



October 1, 2010

Our reference
File #9545-2-3.3BM.HALA
CIDM #427086

Sent by email: licensing@nunavutwaterboard.org

Your reference
3BM-HAL0810

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
Gjoa Haven, Nunavut
X0E 1J0

**Re: Nunavut Water Board License #3BM-HAL0810, Hamlet of Hall Beach,
Qikiqtani Region, Renewal Application**

Dear Phyllis,

Thank you for your September 2, 2010 letter regarding the April 12, 2010 water license renewal application submitted by the Government of Nunavut's Department of Community and Government Services on behalf of the Hamlet of Hall Beach. Interested parties were requested to review this submission and provide written representations by October 2, 2010.

A Technical Review Memorandum is provided for the Board's consideration.

Please do not hesitate to contact me by telephone at 867 975-4555 or email at david.abernethy@inac-ainc.gc.ca to discuss this submission.

Regards,

David W. Abernethy
Water Resources Regional Coordinator
Operations Directorate
Nunavut Regional Office
Iqaluit, Nunavut
X0A 0H0

Encl.

c.c.: L.A. Cornacchio, Water Resources Manager
P. Kusugak, Field Operations Manager

Technical Review Memorandum

TO	Phyllis Beaulieu Manager of Licensing Nunavut Water Board	OUR REFERENCE File #9545-2-3.3BM-HALA CIDM #427086
FROM	David Abernethy Water Resources Regional Coordinator Indian and Northern Affairs Canada	YOUR REFERENCE 3BM-HAL0810 DATE October 1, 2010
SUBJECT	Nunavut Water Board License #3BM-HAL0810, Hamlet of Hall Beach, Qikiqtani Region, Renewal Application	

A. PROJECT DESCRIPTION

On Sept. 2/10 the Nunavut Water Board (NWB or Board) distributed a license renewal application that was submitted by the Government of Nunavut's Department of Community and Government Services (GN-CGS) on behalf of the Hamlet of Hall Beach. The Hamlet of Hall Beach's Type B license, #3BM-HAL0810, allows for the use of water and the disposal of waste for municipal undertakings. Its terms and conditions are designed to ensure that such undertakings do not negatively impact the quality or quantity of water within the drainage basin where the Hamlet of Hall Beach is situated. Interested parties were requested to review this submission and provide written representations by October 2, 2010.

B. RESULTS OF REVIEW

On behalf of the Indian and Northern Affairs Canada Water Resources Division I am providing the following comments / recommendations for the Board's consideration,

1. General Observations

a. License Expiry

The Hamlet of Hall Beach's Type B water license expired on May 30/10. The GN-CGS's Apr. 12/10 renewal application's submission date did not allow enough time for the license to be renewed prior to its expiry. The Hamlet of Hall Beach and the GN-CGS must file water license renewal and amendment applications well in advance of desired issuance dates and be reminded that the

completeness of an application directly impacts the length of time required for it to be processed.

b. Authorization from Licensee

A signed letter from the Hamlet of Hall Beach authorizing the GN-CGS to be their representative in the licensing process was not included in the submitted license renewal application. The Hamlet of Hall Beach should provide this information prior to any license issuance.

c. Requested License Term

The submitted license renewal application requests a five (5) year term. This request is considered to be reasonable. Although it is evident that the Hamlet of Hall Beach did not fulfill all of their terms and conditions (based on my review of submitted information and INAC Inspection Reports) it is desirable for the Hamlet of Hall Beach to operate and work toward compliance under a valid license.

2. Plan for Compliance

The Hamlet of Hall Beach is required to submit a Plan for Compliance pursuant to Part B: General Conditions, Item #10 of their License. This condition states,

The Licensee shall submit to the Board for approval within the lesser of ninety (90) days or upon the filing of any application in relation to the Licence, a Plan for Compliance that clearly demonstrates the ways and means the Licensee will undertake to achieve full compliance with the conditions of this Licence. The Plan for Compliance must also address the potential for minimally treated sewage to enter the environment during periods when the wetland area may be frozen or otherwise not fully capable of treating sewage.

The GN-CGS submitted a Plan for Compliance with their Apr. 12/10 license renewal application. Brief descriptions of the Water Supply, Sewage Disposal, and Solid Waste Disposal Facilities are provided. In addition, the retention of a consulting firm (Dillon Consulting Ltd.) to implement and oversee measures to bring the Hamlet of Hall Beach into compliance with their license terms and conditions is mentioned.

This Plan for Compliance provides a general overview of how the Hamlet of Hall Beach and the GN-CGS will work toward achieving compliance with their license terms and conditions. However, it lacks in detail and does it address the potential for minimally treated sewage to enter the environment during periods when the wetland area may be frozen or otherwise not fully capable of treating sewage. It is recommended that this plan's revision be a priority for the Hamlet of Hall Beach and that it be revised to (a) identify areas of non-compliance, (b) specify

action items, and (c) provide timelines for delivery of action items. All outstanding submissions to the Board and issues identified by INAC Inspectors must be addressed. Furthermore, a revised plan should be submitted to both the NWB and INAC Field Operations for review.

3. Annual Reporting Requirements

a. Outstanding Annual Report Submissions

The NWB's online public registry does not have a complete record of annual reports required by the Hamlet of Hall Beach's municipal license. The only report available for review is for 2009 which was submitted with the license renewal application. The Hamlet of Hall Beach must submit all outstanding annual reports to comply with their license obligations (refer to Part B: General Conditions, Item #1 of the license). The NWB's standardized form for annual reporting should be used and completed with sufficient detail to provide an accurate briefing of municipal activities. Furthermore, the submission of these reports should be addressed in a revised Plan for Compliance.

b. 2009 Annual Report

The submitted 2009 Annual Report does not demonstrate that all of the monitoring program requirements (Part H: Conditions Applying to the Monitoring Program of the license) are being met. It is noted that the quantity of water consumed, the quantity of sewage generated, and some sewage disposal facility effluent data, and potable water quality data (not applicable to this license) were provided. Suggestions on how the Hamlet of Hall Beach and the GN-CGS can improve these submissions are as follows,

- All effluent quality results should be associated/ correspond with applicable monitoring program stations (MPS) identified in the license (e.g., MPS-4: Effluent Discharged from Sewage Disposal Facility);
- All outstanding information requirements must be provided. The 2009 Annual Report did not address Part H, Item #s 2, 3, 4, and 7 of the license;
- A topographic map that identifies all monitoring program stations and associated municipal facilities should be included;
- A written summary of monitoring events in chronological order should be provided (e.g., when the INAC Inspector is notified that effluent originating from the Sewage Disposal Facility at MPS-4 is observable and when water quality samples are collected as per license requirements); and,
- Summary tables that present data collected pursuant to the monitoring program.

4. Operations and Maintenance Manual

a. Timeline and Format

The Hamlet of Hall Beach was required to submit a complete Operations and Maintenance Manual pursuant to Part F: Conditions Applying to Operations and Maintenance, Item #1 of their license by Aug. 27/08. Some, though not all sections of this manual were provided as appendices to the license renewal application. It is recommended that this manual be submitted under separate cover referencing its applicable license requirement and include all of the required plans (i.e., Water Distribution Facility Operation and Maintenance (O&M) Plan, Sewage Disposal Facility O&M Plan, Sewage Sludge Management Plan, Solid Waste Disposal Facility O&M Plan, Spill Contingency Plan, and Monitoring Program Quality Assurance / Quality Control Plan).

b. Water Distribution Facility Operations and Maintenance Plan

The GN-CGS July 17/19 letter to the NWB titled, "Response to July 12 Letter" states that the Hamlet of Hall Beach has an up to date operation and maintenance manual to operate the water truck fill station and it will be revised when needed. A copy of this manual was not included in the license renewal application. It is recommended that the Hamlet of Hall Beach and the GN-CGS revise this document to reflect the format specified by the NWB (i.e., it should be titled Water Distribution Facility Operation and Maintenance Plan and be a component of an Operation and Maintenance Manual) and make it available for review. As a minimum, this plan should address the bermed reservoir, preventative maintenance, and routine water quality and quantity monitoring measures.

c. Sewage Disposal Facility Operations and Maintenance Plan

An operations and maintenance plan for the Sewage Disposal Facility has not been provided to the Board. This plan should be developed and be incorporated into the Operation and Maintenance Manual required by Part F, Item #1 of the license.

d. Sewage Sludge Management Plan

A Sewage Sludge Management Plan has not been provided to the Board. This plan should be developed and be incorporated into the Operation and Maintenance Manual required by Part F, Item #1 of the license.

e. Solid Waste Disposal Facility Operations and Maintenance Plan

An operations and maintenance plan for the Solid Waste Disposal Facility has not been provided to the Board. This plan should be developed and be incorporated into the Operation and Maintenance Manual required by Part F, Item #1 of the license. In their July 19 letter to the Board, titled, "Response to July 12 letter," the GN-CGS states that they have contracted a consulting firm to perform a solid waste management study and that this plan will be developed once a new facility is commissioned. It is recommended that the Hamlet of Hall Beach and the GN-CGS develop an operations and maintenance plan for the existing facility, as required by their license, and revise it accordingly when it is replaced with a new facility. This plan must address the management of bulky metal and hazardous waste materials.

f. Spill Contingency Plan

A Spill Contingency Plan was included in the license renewal application. This plan "addresses potential environmental spill incidents that may occur during routine operation of environmental facilities and during their new construction phases." It describes the facilities covered by the plan, spill response procedures, reporting contacts, spill response equipment, and training. It is recommended that this plan be revised to include the following,

- Contact information for the Hamlet of Hall Beach representative responsible for preventing and responding to fuel and hazardous material spills;
- INAC Field Operations contact information. Fuel and hazardous material spills should be reported to the INAC Manager of Field Operations by telephone at 867 975-4295 or fax at 867 979-6445;
- The locations where spill response equipment will be mobilized; and,
- Applicable Material Safety Data Sheets.

g. Monitoring Program Quality Assurance / Quality Control Plan

Two quality assurance / quality control (QA/QC) plans for water quality sample analysis were included in the license renewal application. One for the Hamlet of Hall Beach's potable water supply and one for the quality of effluent released from the sewage disposal facility. These plans present the QA/QC procedures provided by the lab currently retained to analyze the quality of water samples (Caducedon Environmental Laboratories). It is recommended that a single QA/QC plan be developed specific to the licensed monitoring program and be prepared in accordance with INAC's July 1996 QA/QC Guidelines (attached). The plans provided in the license renewal application are more appropriate for lab analysts rather than for the Hamlet staff who will collect samples.

5. Other

a. Questionnaire

The NWB's license application questionnaire should be completed and submitted for review as a supporting document to the license renewal application. The January 2003 questionnaire posted on the NWB's public registry no longer provides an accurate reflection of the Hamlet of Hall Beach's current water and waste management practices.

b. Geotechnical Inspection

Pursuant to Part F: Conditions Applying to Operation and Maintenance, Item #3 of the license, "an inspection of all engineered facilities related to the management of water and waste shall be carried out annually in July or August by a Geotechnical Engineer. The engineer's report shall be submitted to the Board within sixty (60) days of the inspection, including a covering letter from the Licensee outlining an implementation plan to address each of the Engineer's recommendations." There is no record of any such inspections on the NWB's public registry. The Hamlet of Hall Beach should notify the Board on their compliance status with this license condition. If these inspections have not been carried out they should be addressed in a revised Plan for Compliance.

Prepared by David Abernethy