

Environmental Protection Branch
Qimugjuk Building 969 P.O. Box 1870
Iqaluit, NU X0A 0H0
Tel: (867) 975-4631
Fax: (867) 975-4645

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NWB File: 3BM-HAL0810

Richard Dwyer
Licensing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Via email: licensingadmin@nunavutwaterboard.org

RE: 3BM-HAL0810 Hamlet of Hall Beach Renewal water license

Environment Canada (EC) has reviewed the information submitted with the above-mentioned application to the Nunavut Water Board (NWB). The following specialist advice has been provided pursuant to the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

The Hamlet of Hall Beach, population 829, is applying for a renewal of their water license. This license includes environmental facilities, including a water reservoir, sewage lagoon, solid waste disposal site, and bulky metal site. Information provided to the NWB includes a Compliance Plan, a Spill Plan, Water Quality QA/QC Plan, Wastewater Quality QA/QC Plan, Community Plan, and a Revised Compliance Plan.

EC provides the following comments and recommendations regarding the submitted plans for the NWB's consideration:

Compliance Plan

- The proponent states that solid waste is incinerated during summer months. 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.
- If open burning does occur, solid wastes that are conditionally suitable for open burning are: paper products, paperboards packaging, and untreated wood. Plywood, painted wood or other treated wood should not be disposed of through open burning.
- EC recommends that all waste be segregated to remove hazardous wastes (such as paint, batteries, plastics, etc.).
- EC recommends the use of an approved incinerator for the disposal of combustible wastes. The proponent is considering onsite incineration a waste disposal option. EC has developed a Technical Document for Batch Waste Incineration, and is available at the following web link:
<http://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.

Spill Contingency Plan

- Personnel should be made aware of the properties of the products that they handle and have access to material safety data sheets (MSDS) and other sources of information. This information should be included in the Plan. A copy of the Plan should be posted at any location where these products are stored and at each fuel cache and refuel station.
- Refuelling shall not take place below the high water mark of any water body and shall be done in such a manner as to prevent any hydrocarbons from entering any water body frequented by fish.
- A spill kit, including shovels, barrels, absorbents, etc. should be readily available at all locations where fuel is being stored or transferred in order to provide immediate response in the event of a spill. Concrete pads or other means of controlling spills at refuelling stations should be in place and equipment to combat major spills should be located at these areas.
- Environment Canada recommends that the proponent include a provision that drip pans be used when refueling equipment on site in order to help prevent spills from occurring.

Wastewater Quality QA/QC Plan

- EC recommends that a water quality monitoring program log sheet be included in the plan.
- EC notes that the CCME Strategy for the Management of Municipal Wastewater has been signed, and that northern jurisdictions can expect performance standards for BOD5 and TSS to be regulated following a five year period which started in 2009. We anticipate that the standards for these parameters may be higher than the 25 mg/L for each that is proposed for the southern jurisdictions and the Yukon. Also, it should be noted that carbonaceous Biochemical Oxygen Demand (cBOD) is anticipated to be the regulated parameter, and it would be prudent to add this to the list of monitored parameters now, in order to gain some idea of the system's track record over the next four years.

EC looks forward to reviewing the Operation and Maintenance Manual for the Sewage Lagoon and the Sludge Management and QA/QC Plan, and a Solid Waste Operation and Maintenance Manual once they become available. Comments previously submitted on behalf of EC regarding water license 3BM-HAL would still apply to this project. If there are any changes in the project EC should be notified as further review may be necessary. Please do not hesitate to contact the undersigned with any questions or comments with regards to the foregoing at (867) 975-4631 or by email at Paula.C.Smith@ec.gc.ca.

Yours truly,



Paula C. Smith
Environmental Assessment Coordinator

cc: Carey Ogilvie (Head, Environmental Assessment-North, EPO, EC, Yellowknife, NT)
Ron Bujold (Environmental Assessment Technician, EPO, EC, Yellowknife, NT)
Anne Wilson (Water Pollution Specialist, EPO, EC, Yellowknife, NT)
Mary Kelly (Project Officer, EPO, EC, Yellowknife, NT)

References

CCME. 1999. Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. Retrieved from: <http://www.ccme.ca/publications/>.