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Our file: 4782 029

Richard Dwyer
Licensing Administrator
Nunavut Water Board
P.O Box 119
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Via Email: licensing@nunavutwaterboard.org

Re: Acknowledge Receipt of information pertaining to the Arctic Bay Municipal Water Licence Plan for Compliance (B,10), Monitoring Reports (B,15), Final Discharge Point of the existing Sewage Disposal Facility (D,10), Operation and Maintenance Manual (F,1), and Instrumentation Monitoring (H,16).

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 EC's responsibilities under the *Canadian Environmental Protection Act*, and Section 36(3) of the *Fisheries Act*.

The Hamlet Arctic Bay (Hamlet) has submitted their Licence Plan for Compliance (B,10), Monitoring Reports (B,15), Final Discharge Point of the existing Sewage Disposal Facility (D,10), Operation and Maintenance Manual (F,1), and Instrumentation Monitoring (H,16) to the Nunavut Water Board (Board) for review.

Environment Canada recommends the following comments and recommendations for the Board's consideration:

General

- All mitigation measures identified by the Hamlet, and the additional measures suggested herein, should be strictly adhered to in conducting project activities. This will require awareness on the part of the Hamlet's representatives (including contractors) conducting operations in the field. EC recommends that all field operations staff be made aware of the Hamlet's commitments to these mitigation measures and provided with appropriate advice / training on how to implement these measures.
- The Hamlet must ensure that any effluent discharged must be in compliance with Section 36(3) of the *Fisheries Act*. According to the *Fisheries Act*, Section 36(3), 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.
- Several components required by Part F, Item 1 of the water licence have yet to be submitted to the Board. These items include: Water Supply Facilities O&M plan, Solid

Waste Operation and Maintenance Plan, and the Hazardous Waste Management Plan. EC is available to review these plans when they are made available.

- 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 starts 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 Biological Oxygen Demand (cBOD) will be the regulated parameter, and it would be prudent to add this to the list of licence parameters now, in order to gain some idea of the system's track record over the next five years.

Operation and Maintenance Manual for the Wastewater Treatment Facility

- The O&M manual should include site diagrams of both the Existing Sewage Disposal Facility and the new Wastewater Treatment Facility.

Monitoring Program Quality Assurance/Quality Control Plan

- The monitoring stations listed in Table 6.1 of the O&M do not correlate with the monitoring stations under Part H, Item 1 of the licence. EC recommends that the Hamlet review the monitoring stations so that they are consistent with those required by the water licence.
- The monitoring program should include information regarding the new Wastewater Treatment Facility in addition to the Existing Sewage Disposal Facility, as per Part F, Item 1.c, the O&M manual.
- As per Part F, Item 1.g, the Hamlet should include a diagram of Monitoring Program Station Numbers for both Existing Sewage Disposal Facility and new Wastewater Treatment Facility.
- Chapter 6.5 of the O&M manual should provide the contact information of the accredited lab, including name and address.

Sludge Management Plan

- The Hamlet should provide additional information for the Sludge Management Plan including sampling procedures for sludge and guidelines for desludging.

Spill Response Plan

- In the final version of the Spill Response Plan, the Hamlet should provide correct contact names and numbers in section 4, table 1.
- The number listed for Environment Canada in section 4.0, table 2, of the Spill Response Plan is incorrect. The contact number for the Iqaluit Enforcement Officer is (867) 975-4644.
- Section 8.3, page 12, of the Spill Response Plan describes that the spill kit will be contained in a 205 L drum; however, there is no location specified for where this drum will be located. EC recommends that the final copy of the Spill Response Plan include the location of the spill kit and drum.
- As per Part F, Item 1.f, of the Water Licence, the Spill Contingency Plan should include a Spill Response Plan for Aggregate deposits. EC recommends that the Spill Contingency Plan be revised to include Aggregate deposits.
- Secondary containment or surface liners (drip pans, fold a tanks, etc.) should be placed under all containers and vehicle fuel tank inlet and outlet points, hose connections and hose ends during fuel or hazardous substance transfers. Secondary containment should be

of adequate size and volume to contain and hold fluids for the purpose of preventing spills (the worst-case scenario).

If there are any changes in the proposed activities, EC should be notified, as further review may be necessary. If you have any questions regarding the foregoing please contact Carrie Spavor at (867) 975-4631 or via email at carrie.spavor@ec.gc.ca.

Yours truly,

Original signed by

Carrie Spavor
Environmental Assessment Coordinator

cc: Carey Ogilvie (Head, EA-North, Environment Canada, Yellowknife, NT)
Anne Wilson (Water Pollution Specialist, Environment Canada, Yellowknife, NT)