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Avatiligiyiit

Department of Environment

Ministère de l'Environnement

August 11, 2008

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board

via Email to: licensingadmin@nunavutwaterboard.org

RE: NWB FILE # 3BM-TAL – Hamlet of Taloyoak – Water License Application

Dear Ms. Beaulieu:

The Government of Nunavut, Department of Environment (DOE) has reviewed the water license application from the Hamlet of Taloyoak, and has the following comments and recommendations to make based on the *Environmental Protection Act* regarding solid waste management and sewage treatment.

SOLID WASTE

The *Annual Water License Inspection Report* from 2007 indicates that no fencing is in place for the landfill. It is important that fencing with signs for the landfill is installed to ensure environmental protection and public safety.

In addition, if there currently is no containment of leachate at the landfill site, this should be rectified. It is important that leachate be treated and tested prior to its discharge to the surrounding environment so contaminants from leachate do not enter the environment.

Solid waste should be segregated within the Solid Waste Facility.

Furthermore, a spill contingency plan should be provided for review, and the scope of the plan should include all the relevant project components such as solid waste facility and sewage treatment facility that may be affected by spills. The applicant is referred to DOE's *Spill Contingency Planning and Reporting Regulations* and *Spill Reporting in Nunavut: a Guide to the New Regulations*.

If open burning is the option currently in use in Taloyoak, the following should be applied. 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. In this instance, the DOE accepts that the practicalities of waste disposal in Taloyoak make it one of the only viable options for waste

volume reduction and management. However, the DOE recommends the following:

- 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.
- 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.
- Having applicable permits for burning.

SEWAGE TREATMENT

The documents provided in this application does not indicate whether effluents from the current sewage treatment facility would be able to meet the discharge standards. The cover letter indicates that an engineering study will be undertaken in the future to upgrade the treatment facility as the current facility is non-engineered. DOE is looking forward to receiving these documents as they become available for review.

When the applicant intends to file an amendment application to upgrade the sewage treatment facility, DOE recommends the following information be submitted for review.

- Design drawings for the new facility signed off by a professional engineer registered in Nunavut;
- Design details related to the facility should be discussed.
- Operation & maintenance procedures:

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- Monitoring details for sewage effluent quality should be included, such as monitoring locations, monitoring frequency and timing, and effluent discharge criteria to be used;
- If a treatment wetland is part of the design, details related to the treatment wetland should be discussed. Details should include wetland design, and operation & maintenance;
- Details related to treatment and management of sludge;
- A spill contingency plan including all the project components in the water license application that may be affected by spills, should be provided for review;
- A preliminary abandonment & restoration plan.

DOE thanks NWB for the opportunity to provide comments on the Hamlet of Taloyoak's water license application. Please contact us if you have further questions.

Yours sincerely,

Original signed by

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