

Inspection Report

License #: 3BM-ARC0810

Inspector: A. Keim

CIDMS # 364370

Client	Municipality of Arctic Bay		
Mailing Address	Box 150		
Inspection site location	Arctic Bay , Nunavut		
Contact name	Joelie Qamanirq	Title	SAO
Last inspection date	July 13, 2008		
Inspection start date	July 11, 2009		
Region	Qikiqtani		



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

October 29, 2009

Joelie Qamanirq Senior Administrative Officer P.O Box 150 Arctic Bay, Nunavut, XOA OAO

Submitted Via E-Mail

Our File: 3BM-ARC0810 Your File:____

CIDM # 364370

RE: Municipal Water Licence Inspection July 11th, 2009 3BM-ARC0810

Hamlet staff members did not attend the Inspection. A copy of the completed form was sent via e-mail and then mailed to the Municipal Offices following the inspection.

Previous findings:

Issues identified by the inspector during the 2008 Inspection were as follows;

Issues with a known or anticipated human health impacts;

- o Sewage treatment remains below an acceptable standard.
- o Failure to collect and submit for analysis the samples required under the Monitoring Program.
- o Failure to submit reports and substantive information as required by the Nunavut Water Board to complete the application for amendment necessary to ensure construction of the new lagoon system was undertaken before the period of the next inspection.
- o Undertake such works as are necessary to prevent the failure of the existing lagoon system.

Issues where there is a known or anticipated environmental impairment;

- o Failure to undertake such works so to mitigate and remediate such lands and waters as were effected by effluent leaching from the existing lagoon system.
- o Failure to undertake such works as required to prevent the failure and erosion of the existing lagoon system into waters downstream of the system.
- Waste Management and control in the community continues to be below an acceptable standard, segregation and fencing issued have repeatedly not been addressed.

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

- o Failure to submit Compliance Plan.
- o Failure to submit Plans and Operations manuals.
- o Failure to submit Sampling Results under the monitoring program.
- o Failure to submit Abandonment and Restoration Plans.
- o Failure to submit Annual reports.

During the period of the 2009 Inspection the following issues were identified;

- The Licensee has failed to collect samples and submit results in the Annual report as required by the license (Part B Item I through xiv).
- Sewage treatment continues to be below an acceptable standard as evidenced by observations made during the Inspection and the results of sampling conducted during the Inspection of July 11th, 2009.

Parameter:	Result	NWTELSD¹ Criteria
Iron	6930 μg/L	300 μg/L
Manganese	$1320~\mu g/L$	50 μg/L

¹ NWT Limits for Effluent Parameters for specific Discharges Criteria



- As noted during the period of Inspection no further work on the existing waste management area has been undertaken. Hazardous materials remain uncontained and a fence has not been installed.
- Work on the existing sewage waste infrastructure appears to have been undertaken to repair the spring wash out of the lagoon which was reported to the Inspector. No sampling was undertaken during this uncontrolled release and further work to prevent this in the future is required.
- To address the requirement for the submission of documents to the Nunavut Water Board the Government of Nunavut, on behalf of the Municipality of Arctic Bay (Licensee) submitted the following documents to the Nunavut Water Board on October 6th, 2009.
 - 1. Plan for Compliance (B,10),
 - 2. Monitoring Report update (B,15),
 - 3. Final Discharge Point of the existing Sewage Disposal Facility (D,10),
 - 4. Operation and Maintenance Manual (F,1), (Draft)
 - 5. Instrumentation Monitoring (H,16).

A review of the above plans and reports is currently underway within the Water's Division of Indian and Northern Affairs, comments are due to the Board on November 9th, 2009. Presently the following deficiencies have been noted;

- 1. Part B Item 10 Plan for Compliance
 - The Plan as submitted does not meet the criteria set out under the license nor does it address those issues identified in past Inspection reports.
- 2. Part B Item 15 Monitoring Report Update
 - The License has not submitting sampling results, water usage data, Geotechnical information nor any of the information outlined in the current or past license as would normally be required as part of an annual report (Part B Item I through xiv). The assertion by the GN that this requirement will be undertaken once the new facilities are commissioned is, at best questionable. Compliance with the terms of the license and the Act is mandatory and includes that infrastructure that currently is in place and in use.
- 3. Part D Item 10 Final Discharge Point
 - The GN on behalf of the Licensee has identified in the submitted documents that a Final Discharge Point does not exist at the existing facilities at this time. Rather an explanation on the condition of the lagoon and treatment system (including wetlands) is presented. Finally the submission concludes with an assertion that a new facility, once complemented and commissioned, will have the required Final discharge point identified. This fails to meet the criteria as required under the license.
- 4. Part F Item 1- Operations and Maintenance Manual(Draft)
 - The GN has submitted, on behalf of the Licensee, a generic draft document that concentrates on a as yet to be built or commissioned facility and does not contain the required site specific information required by the license. The missing information includes but is not limited to the following; signed and stamped drawings of existing infrastructure, actual water usage and waste generation data, operations and technical information pertaining to the existing Water Supply facilities, Operations and technical information pertaining to the existing Solid Waste Management Area.
- 5. Part H Item 16- Instrumentation Monitoring
 - The above information was not self evident within the Information items submitted to the Nunavut Water Board. The Inspector is unclear if the information has been provided and calls upon the Licensee to provide clarification on this.

In short the information provided by the Government of Nunavut, on behalf of the Licensee, in the above submissions to the Nunavut Water Board are generic documents (in some cases in Draft Form) and contain information which fails to meet the requirements of the current license. The documents, as a package, reference the lack of specific information on the current infrastructure and operations within the Community and indicate the intention is to build new infrastructure at some future date and at that time to come into compliance with the license and Act.

For example, in a number of instances within the covering letters the author, Mr. Bhabesh Roy, Municipal Planning Engineer, Community Government and Services, Government of Nunavut makes the following statements;

"the required compliance plan will be implemented once the new sewage Lagoon is operational"

Page 3 of a letter dated September 1st, 2009 between Bhabesh Roy, and Mr. Richard Dwyer, Licensing Administrator, Nunavut Water Board. (attached)

And,

"Once funds are available, new facilitates (Speaking of the existing Land fill and Bulk Metal Management sites) will be built satisfying the requirements of the Community Water License. Proper O&M manuals, QA/QC plans and "Plans of Compliance" will be developed for the new waste management facilities once they are built and commissioned."

Page 3 of a letter dated September 1st, 2009 between Bhabesh Roy, and Mr. Richard Dwyer, Licensing Administrator, Nunavut Water Board. (attached)

And,

"Waste Management (Landfill and Bulky Metals): This is not a standard designed facility. No samples were taken and tested so far. But once the capital funds will be available, a new facility will be designed and built satisfying the guidelines of the NWB and sampling, testing and O&M will be followed accordingly."

Page 4 of a letter dated September 1st, 2009 between Bhabesh Roy, and Mr. Richard Dwyer, Licensing Administrator, Nunavut Water Board. (attached)

Continued failure to implement such actions and measures as are required to ensure compliance with the license and the Act will result in compliance and enforcement actions being undertaken by the Department. Compliance with an issued water license and the Act is mandatory and not an option to be elected or discarded when inconvenient.

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

The Licensee is required, in accordance with the terms and conditions of the current license to submit those items as outlined in the water License 3BM-ARC0810 and the associated amendment #1.

Additionally, prior to the period of the next Inspection the Licensee is required to address the following issues;

1. Submit an Operations and Maintenance Manual based on the specific in place infrastructure in the community.

This Plan is to include but not be limited to the following items;

- i. Water Distribution Facility Operation and Maintenance (O&M) Plan;
- ii. Sewage Disposal Facility Operation and Maintenance (O&M) Plan;
- iii. Sewage Sludge Management Plan;
- iv. Solid Waste Disposal Facility Operation and Maintenance (O&M) Plan;
- v. Spill Contingency Plan; and
- vi. Monitoring Program Quality Assurance/Quality Control Plan.
- 2. To address those areas as noted in the 2007 and 2008 Inspections where the Licensee is required to maintain and operate the Sewage Disposal Facility as to prevent structural failure. During the period of inspection the inspector noted and photographed the following issues with the sewage lagoon;
 - 1. Areas of erosion along the outside walls of the lagoon resulting in leakage from the toe of the lagoon.
 - 2. An obvious flow originating from the lagoon which enters an existing stream and continues downhill and into the wetlands area below the lagoon.

- 3. Ensure that copies of all chlorination records are available in the pumping station and Hamlet office during the period of the next Inspection.
- 4. To have addressed the issues as noted within the Bulk waste management areas including the lack of fencing and segregation of hazardous materials.

The Municipality of Arctic Bay continues to operate in Non-conformity with the terms and conditions of the Water License and the Nunavut water and Nunavut Surface Rights Tribunal Act. The Government of Nunavut, specifically the Department of Community and Government services is strongly encouraged to contact the Nunavut Water Board and the inspector to determine what is required to achieve and maintain compliance with the issued license and the Act.

A. Keim	
Inspector's Name	Inspector's Signature

Cc:

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













