



Environment Canada
Environnement Canada

Environmental Protection Operations
Prairie and Northern Region
5019 52nd Street, 4th Floor
P.O. Box 2310
Yellowknife, NT X1A 2P7

Your file 3BM-HAL0810

Our file 4781 031

March 1, 2012

Phyllis Beaulieu
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Re: Hamlet of Hall Beach Type B Water Licence Renewal - 3BM-HAL0810

Environment Canada (EC) has reviewed the information submitted with the above-mentioned application. The following specialist advice is provided pursuant to EC's mandated responsibilities arising from the *Canadian Environmental Protection Act* and Section 36(3) of the *Fisheries Act*.

It is our understanding that the Hamlet of Hall Beach has submitted an application for a Water Licence Renewal for their water licence which expired on May 30th, 2010. The renewal application is for the continued use of water and disposal of waste for municipal undertakings. EC previously submitted comments and recommendations to the Nunavut Water Board with respect to this Water Licence Renewal Application on October 1, 2010. Additional information has been submitted by the Hamlet of Hall Beach, including an Executive Summary, a Sewage Treatment Facility Operation and Maintenance Manual, a Solid Waste Facility Operation and Maintenance Manual, a Spill Contingency Plan, the 2010 Annual Report and a Plan for Compliance.

EC offers the following recommendations and comments for the Nunavut Water Board to consider:

Sewage Treatment Facility

- The Sewage Treatment Facility O&M Manual, Inspection Reports, Executive Summary and Plan for Compliance, indicate that the lagoon berm walls of both cells and floor of one cell is exfiltrating and/or leaking partially treated sewage at a rate higher than expected for these semi-permeable berms. **Every effort should be made to eliminate the discharge of untreated or partially treated wastewater to receiving waters.** EC recommends that the proponent in collaboration with Government of Nunavut Community and Government Services develop a compliance plan specific to the Sewage Treatment Facility that would address the following:
 - Review of options for repairing both cells to prevent excessive exfiltration or leaks in the floor or berm walls of both cells
 - Interim Operation and Maintenance procedures for Sewage Treatment Facility in the interim period when the lagoon is not functioning properly (ie: Which cell will raw sewage be dumped into? How will the leak be prevented from getting bigger? Are there alternative means of operation to increase the retention time in the lagoon cells and/or reduce the volume or rate of leakage?)
 - Implementation schedule to bring the Sewage Treatment Facility back to performance as designed, and update O&M manual accordingly.
- As specified in the decision letter of the now expired licence, the Sewage Treatment Facility Operation and Maintenance Plan should include "procedures and frequencies of

inspections to be carried out to verify when there is flow from the Sewage Disposal Facility.” Furthermore, these inspections should be recorded.

- Additionally, the Sewage Treatment Facility Operation and Maintenance Plan should include a listing of roles and responsibilities of individuals involved in the O&M of the facility.

Solid Waste Management

- Open burning of municipal waste is strongly discouraged by EC, as this results in the formation and spread of some extremely toxic compounds as well as the generation of fine particulate matter due to incomplete combustion of household materials. Should the proponent chose to continue burning Solid Waste, EC recommends the use of an approved incinerator for the disposal of combustible wastes. EC has developed a technical document for Batch Waste Incineration, and is available at the following web link www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=F53EDE13-1
The technical document provides information on appropriate incineration technologies, best management and operational practices, monitoring and reporting.

If there are any changes in the project proposal or more information is available, EC should be notified, as further review may be necessary. Please do not hesitate to contact me at (867) 669-4715 or at mary.kelly@ec.gc.ca with any questions concerning the above points.

Sincerely,



Mary Kelly
Project Officer

cc: Lisa Lowman, Senior Environmental Assessment Coordinator, EC, Yellowknife
Carey Ogilvie, Head of Environmental Assessment North, EC, Yellowknife