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CIDM # 175510

October 10, 2007

Ron Mongeau Senior Administrative Officer Box 253 Pangnirtung, Nunavut XOA ORO

ph: 867-473-8953 fax: 867-473-8832

# RE: July 19th, 2007 Municipal Water Licence NWB3CAP0207 -

The Inspector would like to thank SAO Ron Mongeau for taking the time to meet during the inspection period and for acting as guide while conducting the inspection of the waste treatment system and waste management areas.

## **Part B: General Conditions**

It should be noted that during the period of inspection the Municipality of Pangnirtung was operating under a current water license. That license is scheduled to expire on November 31<sup>st</sup> 2007. A review of the Nunavut Water Board FTP site fails to produce an application or any supporting documents required in the application process for the renewal or application for a new water license. The Municipality 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. Non-compliance with the legislation may result in the need for enforcement actions to be undertaken by Indian and Northern Affairs Canada.

The licensee is reminded that the application process may take as long as three months. The licensee is strongly encouraged to submit their application as soon as possible to avoid the possibility that they will be forced to operate contrary to the legislation.

Additionally, during the same review of the Nunavut Water Board FTP site the Inspector failed to find any of the required annual reports which were to have been filed in accordance with the current license. The licensee is reminded that an annual report is required to be filed by March 31<sup>st</sup> 2008 for the year ending December 31<sup>st</sup> 2007. This report is to include all items noted in this Part under Sections 1.i to 1.ix.

During the inspection it was also noted that the license holder has not installed signage at many of the stations noted under the Surveillance Network Program.

# Part C: Conditions Applying to Water Use

The raw water from Duval River is pumped through the pipeline to the holding reservoir. It is chlorinated on its way into the water truck. The chlorine residual is measured twice daily. All appeared to meet the requirements of the license during the inspection.



A visual inspection of the in-take pipe line and intake facilities was conducted during the period of inspection. No issues were noted. Water samples were taken near the intake pipe from the Duval River.

Metres and records were observed during the inspection inside the pumping station.

# Part D: Conditions Applying to Waste Disposal

#### Sewage treatment;

The Licensee is responsible for ensuring that effluent entering the environment meets the following standards;

Parameter:Max ConcentrationFaecal Coniform:1X 10 ³CFU/dlBOD120 mg/LTSS180 mg/LOil & GreaseNo visible sheenPHBetween 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 Municipality.

During the period of inspection it was noted by the Inspector that the Municipality was storing bags of sludge from the sewage treatment centre outside the access door on pallets until such time as it could be hauled to the land fill. When the safety of this practice was questioned by the inspector the SAO stated that this would stop and another method of storage and transport would be found. The licensee is reminded that pursuant to section 4 of this Part a Plan for the disposal of sewage sludge was to have been submitted to the Nunavut Water Board within 30 day of the issuance of this license. If the licensee has not already done so the development of this plan is a requirement of the water license.

Further to this an Inspector's Direction dated October 4<sup>th</sup>, 2006 clearly outlined to the Municipality that the required plan was to be submitted to the Nunavut Water Board no later than 90 day following the issuance of the order. It is clear that communications with the then SAO Mr. Greg Morash were incorrect when the Inspector was told that this plan was submitted and that all of the required work outlined in the order had been completed.

It should also be noted that the Municipality has not completed any remediation work on the old sewage outfall area adjacent to the new sewage treatment plant as was outlined to the SAO of the Municipality during the 2006 Inspection.

# Solid Waste Management Area;

Within the Solid Waste disposal facilities the Inspector noted the following areas of concern;

- O Sewage Sludge (bagged) from the treatment facility was piled within the facility adjacent to an overflowing pit of fish processing wastes. The sludge bags, many of which were broken, appear to be intermingled with some of the fish wastes and a sludge from the area was noted flowing West along the North wall.
- O Commercial Fish wastes in a Municipal dump are beyond the understanding of the inspector, however, as per the terms of the Water License these wastes are to be stored in a pit that has been excavated below the level of the permafrost thus to facilitate encapsulation of these wastes. This has not taken place as was evidenced by the inspectors.



- The solid waste facility also had the North West corner of the facility wash out from beneath the fence. This allowed rain and precipitation to proceed down stream into pools at the high tide mark immediately beneath the facility. Samples of this run off were collected and analysis show elevated levels of the following parameters; Selenium, Strontium Manganese and Iron.
- o Segregation of materials within the dump was also nonexistent.

Finally and in follow up, the wash out in the North west corner of the solid waste management area had not been repaired as per the 2006 Inspector's Direction and contrary to the assurance of the then SAO Mr. Greg Morash.

# Part E: Conditions Applying to Modifications and Construction

It is impossible for the Inspector to determine if any of the terms of this section have been complied with.

No notification of any omission has been received by this office from the Nunavut Water Board.

# Part F: Conditions Applying to Maintenance

The Water Intake Facility was well maintained and found to be working and in good order.

The Inspector has no information concerning the Operations and maintenance manual that was to be submitted by June 2002. As it is still a condition of the license and not addressed in any correspondence as being completed, the inspector will look to the Water Board for confirmation of compliance, again.

# Part: G Conditions Applying to Abandonment and Restoration

A plan was to have been submitted to the Nunavut Water Board but a search the Nunavut Water Board FTP site is inconclusive. The Plan may have been filed and then lost. The Nunavut Water Board will have to determine if this part has been complied with and if not advise this office.

# Part H: Conditions Applying to the Surveillance Network Program (Monitoring Program)

The Inspector identified in this inspection and that of 2006 the lack of signage and warnings at all of the SNP stations within the Municipality..

The Licensee, according to the terms of the water license is required to sample, during the months of May to August inclusive the following parameters;

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

#### Indian and Northern Affairs Canada

# Affaires indiennes et du Nord Canada

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.

The Nunavut Water Board is reminded that failure to comply with terms of licenses issued by the Board puts the validity of the issued license is question.

## **Non-Compliance**:

Waste Management in the community continues to be below an acceptable standard because of problems at the solid waste management area.

The Municipality is required to complete the following;

- O Submit an application for a renewal of the existing or new water license
- o Submit the required Annual reports
- o Maintain the appropriate signage, and Surveillance Network Program (SNP)
- o Develop a Quality Assurance/ Quality Control Plan (contact the Nunavut Water Board)
- o Develop a Solid Waste Disposal Operations and Maintenance Manual
- o Develop and submit a sewage sludge management plan.

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Cc:

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