



Water Resources Division
Nunavut Regional Office
Iqaluit, NU X0A 0H0

April 20, 2009

Richard Dwyer
Licensing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0A 1J0

Your File: 3BM-WHA0207
Our File: 9545-2-3WHAG
CIDM's #: 323972

**Re: Hamlet of Whale Cove – Type 'B' Water Licence Renewal
Landfarm Facility Licence #: 3BM-WCL0712**

Indian and Northern Affairs Canada (INAC) has completed a review of the Type 'B' renewal application of the expired water licence #: 3BM-WHA0207 for the Hamlet of Whale Cove. The Hamlet submitted their application to the Nunavut Water Board (NWB) on September 5th, 2007.

The Hamlet of Whale Cove has submitted a comprehensive set of operational plans for the renewal of the license. These plans include:

- Environmental Emergency Contingency Plan
- Environmental Monitoring Program & Quality assurance Quality Control (QA/QC) Plan
- Sewage Treatment Operation and Maintenance (O&M) Plan
- Solid Waste Management Facility O&M Plan
- Water Supply Facility O&M Plan

In conducting this review, I have referred to the plans above as well as all other documents on the NWB's FTP-Site under 3BM-WHA0207. Attached is a Technical Review Memorandum for your consideration in the approval of this renewal application.



Please feel free to contact me should you have any questions or comments. I can be reached at (867) 975-4568 or by email at Ian.Rumbolt@inac-ainc.gc.ca.

Sincerely,

Original signed by

Ian Rumbolt
Regional Coordinator



Technical Review Memo

To: Richard Dwyer – Licensing Administrator, Nunavut Water Board

From: Ian Rumbolt – Regional Coordinator, Indian & Northern Affairs Canada

**Re: Hamlet of Whale Cove – Type ‘B’ Water Licence Renewal
Landfarm Facility Licence #: 3BM-WCL0712**

Background

On August 31st, 2007 the Water Licence #: 3BM-WHA0207 for the Hamlet of Whale expired. On September 5th, 2007 a renewal Type ‘B’ water licence application for the Hamlet of Whale Cove was received by the Nunavut Water Board. Due to insufficient application information the NWB requested that the Hamlet provide additional information, specifically the Water Licence Application Supplementary Questionnaire and Written Summary of existing water use and waste disposal facilities status (in English and Inuktitut).

In February 2009 the Hamlet provided this outstanding information to the NWB. This included the following,

- Water Licence Application, received September 5, 2007
- Compliance submission letter, received February 11, 2009
- English Executive Summary, received February 20, 2009
- Environmental Emergency Contingency Plan, received February 20, 2009
- Environmental Monitoring Program & QA/QC Plan, received February 20, 2009
- Sewage Treatment O&M Plan, received February 20, 2009
- Solid Waste Management Facility O&M Plan, received February 20, 2009
- Supplementary Questionnaire, received February 20, 2009
- Water Licence Annual Report, received February 20, 2009
- Water Supply Facility O&M Plan, received February 20, 2009



Comments/Recommendations:

Solid Waste Management Facility (O&M) Plan

- 1) Under section VII. Public Concerns of the Water Licence Application Supplementary Questionnaire for Municipalities it is noted that the fence surrounding the municipal landfill is inadequate and falling down on the northern side. INAC recommends that the Hamlet repair or replace sections of the fence that are inadequate or falling down. This will limit the amount of wind blown garbage exiting the landfill and entering into nearby streams, rivers and/or water bodies.
- 2) During any restoration or operational activity there should be no open burning of plastics, wood treated with preservatives, electrical wire, Styrofoam, asbestos or painted wood to prevent the deposition into any surrounding waters of waste or toxic materials generated due to incomplete combustion and/or leachate from contaminated ash residues. This type of material must be disposed of appropriately at the waste disposal site.

Sewage Treatment Facility (O&M) Plan

- 1) In the Sewage Treatment Facility (O&M) Plan states in section 3.1.3 Sewage Retention “The level of the lagoon remains consistent indicating that the flow out of the lagoon is equal to the flow into the lagoon.” It is also mentioned that, in 2008, calculated retention times showed a sewage retention time of 220 days with dilution and 608 days without dilution. It is not clear how the lagoon could have 220 days of retention time when the flow into the lagoon equals the flow out of the lagoon. INAC requests that the proponent provide more information (including diagram) about the lagoon capacity (volume), total inflows and outflows, as well as clarifying the calculations used in determining these figures.



Water Supply Facility (O&M) Plan

- 1) It was noted in the INAC 2008 Water Use Inspection Report that the Hamlet of Whale Cove had not been collecting raw water samples or recording required information. Records for all water usage and waste disposal, as well as chlorine usage should be recorded daily and included in the annual report submitted to the NWB. This is a standard requirement for all licensees.

Environmental Monitoring Program and QA/QC Plan

This plan appears to be satisfactory.

Environmental Emergency Contingency Plan

This plan appears to be satisfactory.

Water Licence Annual Report 2008

- 1) In the Sewage Treatment Facility O&M Plan the estimated volume of wastewater produced (based on calculations) is 12,918 m³. However, in the 2008 Annual Report the actual volume of sewage wastewater recorded was 14,427 m³. This is approximately 1500 m³ more sewage/wastewater than the calculated approximation. INAC suggests that the proponent provide clarification in regard to this discrepancy and submit any updated calculations and diagrams.
- 2) Under Section 7.3 - Solid Waste Management Facility, the Plan references the CCME Guideline for the Protection of Aquatic Life for Copper to be 0.04 mg/L, but instead it should be 0.02 mg/L.
- 3) INAC recommends that the Hamlet include more of the results/data from previous INAC Inspection reports referenced in the 2008 Annual report. This is especially relevant with respect to actions taken in response to previous identified non-compliance. For example the 2008 Annual Report references two inspection reports (2001 and 2003) I have attached the



2006 INAC inspection report which was completed (could not locate on the NWB FTP site).

Other Comments

- 1) The Nunavut Water Board should approve all Plans, including any relevant comments from interveners, prior to the issuance of a new license and ensure they are included as part of the license requirements.

Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4568 or by email at Ian.Rumbolt@inac-ainc.gc.ca.

Sincerely,

Original signed by

Ian Rumbolt
Regional Coordinator

Cc. Kevin Buck, Manager of Water Resources – Indian and Northern Affairs Canada, Nunavut Regional Office