Aboriginal Affairs and Northern Development Canada Nunavut Regional Office **Operations Directorate** P.O. Box 100 IQALUIT, NU X0A 0H0

June 22, 2012

Our reference: IQALUIT-#538861

Ms. Phyllis Beaulieu Manager of Licensing **Nunavut Water Board** P.0. Box 119 GJOA HAVEN, NU X0E 1J0

Your reference: 3BM-CLY0909/F1,&2

Sent via email

Re: Water Licence 3BM-CLY0909 – Hamlet of Clyde River – Submission of Wastewater Facility Operations and Maintenance Manual – Qikiqtani Region

Dear Ms. Beaulieu,

Thank you for your May 30, 2012 request for written representations on the abovereferenced water licence related submission.

A Technical Review Memorandum is provided for the Board's consideration. Comments/ recommendations have been provided pursuant to the Department's mandated responsibilities under the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Department of Indian Affairs and Northern Development Act.

Please do not hesitate to contact me by telephone at (867) 975-4555 or email at David.Abernethy@aandc-aadnc.gc.ca to discuss this submission.

Regards,

David Abernethy Regional Coordinator Water Resources Division

Encl.

C.C.: Murray Ball, Manager of Water Resources



TECHNICAL REVIEW MEMORANDUM

TO Phyllis Beaulieu OUR REFERENCE

Manager of Licensing File #9545-2-3.3BM.CLY0909

Nunavut Water Board IQALUIT-#538861

FROM David Abernethy YOUR REFERENCE 3BM-CLY0909/F,1&2

Water Resources Regional Coordinator

Aboriginal Affairs and Northern DATE

Development Canada June 22, 2012

SUBJECT Water Licence 3BM-CLY0909 – Hamlet of Clyde River – Submission of

Wastewater Facility Operations and Maintenance Manual – Qikiqtani

Region

A. PROJECT DESCRIPTION

On May 30, 2012 the Nunavut Water Board (NWB or Board) distributed an Operations and Maintenance Manual (O&M Manual) specific to the Hamlet of Clyde River's Wastewater Facility, dated November 2011, to interested parties for review. The Government of Nunavut's Department of Community and Government Services (GN-CGS) submitted this plan on behalf of the Hamlet pursuant to Part F, Items 1 and 2 of the Hamlet's municipal water licence, 3BM-CLY0909.

Part F, Items 1 and 2 of water licence 3BM-CLY0909 state,

- 1. The Licensee shall submit to the Board for approval in writing, within sixty (60) days of issuance of this Licence, and Operation and Maintenance Manual (O&M Manual) prepared where appropriate, in accordance with the Guidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories; 1996. This manual shall specifically address issues which were identified in the August 21, 2001 DIAND Inspection Report, with respect to the operations and facility capacity at the Sewage Disposal Facility and include the following Plans:
 - a. Water Supply Facility Operation and Maintenance Plan;
 - b. Sewage ad Solid Waste Operation and Maintenance Plan;
 - c. Hazardous Waste Management Plan;
 - d. Sludge Management Procedures;
 - e. Spill Contingency Plan, including updated Spill Response Plan for Aggregate Deposits;
 - f. Monitoring Program Quality Assurance/ Quality Control Plan (QA/QC Plan)

2. The Licensee shall submit to the Board for approval, a minimum of ninety (90) days prior to commissioning of the Enhanced Sewage Disposal Facility, a revision to the O&M Manual referred to in Part F Item 1. The Manual shall take into consideration the new facility and comments received during the application review.

The NWB's May 30, 2012 correspondence references their preliminary review of this submission and correspondence dated October 21, 2011 in which they directed the Hamlet to revise their O&M Manual, dated January 2011, to address comments received during the previous review process and to submit a complete O&M Manual that satisfies all of the components required by Part F item 1 of the Licence including solid waste and hazardous waste management. The Board notes that the current submission does not address these requirements and that it is labeled "draft." As a result, the Board has determined that the Hamlet's O&M Manual cannot be approved until the following conditions are fulfilled,

- 1. All components of condition Part F, Item 1 have been satisfied:
- 2. The document is finalized, with all references to "draft" removed;
- 3. The document is signed; and,
- 4. The initial release date is filled in.

B. RESULTS OF REVIEW

On behalf of Aboriginal Affairs and Northern Development Canada (AANDC), the following comments/ recommendations are submitted for the Board's consideration,

1. Revising applicable sections to represent the as-built and operational status of the rehabilitated upper sewage lagoon and newly constructed lower sewage lagoon

When finalizing the submitted Wastewater Facility O&M Manual, the Hamlet and GN-CGS should confirm that it reflects the as-built status of the licensed sewage disposal facility. In addition to the observations made by the NWB in their May 30, 2012 correspondence, AANDC notes that Section 3.1 (Berm Maintenance) states, "a liner on the upstream slope to provide an impermeable liner *will be* installed, with an ice core dam providing secondary containment" (emphasis added). The GN-CGS May 7, 2012 cover letter states that the new sewage lagoon was constructed in the summer of 2010 and the existing sewage lagoon was rehabilitated in 2011. This section and all other sections that do not reflect the as-built and operational status (e.g., maintenance and monitoring procedures) of the

licensed sewage disposal facility should be revised prior to submitting a final version of this O&M Manual.

2. AANDC Contact Information

Section 1.10 of the submitted plan does not provide the correct AANDC contact information. The Manager of Field Operations should be referenced. This individual can be contacted by telephone at (867) 975-4295 or fax at (867) 979-6445.

3. Spill Contingency Plan specific to Wastewater Treatment Facility

The submitted Wastewater Treatment Facility O&M Manual includes a Spill Contingency Plan. The plan is specific to this facility. AANDC recommends that a stand-alone plan for all potential hazardous material spills within the Hamlet's municipal boundaries, including petroleum hydrocarbon spills, be submitted to the Board for approval. This would partially satisfy the requirements of Part F, Item 1 of the Hamlet's municipal water licence.

4. Spill Kit Locations

Section 8.3 (Spill Kit Locations) of the Spill Contingency Plan included in the Wastewater Facility O&M Manual does not specify how many spill kits are mobilized in the Hamlet and where they are located. These details should be included in a new stand-alone Spill Contingency Plan that addresses all potential hazardous material spills within the Hamlet's municipal boundaries (i.e., sewage effluent and petroleum hydrocarbon products.

Prepared by David Abernethy