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28 March 2011

EC File: 4752 050
NWB File: 3BM-QIK0712

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Via email : licensing@nunavutwaterboard.org

**RE: 110223 3BM-QIK0712 F1 OM Manual Submission
110224 3BM-QIK0712 Env. Emergency Response Plan Submission**

Environment Canada (EC) has reviewed the above-mentioned manual and plan submitted 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 Qikiqtarjuaq, a community of approximately 600 people, is located on the eastern coast of Baffin Island, on Broughton Island. The Hamlet operates their municipal water, sewage, and solid waste facilities under NWB water license 3BM-QIK0712. Part III of this license requires that an Operation and Maintenance (O&M) Plan be submitted for all licensed facilities, the Environmental Emergency Response Plan is contained within the O&M Manual.

Upon review of the manual and the plan, EC provides the following comments:

Operation and Maintenance (O&M) Manual

- Position of raw discharge into lagoon, and decant from the lagoon: The O&M manual should indicate clearly into which cell raw sewage is discharged to, and which cell the treated sewage is decanted from. The as-built drawings indicate a raw sewage discharge culvert in the new lagoon. However, the initial design report indicated raw sewage would be discharged into both cells. The as-built drawings also show the overflow culvert between the cells is tilted towards the new cell where riprap would reduce berm erosion from flowing water. However, if raw sewage is discharged to the new cell, the overflow culvert is tilted in the wrong direction. Treatment would be optimized if one of the cells was isolated from raw sewage to establish and maintain more aerobic conditions, and EC recommends depositing raw sewage only into one of the cells. The O&M Manual should clearly identify that raw sewage should only be discharged into one of the cells.
- EC notes that there is no sludge management guidance in this O&M. If a sludge management plan is not required as a separate requirement of the licence, EC suggests that maintenance procedures for de-sludging be included in the plan. If a separate plan is required, then it should be referenced in the O&M Manual.

Environmental Emergency Response Plan

- Based on the information provided, EC has no major concerns with the Plan at this time. It should be noted however, that ***all*** spills are to be documented and reported to the NWT-NU 24 hour Spill Line at (867) 920-8130.
- EC recommends that a Spill Contingency Plan be in place for any fuel storage or transfer location, outlining a clear path of response in the event of a spill and address the key areas of prevention, preparedness, response and recovery.
- EC also recommends that a 24 Hour NWT/NU Spill Response Form be attached to the Plan.

If there are any changes to the O&M Manual or the Emergency Response Plan 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
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