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Department of Environment

Ministère de l'Environnement

October 3, 2008

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board

via Email to: licensing@nunavutwaterboard.org

RE: NWB FILE # 3BM-CAM0207 – Hamlet of Cambridge Bay Municipal Water License

Dear Ms. Beaulieu:

The Government of Nunavut, Department of Environment (DOE) has reviewed the water license renewal application from the Hamlet of Cambridge Bay, and has the following comments and recommendations to make based on the *Environmental Protection Act* regarding spill contingency planning, sludge management, landfill leachate monitoring, hazardous waste handling training, and open burning.

1. Spill Contingency Plan

Based on the DOE *Spill Contingency Planning and Reporting Regulations, Contingency Planning and Spill Reporting in Nunavut: a Guide to the New Regulations*; and *Guideline for the General Management of Hazardous Waste in Nunavut*, DOE has the following comments and recommendations to make:

- The Spill Contingency Plan (SCP) should include a 24-hour contact number for the persons responsible for activating the contingency plan. This is required as it ensures the employee discovering the spill can activate a response and provides a 24-hour point of contact for the authority investigating the spill.
- The SCP does not outline any disposal/treatment techniques for contaminants (e.g. contaminated soils); however, section 4.2.2 states that soil will be disposed “as directed by twenty-four (24) hour Spill Reporting Line personnel or an INAC Inspector” (SCP, p.4). The DOE advises the proponent that the role of the regulatory agencies is not to foreclose how the disposal is done, but to ensure that clean up and disposal/treatment occurs in an approved and authorized manner. The proponent should revise the Spill Contingency Plan to outline disposal/treatment techniques for contaminated material such as soils. This may include location of disposal sites approved to accept wastes, means of storage prior to disposal and other approvals required. The goal of the treatment and/or disposal of the contaminant is to ensure that there is no longer a threat to the environment. For further information, the proponent is referred to DoE’s *Environmental Guideline for Site Remediation* and *A Guide to Spill Contingency Planning and Reporting*.

2. Sludge Management

Page 2, Section 5.3 of the *Cambridge Bay Detailed Design Report* state the following: "The sludge settled in primary cell could be removed on a periodic basis". However, this is not discussed further in the *Operations and Maintenance Manual* for the lagoon provided by the Proponent. Sludge Management should be discussed in the O&M manual including but not limited to the following: how desludging will occur, when (e.g. time of year), where the sludge will be disposed off, as well as where the community's wastewater will be discharged while the lagoon is being desludged.

3. Landfill Leachate Monitoring

Annual monitoring of leachate at the landfill is currently proposed in the O&M manual; however, no details are provided. It is important monitoring is carried out to ensure that local water resources are not contaminated, and that monitoring results comply with approved standards. Leachate should be monitored regularly by collection of soil and/or water samples, in addition to visual inspections. Any run-off collected in the detention pond in the landfill should be tested prior to release into the wastewater lagoon system, and should comply with appropriate standards such as the DOE guidelines: Schedule 1 of the *Environmental Guideline for Industrial Waste Discharges*. The Guideline is available online at <http://www.gov.nu.ca/env/industrial.pdf>.

4. Hazardous Waste Management Training

The *Landfill Operations and Maintenance Manual* states that “Hamlet staff will be trained for hazardous waste handling” (p.9, Section 4.6.2). The Manual should be revised to include further details on the hazardous waste handling training of hamlet staff including but not limited to who will deliver the training and the curriculum.

5. Open Burning

DOE would like to state that open burning of non-segregated municipal solid waste (MSW) remains a last option for the management of MSW. Continuation of this practice should not be allowed unless a site-specific assessment fails to identify a feasible and practical alternative. However, the DOE accepts that the practicality of waste disposal in Cambridge Bay make it one of the only viable options for waste volume reduction and management. Consequently, the DOE recommends the Proponent complies with the following recommendations:

- The principle of source reduction should be utilized to reduce, reuse and recycle materials otherwise bound for landfill.
- Municipal solid wastes that are conditionally suitable for open burning are paper products, paperboard packing and untreated wood wastes only. Other wastes such as hazardous wastes should be contained in a designated area and be managed appropriately.
- The appropriate materials are segregated and burned in a controlled manner and at a controlled site which is separate from the working landfill so that the fire cannot spread. There should be fencing with signage for the landfill.
- Standard burning conditions shall apply, such as burning on days where winds are light and blowing away from the community.
- Materials are burned in manageable volumes so that fires do not get out of control.
- Have applicable permits for burning.

We thank the NWB for the opportunity to provide comments on the Hamlet of Cambridge Bay's water license renewal application. Please contact us if you have further questions.

