



April 4, 2012

Our reference  
IQALUIT-#509392

Sent by email: [licensing@nunavutwaterboard.org](mailto:licensing@nunavutwaterboard.org)

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

Your reference  
3BM-HAL0810

**Re: Water Licence No. 3BM-HAL0810, Renewal Application – Hamlet of Hall Beach – Qikiqtani Region**

Dear Phyllis,

Thank you for your January 31, 2012 request for written representations on the above referenced water licence renewal application.

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@aandc-aadnc.gc.ca](mailto:David.Abernethy@aandc-aadnc.gc.ca) to discuss this submission.

Regards,

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

Encl.

Cc: Murray Ball, Manager of Water Resources, AANDC

## Technical Review Memo

<b>TO</b>	Phyllis Beaulieu Manager of Licensing Nunavut Water Board	OUR REFERENCE File #9545-2-3.3BM.HALA IQALUIT-#509392
<b>FROM</b>	David Abernethy Water Resources Regional Coordinator Aboriginal Affairs and Northern Development Canada	YOUR REFERENCE 3BM-HAL0810  DATE April 4, 2012
<b>SUBJECT</b>	<b>Water Licence No. 3BM-HAL0810, Renewal Application – Hamlet of Hall Beach – Qikiqtani Region</b>	

### A. PROJECT DESCRIPTION

On behalf of Aboriginal Affairs and Northern Development Canada (AANDC), I have reviewed the additional documentation distributed by the Nunavut Water Board (the NWB or Board) on January 31, 2012 in support of the above referenced water licence renewal application. This documentation was submitted by the Government of Nunavut's Department of Community and Government Services (the GN-CGS) on behalf of the Hamlet of Hall Beach.

This additional documentation is as follows:

- Executive Summary, English and Inuktitut;
- June 2011 Sewage Treatment Facility Operations and Maintenance (O&M) Manual;
- June 2011 Solid Waste Facility O&M Manual;
- June 2011 Spill Contingency Plan, Sewage Treatment and Solid Waste Sites;
- 2010 Annual Report; and,
- Plan for Compliance.

Furthermore, the 2011 Annual Report and the AANDC Multi-year Compliance Summary Report distributed by the NWB on March 3 and March 8, 2012 were included in my review.

The Hamlet of Hall Beach is applying for a renewal of their Type 'B' municipal water licence. This licence expired on May 30, 2010. The NWB received a renewal application from the GN-CGS on May 21, 2010, and following a preliminary technical review and receipt of additional information requirements, distributed this application to interested parties for review on September 2, 2010. Comments/ recommendations were provided by AANDC on October 1, 2010. The NWB are now carrying out a subsequent review of additional documentation associated with this renewal application.

# Technical Review Memo

The Hamlet of Hall Beach's water licence allows for the use of water and disposal of waste for municipal undertakings. Licensed activities include the consumption of potable water from Fresh Water Lake, the treatment of municipal wastewater effluent, and the management of solid waste and hazardous waste materials.

## **B. RESULTS OF REVIEW**

The following comments/ recommendations are provided for the Board's consideration,

### **1. Sewage Treatment Facility**

According to the submitted Sewage Treatment Facility O&M Manual, AANDC Inspection Reports, and Plan for Compliance, the Sewage Treatment Facility's two lagoons have a limited wastewater retention capacity that can be attributed to a berm failure and chronic leaks. AANDC acknowledges that the GN-CGS and the Hamlet of Hall Beach are planning to design and construct a new lagoon at some point in the future. However, in the interim period, it is recommended that the GN-CGS and the Hamlet of Hall Beach work toward repairing the existing Sewage Treatment Facility lagoon cells to ensure that municipal wastewater is being adequately treated. The NWB should be regularly informed of any planned measures to improve the retention capacity of these two lagoons.

### **2. Solid Waste Facility**

As indicated in the submitted Solid Waste Facility O&M Manual and Plan for Compliance, the GN-CGS and the Hamlet of Hall Beach are making efforts to improve the management solid wastes and hazardous materials. Substantial changes have been proposed to the waste management practices reflected in AANDC Inspection Reports to date (e.g., the implementation of a no-burn policy). AANDC recommends that the Solid Waste Facility O&M Manual be regularly reviewed and revised when necessary so that it can adequately reflect the day to day management of waste materials for the benefit of Municipal staff, the GN-CGS, regulators, and other interested parties.

### **3. Monitoring Program**

- The 2010 and 2011 Annual Reports provide the quantity of water consumed and estimate of sewage waste discharged.

## Technical Review Memo

- The 2010 Annual Report includes water quality and aquatic life monitoring data as required by the Hamlet of Hall Beach's water licence monitoring program. This data was collected with the assistance of a consultant retained by the GN-CGS. AANDC appreciates that the Hamlet of Hall Beach and the GN-CGS endeavoured to satisfy their monitoring program requirements in 2010, although samples were collected only once from monitoring program station no.'s HAL-4 and HAL-5 (the licence requires sampling every four weeks after flow is observed) and the cover letter for the monitoring data notes that the results may have been compromised due to transportation complications,.
- The water quality data included in the 2010 Annual Report indicates that pH from monitoring program station no. HAL-4 (effluent discharged from the sewage disposal facility) was 9.20. This exceeds the maximum average concentration of 6 to 9 as specified in Part D, Item No. 3 of the Hamlet's water licence. The Hamlet of Hall Beach should fully implement their monitoring program during the 2012 summer season, and provide monitoring results to the Board. The availability of data will allow reviewers to monitor trends in sampled parameters.
- Although no water quality or aquatic life monitoring data was submitted with the 2011 Annual Report, greater detail was provided for questions iv through ix when compared to the 2010 Annual Report which provided no information at all. The Hamlet of Hall Beach should continue this practice in subsequent annual report submissions. In addition, revised versions of their Plan for Compliance and details on how areas of non-compliance identified by AANDC Water Resource Officers should be provided in annual reports.

Prepared by David Abernethy