



Inspection Report

License #: 3BM-GRI

Inspector: A. Keim

CIDMS # 279995

Client	Municipality of Grise Fiord		
Mailing Address	Box 77		
Inspection site location	Grise Fiord , Nunavut		
Contact name	Grant Scott	Title	A/ SAO
Last inspection date	August 19, 2006		
Inspection start date	July 12, 2008		
Region	Qikiqtani		



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

Submitted Via E-Mail
Our File: 3BM-GRI0308
Your File: _____
CIDM # 279995

May 22, 2009

Grant Scott
A/ Senior Administrative Officer
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Grise Fiord, Nunavut
XOA OJO
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RE: July 12, 2008 Municipal Water Licence Inspection 3BM-GRI0308

The Inspector would like to thank A/SAO Grant Scott who had only just arrived in the community, for taking the time to meet with the Inspector and to work through the Inspection process. The inspection of the water and waste management systems within the Municipality of Grise Fiord went smoothly because of Mr. Scott's efforts on our behalf.

Part B: General Conditions

During the period of inspection the Municipality of Grise Fiord was found to be operating under a current water license. That license is scheduled to expire on November 15th, 2008. A review of the Nunavut Water Board FTP site during the writing of this report found an application, supplementary questionnaire and letter of authorization to the Nunavut Water Board on file for the renewal of the water license. These documents were submitted by Grant Scott on September 29th, 2008.

During the same review of the Nunavut Water Board FTP site annual reports from 2003 through 2007 which were required under the existing license were not found. The Licensee is reminded that the NWB has imposed 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. Annual reports are required to be filed by March 31st for the year ending December 31st. The annual report **must** include but not be limited to those items listed in Section 1 (i) through (viii) inclusive, of this part as well as any information required by the Inspector.

The licensee is also reminded that pursuant to section 2 of this Part the Licensee has an obligation to comply with the "Monitoring Program" described in this Licence, and any amendments to the "Monitoring Program" as may be made from time to time, pursuant to the conditions of this Licence. The results of the sampling collected under the Monitoring program are to be submitted as part of the Annual report.

The Licensee is also reminded that signage continues to be a requirement under the current license and must be addressed by the period of the next inspection.

PART C: CONDITIONS APPLYING TO WATER USE

During the period of inspection it was noted that the Community of Grise Fiord is still collecting their Fresh water from the Glacial run off originating up the fiord directly behind the community. As noted in the past, the community has had repeated difficulties using the exiting collection area and has repeatedly not been able to collect enough fresh water to sustain the community for an entire year.



This has resulted in the community having to ration water, cut services and in fact harvest fresh water from Glaciers in the Fiord. The community of Grise Fiord requires an alternative to the presently used run off ditch in the community for collecting and transferring fresh water.

As was suggested during the period of Inspection there exists 300 m away from the current collection site a fast flowing river which originates in the same location has the current source water. This river, it was suggested, may have enough capacity and flow for long enough duration during the short summer season to allow the community to completely fill their fresh water storage tanks.

A visual inspection of the intake facilities was conducted during the period of inspection. Water samples were taken from run off collected in the ditch. None of the samples collected returned results in excess of the Canadian Council of Ministers of the Environment (CCME) guidelines for Community Drinking Water;

The Inspector is supportive of the efforts required to research this options and to immediately take the steps necessary to provide the community of Grise Fiord was a sustainable and adequate source of fresh water

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 Concentration
Faecal Coliform :	1X 10 ⁶ CFU/100mL
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 Municipality.

Samples collected from the receiving environment approximately 500 m from the lagoon did not return any results in excess of the Licensing criteria or the Limits for Effluent Parameters for Specific Discharges criteria.

Solid Waste Management Area;

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

- No segregation of materials within the dump has been undertaken by the Licensee contrary to Section 7 of this Part;

PART E: CONDITIONS APPLYING TO MODIFICATION 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 works undertaken during the period of the current license.

The Licensee is reminded that once works have been completed and pursuant to Section 4 of this part, the Licensee shall provide as-built plans/drawings of the modifications referred to in this Licence within ninety (90) days of



completion of the modifications to the Nunavut water Board.

PART F: CONDITIONS APPLYING TO OPERATION AND MAINTENANCE

During the period of Inspection it was noted that an Operations and Maintenance Manual was not available for review. A review of the Nunavut Water Board FTP site was undertaken during the compilation of this report was also unable to locate a copy of the Operations and maintenance manual.

The Licensee is reminded that Pursuant to Section 1 of this Part the Licensee was required, before May 31, 2004 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). This Plan shall specifically address the hazardous waste disposal and operational issues at the Solid Disposal Facility, which were identified in the July 20-21, 2001 DIAND Inspection Report.

As this Plan is not available for review on the FTP site an the Required manuals were not available for review on site the Inspector seeks clarification from the Licensee on the status of this requirement.

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.

Waste monitoring:

During the inspection it was noted that the Hamlet had not complied with Section 2 of this Part. The Licensee is reminded that they must collect the required samples at two locations (GRI-2 and GRI-3) during the months of May to August, inclusive as outlined in the current 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.



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

Issues with a known or anticipated human health impacts;

- Develop and submit to the Nunavut water Board for approval a plan to address TSS and other issues with the current water supply system.

Issues where there is a known or anticipated environmental impairment;

- Failure to take steps to control and mitigate runoff from the Solid Waste Management Facility.
- Failure to segregate and properly store/dispose of hazardous wastes within the Municipal Solid waste Disposal Area.

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

- Submit required Annual reports.
- Maintain the appropriate signage, and Surveillance Network Program (SNP).
- Implement the requirements listed under the Monitoring Program.
- Operation and Maintenance Manual for the Water Supply Facilities and the Solid Waste Disposal Facilities.
- Development and submission of a QA/QC Plan.

The Municipality of Grise Fiord continues to operate in Non-conformity with the terms and conditions of the Water License issued in 2003 and which expired November 15, 2008.

A. Keim

Inspector's Name

Inspector's Signature

Attached under separate cover;
Photos taken during Inspection of July 12, 2008

Cc:

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













