



Inspection Report

License #: 3BM-IGL

Inspector: A. Keim

CIDMS # 280262

Client	Municipality of Igloolik		
Mailing Address	Box 30		
Inspection site location	Igloolik , Nunavut		
Contact name	Brian Flemming	Title	SAO
Last inspection date	August 9, 2006		
Inspection start date	August 10, 2008		
Region	Qikiqtani		



INAC, Nunavut District
P.O. Box 100
Building 918
Iqaluit, NU, X0A 0H0

Submitted Via E-Mail
Our File: 3BM-IGL0308
Your File: _____
CIDM # 280262

May 22, 2009

Brian Flemming
Senior Administrative Officer
Municipality of Igloolik
Box 30
Igloolik, Nunavut
XOA OLO

RE: August 10 2008 Igloolik Municipal Water Licence Inspection 3BM-IGL0308

The Inspector would like to thank Brian Flemming, Senior Administrative Officer for taking the time to meet after hours and into the early evening during the inspection period and for acting as a guide for the Inspector.

Part A: Scope and Definitions

During the period of Inspection the Municipality of Igloolik was operating under a Water license issued September 1st, 2003 and set to expire on August 31st 2008.

On August 5th, 2008 the Municipality and Government of Nunavut applied for a renewal of the existing Water License. A review of the Nunavut Water Board FTP site located an application and covering letter. Also present on file were a letter to the Nunavut Water Board dated September 2nd, 2008 from the Government of Nunavut providing supplementary information and acknowledging missing or incomplete information on behalf of the Licensee.

The license is classed as water use and waste disposal for Municipal Undertakings as indicated on the license form.

Part B: General Conditions

It should be noted that during the period of inspection the Municipality of Igloolik was operating under a current water license.

A review of the Nunavut Water Board FTP site produced an application from the Municipality and supporting document submitted by the Government of Nunavut, Department of Community and Government Services who are acting on behalf of the Municipality during the application for renewal.

During the same review of the Nunavut Water Board FTP site, the Inspector failed to find the required annual reports which were to have been filed in accordance with the license. The licensee is reminded that the NWB has imposed on the Licensee, the requirement to produce an Annual Report. These reports are for the purpose of ensuring that the NWB has an accurate annual update of municipal activities during a calendar year. A "*Standardized Form for Annual Reporting*" is to be used by the Licensee and is available from the NWB file transfer protocol (FTP) site under the Public Registry link at the NWB Website. Such an annual report is required to be filed by March 31st 2009 for the year ending December 31st 2008. Annual reports are to include the results of the Monitoring Program as outlined in Part H of the current license. As



per section 2 of this Part the Licensee is required to comply with the Monitoring program and submit the results of samples collected under the monitoring program.

It is noted that while an application for renewal has been submitted by the Government of Nunavut Department of Community and Government Services on behalf of the Municipality, and that a letter containing further information as required by the Board was submitted. The license has since expired. The Licensee is reminded that all of the terms and conditions contained within the now expired license still apply and are binding on the licensee.

The Licensee is reminded that any use of water or deposition of waste into any place where it may enter water in Nunavut requires a license issued pursuant to the Nunavut Water and Nunavut Surface Rights Tribunal Act. The licensee is also reminded that the application to process a renewal of the now expired license may take as long as three to six months. The licensee and the Government of Nunavut, Department of Community and Government Services are strongly encouraged to submit the required and requested information to the Nunavut Water Board as soon as possible to avoid prolonging their period of operations contrary to the legislation.

The Inspector calls upon the Government of Nunavut, Department of Community and Government Services who are acting on behalf of the Municipality for this period to provide the required information to the Nunavut Water Board and to submit as required the Licensee's Annual Report.

Part C: Conditions Applying to Water Use

A visual inspection of the Municipal reservoir was conducted during the period of Inspection. A large pump and hose system were installed at the site and pumping operations were underway to empty the municipal reservoir.

The Inspector was informed that the Department of Community and Government Services required the Municipality to completely empty the reservoir prior to refilling it this year. No other explanation was provided.

Water samples taken during the Inspection from within the reservoir returned results all within Canadian Council of Ministers of the Environment (CCME) Guidelines for Community Drinking Water.

Following the Inspection a fire destroyed the Large Pump and adjacent fuel system. As the fire was in close proximity to the community potable water source additional samples were collected and analyzed for contaminants and Hydrocarbon contamination. The results of these samples all returned values below detectable limits.

It is highly recommended that sampling of the reservoir take place semi annually over the next two years to ensure contaminated ground water does not enter the reservoir.

Part D: Conditions Applying to Waste Disposal

Sewage treatment;

The Licensee is responsible for ensuring, subject to Section 2 of this Part, that effluent entering the environment meets the following standards;

Parameter:	Max Concentration
Faecal Coliform :	1X 10(6) CFU/100 mL
BOD	120 mg/L
TSS	180 mg/L
Oil & Grease	No visible sheen
PH	Between 6 and 9



The Licensee is reminded that these parameters are set by the Nunavut Water Board and are included in the terms and conditions of the issued water license. Compliance with these limits is an obligation of the Licensee.

The Licensee is reminded that as per Section 4 of Part D; Conditions Applying to Waste Disposal the Licensee shall provide 10 days notice to an Inspector prior to initiating any decant of the sewage lagoon system. This is to ensure the Inspector has adequate notice to conduct inspections within the Municipality and to ensure proper sampling is completed by the Licensee.

As noted in the 2006 water License inspection there are obvious flow paths originating from the toe and base of the lagoon cell system which is oriented parallel to the shoreline of Foxe Basin. It is obvious that a high load of nutrients is exiting the lagoon system end entering the environment. The Municipality has made efforts to slow the flow of ground water downstream of the lagoon system during freshet via the construction of a number of diffuser dams and diversions to prevent run off from entering the area down slope the lagoon system.

Solid Waste Management Area;

An inspection conducted at the solid waste management area found that the Licensee has not undertaken a program to segregate hazardous materials including batteries and waste oils from the non-hazardous materials collected within the Bulk solid waste facilities.

This report is based on observations carried out on August 10th, 2008.

During the inspection the following locations were sampled;

1. Raw Water.
2. Run off stream 200 meters from lagoon.

Samples were collected from the Bulk Wastes Storage area and down slope of the lagoon system. Results of sampling were all within Canadian Council of Ministers of the Environment (CCME) Guidelines.

Note: Fecal and Biological Oxygen Demand samples exceeded the time restrictions on testing. Results could not be returned from the lab.

Part E: Conditions Applying to Modifications and Construction

Section 1 of this Part reads as follows;

1. The Licensee shall submit to the Board for written approval, construction design drawings stamped by a qualified engineer registered in Nunavut, prior to the construction of any dams, dykes or structures intended to contain, withhold, divert or retain water or wastes.

The licensee is reminded that any planned infrastructure programs related to water and waste works within the Municipality require the approval of the Nunavut Water Board.

Part F: Conditions Applying to Operation and Maintenance

The Municipality was unable to produce a Sewage and Solid Waste Disposal Operations and Maintenance manual during the period of inspection. During the consolidation of this report a review of the Nunavut Water Board FTP site was not able to locate this document.

Pursuant to Section 1 of this Part the Licensee was required, by May 31st 2004 to 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).

The Inspector calls upon the Government of Nunavut, Department of Community and Government Services who are currently acting on behalf of the Municipality for this period to provide the required Plan to the Nunavut Water Board.

Part G: Conditions Applying to Abandonment and Restoration

The Municipality was unable to produce an Abandonment and Restoration Plan during the period of inspection. During the consolidation of this report a review of the Nunavut Water Board FTP site was not able to locate this document.

Part H: Conditions Applying to the Monitoring Program

The licensee is reminded that they must ensure that adequate signage is in place.

Sewage and Solid Waste monitoring:

During the inspection it was noted that the Municipality had not complied with Section 2 of this Part. The Licensee is reminded that they must collect the required samples at two locations (IGL-2 and IGL-4) as outlined in the license.

To assist the licensee in the future, the following are the required parameters to be tested for as a requirement of the water license.

BOD	Faecal Coliforms
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 Nickel
Total Zinc	

These samples are to be collected and analysed in accordance with a Quality Control / Quality Assurance plan approved by the Nunavut Water Board..

Non-Compliance: Issues identified during the inspection and/or review of relevant material

The Municipality is required to undertake the following to ensure compliance with the Act.

Issues with a known or anticipated human health impacts;

- Ensure samples at IGL-4 are collected and results reported as required.

Issues where there is a known or anticipated environmental impairment;

- Undertake the required operations to ensure proper segregation and containment of hazardous materials within the bulk waste management facility.



Issues where there is a known or suspected violation of a requirement of the Water License;

- The Municipality has not submitted the required Operations plans.
- Submit the required Annual reports.
- Install and maintain the appropriate signage, and Surveillance Network Program (SNP).
- Develop a Quality Assurance/ Quality Control Plan (contact the Nunavut Water Board).
- Submit the required Abandonment and Restoration plans.

The Municipality of Igloolik continues to operate in Non-conformity with the terms and conditions of the now expired Water License issued in 2003.

Andrew Keim

Inspector's Name

Inspector's Signature

Attached under separate cover;
Photos taken during Inspection of August 10th, 2008

Cc:

Peter Kusugak – Manager Field Operations Section- Indian and Northern Affairs Canada
Phyllis Beaulieu – Manager Licensing – Nunavut Water Board















