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## RE: Water License Inspection of Resolute Bay Airport August 3rd, 2007

The Water Resources Officer (WRO) appreciates the assistance and cooperation provided by Mr. Jason Brown, Airport Manager for the Resolute Bay Airport who both accompanied the Inspector during the Water License Inspection.

The following report is based on observations made at the time of the inspection at the Bulk Waste Management site and sewage lagoon, results of samples collected during the inspection and items outlined during a review of the terms and conditions of the license with Mr. Brown. Immediately following the inspection an Industrial Water Use Inspection Report outlining any concerns was signed by both Mr. Brown and the Inspector.

## **Part A: Scope and Conditions**

No issues were found with respect to the location of the Facilities as it relates to the information contained within the current license.

The Licensee is reminded that the current license expires this year. The Nunavut water Board requires a minimum of between 3 to 6 months to review applications for renewal of existing licenses. As such, it is recommended that the Licensee apply for a renewal to the current licence as soon as possible to avoid any delays which could bring the licensee into non-compliance with the legislation.

## **Part B: General Conditions**

The issue of water use fees and security were not included within the context of this inspection.

A review of the Nunavut Water Board FTP–Public Registry was conducted during the writing of this report. It is noted that the current water license was issued by the Nunavut Water Board on November 30<sup>th</sup>, 2003 and is set to expire on November 30<sup>th</sup>, 2008

It was noted during the development of this report that since 2003 the Licensee has failed to file the required annual reports required under the current license. The Licensee is reminded that an annual report is required to be filed with the Nunavut Water Board by March 31<sup>st</sup> 2008 for the year ending December 31<sup>st</sup> 2007.

The annual report must include but should not be limited to those items listed in Section 1 i through viii of this Part. Failure to file a complete report as outlined in the current license is a violation of the Act and will subject the licensee to the enforcement measures and penalties provided for under the Act.



The licensee is reminded that it is the responsibility of the licensee to ensure that any documentation submitted by the licensee to the Nunavut Water Board is acknowledged by the Manager of Licensing. It is also highly recommended, that all documents associated with the required annual reports are also submitted to the Inspector.

# Part C: Conditions Applying to Water Use

During the period of Inspection it became clear to the Inspector that a number of the terms and conditions of the current water license were no longer being followed and were in fact redundant. The current license authorizes the licensee to utilize up to 600 Cubic meters of water from Strip Lake for domestic use.

It was explained that as of 2004 Strip Lake was no longer used and in fact the Licensee is receiving water from a contractor who is providing trucked services to the Municipality of Resolute Bay, the Airport and to the Polar Shelf compound. It is noted however that the Municipality of Resolute Bay is operating without a Water License.

This is an obvious modification to the terms and conditions of the current license and as such, as per Part E of the issued License the Nunavut Water Board should have been notified. No such notification of amendment or modification is on file.

# Part D: Conditions Applying to Waste Disposal

During the period of Inspection a tour of the Solid Waste facility was conducted. It was noted during this Inspection that the Licensee had not segregated any of the materials currently being deposited within the facility. When questioned about this Mr. Brown stated that the facility was not being used on a regular basis and was in fact closed.

Evidence of materials being recently deposited within the facility was noted as was evidence of open burning within the facility. These were brought to the Attention of Mr. Brown who stated he was unsure of who was using the facility. Mr. Brown also stated he was unaware of any plan to reclaim the site.

Additionally, it was noted during the period of Inspection that the Sewage lagoon had an obvious flow originating within the lagoon and exiting the lagoon structure via a flow under the wall of the lagoon. Evidence of high nutrient loading was noted downstream of the lagoon and led to questions regarding the integrity of the lagoon walls. When questioned regarding the lagoon construction, Mr. Brown indicated that some repairs had been undertaken on the walls of the lagoon but to the best of his knowledge the lagoon ifs self was not lined and not scheduled for any repairs at this time.

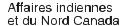
The Licensee is responsible for ensuring that effluent originating from the lagoon system and entering the environment meets the following standards;

Parameter:	Max Concentration
Faecal Coliform	1X 10 <sup>6</sup> CFU/dl
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 terms is an obligation of the Licensee.

Samples collected from the receiving environment approximately 100 m from the lagoon were delayed in getting to the lab and thus results for Faecal Coliform Bacteria and BOD were not available for review.

The Licensee is reminded that as per section 3 of this part required the Licensee to develop a plan to address the operational issues at the Sewage Disposal facility (Lagoon) and to submit the plan to the Nunavut water Board for review by March 31<sup>st</sup> 2004. No records of this plan have been located. If the





Licensee has submitted this plan they are asked to forward an approved copy of this plan to the Nunavut Water Board and the Inspector within 30 days of receipt of this report.

If a plan has not been submitted to the Nunavut Water Board for approval the Licensee is directed to submit the required plan as an addendum to the required annual report due by March 31st 2008.

Further, pursuant to Section 8 of this Part;

8. The Sewage Disposal facilities shall be maintained to the satisfaction of an Inspector, and operated in such a manner as to prevent erosion and structural failure.

The Licensee is cautioned that failure to adhere to the terms and conditions of the current license is a violation of the Act and will subject the licensee to the enforcement measures and penalties provided for under the Act as necessary to achieve compliance.

#### Part E: Conditions Applying to Modification and Construction

No modifications were brought to the attention of the inspector during the period of inspection by the Licensee.

A search of the Nunavut Water Board FTP site did not locate the required request for Amendment/ Modification as was required.

## Part F: Conditions Applying Operations and Maintenance

A review of the Nunavut Water Board FTP site could not located the required Plan for the Operation and Maintenance of the Sewage Disposal Facilities. This Plan was due for submission May 30, 2004. If the Licensee has submitted this plan they are asked to forward an approved copy of this plan to the Nunavut Water Board and the Inspector within 30 days of receipt of this report.

If a plan has not been submitted to the Nunavut Water Board for approval the Licensee is directed to submit the required plan as an addendum to the required annual report due by March 31st 2008.

The Licensee is reminded that All spills are to be documented and reported to the 24 hour Spill Line at (867) 920-8130. Additionally a report for any spill is required to be filed with the Inspector (INAC) within 30 days of the incident

The licensee is reminded that it is the responsibility of the licensee to ensure that any documentation submitted by the licensee to the Nunavut Water Board is acknowledged by the Manager of Licensing.

## Part G: Conditions Applying To Abandonment And Restoration

The Licensee is cautioned that while a prepared plan is not required at this time the Licensee should have in place methods and practices that will ensure the site can be reclaimed to its original condition upon completion of the program.

The Licensee is reminded that a Plan must be submitted to the Nunavut Water for approval a minimum of 6 months prior to abandoning any facilities. Facilities include but should not be limited to those identified in i through xii of Section 1 of this Part.

#### Part H: Conditions Applying To The Monitoring Program

The Inspector identified the lack of signage and warnings at all of the SNP stations listed under the current license. The Licensee is reminded that under the terms and conditions of the current license the Licensee is required to sample, during the months of May to August inclusive of the following parameters at the final discharge point of the sewage disposal facilities;

# Affaires indiennes et du Nord Canada

#### **Parameters**

BOD Faecal Coliforms
pH Conductivity
Total Suspended Solids Ammonia Nitrogen
Nitrate-Nitrite Oil and Grease (visual)

Total Phenols
Sodium
Potassium
Magnesium
Calcium
Total Arsenic
Total Copper
Total Chromium
Total Iron
Total Mercury
Total Nickel

Total Zinc

These samples are to be collected and analysed in accordance with a Quality Control / Quality Assurance plan. The outline of which was to be provided to the Community within 60 days of the issuance of this license by the Nunavut Water Board. There is no indication that the required plan was submitted to the Municipality by the Nunavut Water Board nor that the Municipality has collected the required samples at any time during the duration of the current license.

The Licensee is also reminded that as per the terms and conditions of the current license the information and data collected under the monitoring program are to be submitted in the annual report in accordance with Section 9 of this Part.

#### **Non-Compliance:**

During the inspection a number of items were noted and discussed with Mr. Brown. These issues required corrective action to be undertaken prior to the date of the next inspection. Further work on this file and a review of the terms and conditions of the current license also require the Licensee to provide those identified outstanding issues within the time line specified in the current report. These are listed below;

#### Specifically;

- Submission of an Operation and Maintenance plan for the solid waste management area
- o Submission of an Operations and Maintenance plan for the sewage lagoon
- o Submission of a Spill Contingency Plan for all facilities
- o Collection of samples and submission of analytical results
- o Submission of required annual reports

During the period of the inspection water samples were collected from downstream of the Sewage Lagoon and the Solid waste management area.

\_Andrew Keim \_\_\_\_ Inspector's Name

<u>Original signed and mailed this date</u> Inspector's Signature

Attached under separate cover; Photos taken during Inspection of August 3rd, 2007

Cc:

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