDMENT, RENEWAL, ASSIGNMENT OR CANCELLATION.

1. An Application for an amendment or renewal shall be in the form set out by the Board and shall contain the information identified therein and be accompanied by a deposit equal to any water use fee that would be payable under subsection II (1) in respect of the first year of the licence that is being applied for.
2. The fee payable on the submission of an application for the amendment, renewal, cancellation or assignment of this licence is thirty (30) dollars. Cheque made payable c/o The Receiver General for Canada
3. An application for authorization for the assignment of the licence shall be submitted to the Board, accompanied by the fee set out in (2), no less than 45 days before the date on which the applicant proposes to assign the licence, and shall:
 - a. Be signed by the assignor and the assignee; and
 - b. Include the name and address of the assignee.
4. An application for cancellation of a licence shall be in writing and shall set out the reason for the requested cancellation and a description of the measures taken or proposed to be taken, prior to cancellation, for abandonment of the appurtenant undertaking.

**SCHEDULE III - GENERAL CONDITIONS FOR THE ADMINISTRATION OF
LICENCES
ISSUED BY THE NUNAVUT WATER BOARD (NWB)**

1. At the time of issuance, a copy of the Licence is placed on the Water Register in the NWB Head Office in Gjoa Haven, and is available to the public.
2. To enforce the terms and conditions of the Licence, the Department of Indian Affairs and Northern Development designates Inspectors in a manner consistent with the Memorandum of Understanding between the Department of Indian and Northern Affairs and the NWB. The Inspectors coordinate their activities with the NWB staff and officials of the Water Resources Division of DIAND. The Inspector responsible for Licence No. NWB3PEL9803 is located in the Nunavut District office.
3. To keep the NWB and members of the public informed of the Licensee's conformity to Licence conditions, the Inspectors prepare inspection and compliance reports which detail observations on how the Licensee has met each condition in the Licence. These reports are forwarded to the Licensee with a covering letter requesting 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 importance that the Licensee react in all areas of concern regarding inspection reports so that these concerns may be clarified.
4. If the Licensee contemplates the renewal of Licence No. NWB3PEL9803, it is the responsibility of the licensee to apply to the NWB for renewal of the licence. The past performance of the licensee, new documentation and information, and issues raised during a public hearing, if the NWB is required to hold one, will be used to determine the terms and conditions of the Licence renewal. If the licence expires before the NWB issues a new one, then water use and waste disposal must cease, or the Licensee will be in contravention of the Nunavut Land Claims Agreement. The NWB recommends that an application for the renewal of Licence No. NWB3PEL9803 be filed **at least six months** before the Licence's expiry date.
5. If Licence No. NWB3PEL9803 requires amendment, then a public hearing may be required. The Licensee should submit applications for amendment as soon as possible to give the NWB sufficient time to go through the amendment process. The duration of the process may vary depending on the scope of the amendment requested.
6. The NWB can modify the Surveillance Network Program annexed to the licence without a public hearing. Requests for changes to the Surveillance Network Program should be forwarded to the NWB in writing, and should include the justification for the change.

7. Any communication with respect to this licence shall be made in writing to the attention of:

Philippe di Pizzo
Executive Director
Nunavut Water Board
P. O. Box 119
Gjoa Haven, NT. X0E 1J0
Telephone No: (867) 360-6338
Fax No: (867) 360-6369

8. Inspection and enforcement of the terms and conditions of this licence are performed by:

Mr. Paul Smith, Water Resources Officer
Nunavut District Office
Northern Affairs Program
Department of Indian Affairs
and Northern Development
P. O. Box 100
Iqaluit, NT. X0A 0H0
Telephone No: (867)979-4405
Fax No: (867)979-6445

9. The licensee shall submit all report, plans and studies to the Board in three copies.

APPENDIX I

CORRESPONDENCE

- i. Application for water licence for the Hamlet of Pelly Bay. Received November 12, 1997.
- ii. Nunavut Water Board Public Notice of the Application. Dated February 23, 1998.
- iii. Kitikmeot Health Board. Letter received March 18, 1998, comments on the application.
- iv. Indian and Northern Affairs Canada. Letter dated March 23, 1998, comments on the application.
- v. Environment Canada. Letter dated April 1, 1998, comments on the application.
- vi. Kitikmeot Health Board. Inspection report dated May 19, 1998.
- vii. Department of Fisheries and Oceans. Letter dated May 25, 1998, comments on the application.
- viii. Nunavut Water Board. Notice of Conference call for interested parties dated June 22, 1998.
- ix. Nunavut Water Board. Conference call notes for June 30, 1998.

FIGURE 1 - Hamlet of Pelly Bay SNP STATIONS