

# **Inspection Report**

License #: 3BM-YRB

Inspector: A. Keim

CIDMS # 291389

Client	Government of Nunavut		
Mailing Address	Community and Government Services Enokhok Building,		
Inspection site location	Resolute Bay , Nunavut		
Contact name	Tom Livingston	Title	Municipal Planning Engineer
Last inspection date	2007		
Inspection start date	July11,2008		
Region	Qikiqtani		

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

Submitted Via E-Mail Our File: 3BM-YRB0308

May 25, 2009

Mr. Jason Brown Manager, Resolute Bay/Nanisivik Airport Nunavut Airports – Government of Nunavut P.O. Box 30 Resolute Bay, NU X0A 0V0

E-mail: jbrown@gov.nu.ca

## RE: Water License Inspection Resolute Bay July11th, 2008

The Inspector would like to thank Mr. Jason Brown, Airport Manager Resolute Bay for taking the time to meet during the Inspection. Mr. Brown's input into the activities at the airport and associated facilities and the separation in areas of operation and responsibility between the Government of Nunavut and the Hamlet was invaluable to the Inspection process.

The Municipality continues to be unlicensed. The Government of Nunavut applied on November 24<sup>th</sup>, 2006 for a new water license for use of the Utilidor System in the Hamlet of Resolute Bay. The Department of Community Government Services of the Government of Nunavut is maintaining the Utilidor system via their offices in Pond Inlet. The Water License application was acknowledged by the Nunavut Water Board on October 17<sup>th</sup> 2007 and a review of the application, when made available on the Nunavut Water Board FTP site was completed by INAC on October 19<sup>th</sup>, 2007. The water used at the Resolute Airport is trucked from the Municipal source in Resolute Bay, 10 kilometres from the airport. This is contrary to the existing license for the airport which lists STRIP Lake as the source.

The following report is based on observations made at the time of the inspection at the Resolute Bay Airport dump and Lagoon area on July 11<sup>th</sup>, 2008 and a review of the documents found on the Nunavut Water Board FTP site during the writing of this report.

#### Part A: Scope and Definitions

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 Resolute Bay Airport was operating under a water license issued in 2003 and expiring in 2008. The license has since the period of Inspection expired and a review of the Nunavut Water Board FTP site could not locate an 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 issued 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 on 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 31<sup>st</sup> 2009 for the year ending December 31<sup>st</sup> 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.

The Licensee is reminded that any use of water or deposition of waste into any place where it may enter water in Nunavut will require a license issued pursuant to the Nunavut Water and Nunavut Surface Rights Tribunal Act. The licensee is reminded that the application process for renewal, amendment or modification may take as long as three to six months. The licensee is strongly encouraged to submit their application as soon as possible to reduce the period they will be forced to operate contrary to the legislation.

### Part C: Conditions Applying to Water Use

The community of Resolute Bay is on piped water and sewage system built in the early 1970's. The original license issued to the Government of Nunavut had the potable source listed as STRIP Lake located adjacent to the runway and airport. This has apparently ceased and water for the airport facilities, hotels and Polar Shelf is trucked from the Municipal source in the community of Resolute Bay to the Airport.

The annual quantity of water to be used by the Airport was 600 Cubic meters as set out in Section 2 of this Part. No records of usage were available for the inspector to review during the period of Inspection. It is noted however that the truck would make numerous deliveries throughout the day to the various buildings within the Airport.

# 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 at Monitoring station YRB-3 shall meets the following standards;

PH

Parameter:Max ConcentrationFaecal Coliform:1X 10(6) CFU/100 mLBOD120 mg/LTSS180 mg/LOil & GreaseNo visible sheen

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 terms is an obligation of the Licensee.

It is noted that a review of the Nunavut Water Board FTP site could not locate a report required pursuant to section 3 of this Part requiring the submission of a Plan to address the operational issues at the Sewage Disposal Facility, which were identified in the July 23,2001 DIAND Inspection Report. This report was to have been submitted by March 31<sup>st</sup> 2004.

Solid Waste Management Area;

Pursuant to section 11 of this Part the Licensee is directed to deposit all solid waste in the solid waste disposal facility or as approved by the board. As no other approval is noted it remains that the current facility is in use.

An inspection was conducted at the solid waste management area to determine the status of the facility. Mr. Brown accompanied the Inspector during the inspection and while Mr. Brown noted that the facility had been closed to the public for a number of years there was evidence of more recent deposits of waste within the boundaries of the facility. It was also noted that a large number of barrels containing unidentified substances were scattered through the facility and on the wetlands area below the facility. The area was un-segregated as evidenced by what appeared to be electrical components and other potentially harmful wastes scattered throughout the facility.

During the inspection the following locations were sampled;

o Run off stream 500 meters from lagoon

Location	Sample Parameter	Result	Guideline
Lagoon	Copper	0.004 mg/l	2-4 μg/L
	Lead	0.0014 mg/l	1-7 μg/L

Note: Fecal and Biological Oxygen Demand samples exceeded the time restrictions on testing. Results could not be returned from the lab. Samples collected during the period of Inspection also had an obvious odour of sewage.

## 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.

Again a review of the Nunavut Water Board FTP site could not find an application or approval for any work done on the lagoon as outlined by Mr. Brown during the Inspection.

#### Part F: Conditions Applying to Operation and Maintenance

A review of the Nunavut Water Board FTP site was unable to locate the Plan for the Operations and Maintenance of the Sewage Disposal Facilities as required by Section 1 of this Part. This Plan was to have been submitted within 6 months of the issuance of the now expired license.

#### Part G: Conditions Applying to Abandonment and Restoration

The Government of Nunavut appears to have been unable to produce an Abandonment and Restoration Plan at any time over the duration of the now expired license. During the consolidation of this report a review of the Nunavut Water Board FTP site was not able to locate this document.

As per section 1 of this Part the Licensee was to have provided by June 2004 a Plan that was to include the any Abandonment and Restoration of the Transport Canada landfill located on the land occupied by the Resolute Bay Airport Facility. Specifically and contained within the license this was to include the following;

- water intake facilities;
- o the water treatment and waste disposal sites and facilities;
- o petroleum and chemical storage areas;
- o any site affected by waste spills;
- o leachate prevention;
- o an implementation schedule;
- o maps delineating all disturbed areas, and site facilities;
- o consideration of altered drainage patterns;
- o type and source of cover materials;
- o future area use;
- o hazardous wastes; and
- o a proposal identifying measures by which restoration costs will be financed by the Licensee upon abandonment.

## Part H: Conditions Applying to the Monitoring Program

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

Sewage Waste monitoring:

During the inspection it was noted that the Government of Nunavut had not complied with Section 2 of this part. The Licensee is reminded that they were to have collected the required samples at the final discharge point of the sewage disposal facilities and to have those samples tested in accordance with the terms and conditions of this existing License. That obviously has not occurred.

It is also clear that the licensee has failed to comply with the requirement to record water and sewage intake and outfall quantities as required under the License.

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

The Government of Nunavut is required to undertake the following to ensure compliance with the Act.

#### Issues with a known or anticipated human health impacts;

- o Take steps to prevent the direct discharge of raw sewage into the environment.
- o Take steps to mitigate and control the run off and leachate from the solid waste management area.

### Issues where there is a known or anticipated environmental impairment;

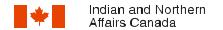
 Develop a plan to address the remediation of the Transport Canada solid waste facility currently occupied and in use by the Government of Nunavut.

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

- The Government of Nunavut has not submitted, as directed, the Operation plans which cumulatively make up the required Operations manuals.
- Submit the required Annual reports for 2003 through 2008.
- Install and maintain the appropriate signage, and Surveillance Network Program (SNP).
- Develop a Quality Assurance/ Quality Control Plan (contact the Nunavut Water Board).
- Develop and submit for approval a Sewage Sludge Waste Management Procedure or manual as required.
- Submit the required Abandonment and Restoration plans.
- Submit the required application and supporting document in application for a renewal of the issued Water license.

The Government of Nunavut continues to operate in Non-conformity with the Nunavut Water and Nunavut Surface Rights Tribunals Act. The continuing operation of water supply and waste disposal services at the Airport facilities of Resolute Bay without a current license is a contravention of the Act.

_Andrew Keim		
Inspector's Name	Inspector's Signature	
Attached under separate cover;		
Photos taken during the Inspection of July 11 <sup>th</sup> , 2008		



Affaires indiennes et du Nord Canada

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

Water License inspection Photos Resolute Bay Airport Lagoon and dump July 11 2008 : CIDM #  $336140\,$ 



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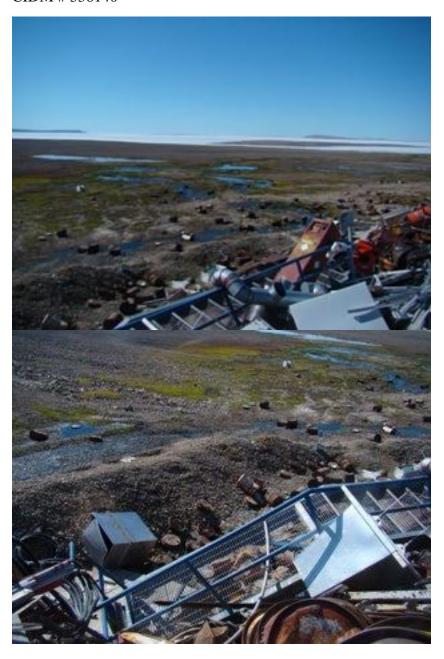
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