



Nunavut Regional Office
Operations Directorate
Water Resources Division
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Jan. 2, 2009

Via Email

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
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File #9545-2-3.3BM.CLYA
CIDMS #291511

**Subject Water License #3BM-CLY0308, Hamlet of Clyde River,
Qikiqtani Region, Renewal Application**

Dear Phyllis,

Please be advised that on behalf of Indian and Northern Affairs Canada (INAC), I have reviewed the Hamlet of Clyde River's above-referenced license renewal application submitted to the Nunavut Water Board (Board or NWB) for approval (received Sept. 5/08).

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

Should you have any questions regarding my comments and recommendations, feel free to contact me at 867-975-4555 or AbernethyD@inac-ainc.gc.ca.

Regards,
David W. Abernethy
Regional Coordinator

Cc. Tanya Trenholm, Acting Manager of Water Resources
 Kevin Buck, Manager of Water Resources
 Bernie MacIsaac, Manager of Field Operations

Technical Review Memorandum

Date: Jan. 2/09

To: Phyllis Beaulieu, Nunavut Water Board

From: David Abernethy, Indian and Northern Affairs Canada

Re: Water License #3BM-CLY0308, Hamlet of Clyde River, Renewal Application, Received by the Nunavut Water Board on September 5, 2008

1. Description

The Hamlet of Clyde River has submitted a renewal application for its municipal water license, #3BM-CLY0308, which will expire on Mar. 15/09. The Board received this application on Sept. 5/08. Following a preliminary review of this application and concluding that it meets the requirements of Section 48(1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, the Board invited interested parties to make representations through a written notice distributed by email on Dec. 8/08.

It should be noted that this license was amended on Sept. 26/08, following an amendment application review, to include the following undertakings:

- Rehabilitation of the existing Sewage Disposal Facility comprised of a sewage lagoon;
- Construction of a new sewage treatment cell to the south and west of the existing lagoon;
- Effluent release to a filter strip wetland area that is 720 m long, 325 m wide, and flows into a marine environment; and,
- Quarry development.

Due to the close proximity of the license renewal application's submission date and the previous license expiry date, the Board decided to extend the license' expiry date by six (6) months, to Mar. 15/09 during the license amendment application review process.

The submitted renewal application consists of the following documents:

- Renewal Application Cover Letter dated Aug. 19/08;
- Water License Application Form;
- Technical Summary, English and Inuktitut;
- Draft Spill Response Plan – Aggregate Deposits; and,
- Municipal Questionnaire.

2. Comments and Recommendations

The following comments and recommendations are provided for the Board's consideration in this license renewal application approval process.

A. Timing of License Renewal Application Submissions

The Hamlet should maintain an awareness of its municipal license requirements and be mindful of the review process that the Board undertakes when reviewing water license submissions. As a minimum, INAC recommends that license renewal and amendment applications be submitted for review four (4) months prior to expiry dates and/or carrying out planned modifications to water use and waste disposal operations so that they can be properly processed by the Board.

B. Identification of Monitoring Program Stations

According to the completed Municipal Questionnaire there are no signs identifying the Licensed Monitoring Program Stations situated at the Hamlet's drinking water source, Sewage Treatment Facility, and Solid Waste Disposal Facility. Signs must be posted and maintained in these locations to the satisfaction of an Inspector in accordance with Part B, Item #5 of the License. INAC recommends that these signs be mobilized as soon as possible. Temporary signs should be set-up until such a time that permanent signs can be put in their place.

C. "Plan for Compliance"

The Sept. 26/08 amendment inserted Item #10 to Part B of the License. This condition reads:

"The Licensee shall submit to the Board for approval, within ninety (90) days of the License issuance or upon the filing of any application in relation to the License within that time, a *Plan for Compliance* that clearly demonstrates the measures the Licensee will undertake, including an implementation schedule, to achieve full compliance with the conditions of this License, including the issues raised in the Inspector's Reports."

The Hamlet must prepare this Plan and respect the timelines written in its License.

D. Spill Contingency Planning

i. Development of a Comprehensive Hazardous Material Spill Contingency Plan

INAC recommends that a comprehensive Municipal Hazardous Material Spill Contingency Plan applicable to the Hamlet of Clyde River municipal land be submitted to the Board for approval. Further, the submitted Draft Spill Response Plan for Aggregate Deposits should be incorporated into this Plan.

ii. Missing Contact Information in Nov. 08 *Draft Spill Response Plan for Aggregate Deposits, Clyde River*

Section 4.0, Contacts and Regulatory Authorities, is missing important sources for the notification of hazardous material spills. Municipal contacts and the INAC Nunavut Regional Office (NRO) Field Operations Division are not included. The INAC NRO Field Operations can be reached by telephone at 867-975-4295 and fax at 867-979-6445.

iii. Material Safety Data Sheets

The Nov. 08 *Draft Spill Response Plan for Aggregate Deposits, Clyde River* should include all applicable Material Safety Data Sheets. This is standard information included in Spill Contingency Plans as per INAC's Apr. 07 *Guidelines for Spill Contingency Planning* (<http://www.mvlwb.ca/Library/INAC%20Spill%20guidelines%20April07.pdf>).

E. Operations and Maintenance Planning

The Hamlet of Clyde River must provide an Operations and Maintenance Manual that satisfies those requirements specified in Part F, Item #s 1 and 2 of the License. This Manual must contain the following plans:

- Sewage and Solid Waste Operation and Maintenance Plan;
- Hazardous Waste Management Plan;
- Sludge Management Procedures;
- Spill Contingency Plan; and,
- Monitoring Program Quality Assurance / Quality Control Plan.

F. Sewage Disposal Area

The Sept. 26/08 License amendment thoroughly addressed rehabilitation measures to the Hamlet's existing Sewage Disposal Facility. Unless the Hamlet proposes further changes, INAC does not have any comments and recommendations on this matter.

G. Solid Waste Disposal Area

i. Planned Facility Upgrades and Development

Pages 10 and 11 of the completed Municipal Questionnaire mention that the Solid Waste Disposal Area will undergo major upgrades in accordance with the GN-CGS 2009-11 Capital Plan. Planned changes to this facility include "an increase in its area, the construction of separate cells for different types of waste, fencing, signage, possible equipment for recycling / waste reduction, and an operations plan." It is noted that there is no specific timeline for the proposed facility upgrades.

The Hamlet of Clyde River should implement its plan to improve the Solid Waste Disposal Facility's design as soon as possible. The facility's current condition does not instill confidence that Part D, Item #s 6 and 7 are being satisfied (i.e., the containment of solid wastes, leachate, and hazardous materials).

ii. Open-burning

Page 9 of the completed Municipal Questionnaire states that solid wastes are burned on a regular basis at the Solid Waste Disposal Area as waste reduction measure. It is not known whether solid waste materials are source separated such that only paper products, paperboard packing and untreated wood wastes, which are conditionally suitable are burned as per the Government of Nunavut's position paper, "*Municipal Solid Wastes Suitable for Open Burning*." The Hamlet must follow those procedures outlined in this document to prevent or minimize impacts to surface water resulting from the deposition of wastes associated with incomplete combustion and the leaching of ash residue through precipitation run-off. As such, there should be no open burning of plastics, wood treated with preservatives, Styrofoam, electrical wire, asbestos, or demolition wastes.

3. Summary

Various comments and recommendations have been provided to the Board for consideration in its approval of the Hamlet of Clyde River's municipal license renewal application, Water License #3BM-CLY0308. They are categorized under the following categories in Section #2 of this Technical Review Memorandum:

- Timing of License Renewal Application Submissions
- Identification of Monitoring Program Stations
- "Plan for Compliance"
- Spill Contingency Planning
- Operations and Maintenance Planning
- Sewage Disposal Area; and,
- Solid Waste Disposal Area.

Please feel free to contact me at your convenience to further discuss this representation to the Board. I can be reached at 867-975-4555 and David.Abernethy@inac-ainc.gc.ca.

David W. Abernethy

Regional Coordinator
Indian and Northern Affairs Canada
Nunavut Regional Office – Water Resources Division