



**Environment Environnement
Canada Canada**

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Our file: 4782 031

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Via Email at nwblic@polarnet.ca

RE: NWB3HAL – Hamlet of Hall Beach, Municipal Water License Application

On behalf of Environment Canada (EC), I have reviewed the information submitted with the above-mentioned application. The following specialist advice has been provided pursuant to Environment Canada's mandated responsibilities for the enforcement of 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 is applying for a 5-year municipal water license to obtain water for municipal use from Water Supply Lake, located just outside the community. The Hamlet requests an annual water use rate of 30 million litres. The existing sewage lagoon, which consists of two exfiltration lagoons, was enlarged in 2002 to accommodate a twenty-year volume. These lagoons empty into two wetlands connected by a ditch with a combined area of 6 ha.

The following recommendations have been included for your consideration and inclusion in the water license renewal:

Water Supply

- The proponent has indicated that Water Supply Lake is recharged from the surrounding land annually. However, indication is also given that Old Water Lake, which supplies water to Water Supply Lake, is in disrepair and eroding. Environment Canada recommends that appropriate measures be taken to prevent sedimentation from occurring.
- The DIAND inspection reports provided with the application indicate that the secondary water impoundment structure has been breached and the western berm of the 'outer' lake immediately down stream of the decant station has also been breached. Environment Canada recommends that measures be taken to repair these structures, as the Fisheries Act, Section 36(3), states that the deposition of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water, is prohibited.

Solid Waste Disposal

- Environment Canada recommends that as gravel cover material is so abundant, the entire waste disposal facility be covered on a monthly basis, as opposed to the annual covering that is currently occurring.

- Environment Canada recommends that the proponent segregate hazardous waste, including waste oil, from the general waste stream and ensure that any hazardous wastes are disposed of at an approved facility.
- Environment Canada recommends that the entire perimeter of the solid waste site be fenced to prevent windblown debris from being scattered.
- Environment Canada recommends that bulky material deposited into the non-hazardous waste landfill be cut into varying shapes and sizes so to minimize void spaces in the landfill.
- Environment Canada recommends that signage indicating the locations of the past and present solid waste disposal sites be erected.

Sewage Disposal

- Environment Canada requests further information regarding the treatment of sludge generated through the sewage lagoon process, including information regarding how often the sludge will be removed, and where the sludge will be disposed of.
- The proponent has indicated that no monitoring is currently being done on the waste water effluent and leachate, and a Surveillance Network program (SNP) has not been established at this location. Environment Canada suggests that a water testing program be established (including ammonia) in order to ensure that the wastewater meets all applicable discharge limits.
- The proponent has indicated that there is some concern regarding the proximity of the sewage lagoon to the ocean and the potential for contamination. Environment Canada recommends that, if the seepage at the toe outer berm noticed during the September 2001 inspection was not corrected during the recent expansion of the sewage treatment system, a berm or other appropriate contaminant measure be constructed to prevent the contamination of the marine environment.
- According to the proponent, while 50% of the buildings in the Hamlet are on sewage pump-out system, the remainder discharge grey water directly onto the ground adjacent to the building. Environment Canada recommends that this discharge water be contained in some way, such as through the construction of a sump, or other similar measures. If applicable, all sumps shall be located above the high water mark and in such a manner as to prevent the contents from entering any waterbody.

Please do not hesitate to contact me with any questions or comments with regards to the foregoing at (867) 975-4639 or by email at colette.meloche@ec.gc.ca.

Yours truly,

Colette Meloche
Environmental Assessment Specialist

cc: (Mike Fournier, Northern Environmental Assessment Coordinator, Environment Canada, Yellowknife)