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25 March 2010

EC File: 4703 003  
NWB File: 3BM-SAN0308

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Via email : [licensing@nunavutwaterboard.org](mailto:licensing@nunavutwaterboard.org)

**RE: 110223 3BM-SAN0308 Hamlet of Sanikiluaq Renewal Application Qikiqtani Region**

Environment Canada (EC) has reviewed the above-mentioned renewal application 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 Sanikiluaq is applying to the NWB for a renewal of water license 3BM-SAN0308. Sanikiluaq is located on the north end of Flaherty Island, a large, central island of the Belcher Islands of Hudson Bay. The water supply for the Hamlet is from Lake Sanikiluaq. In 2010 the estimated population of the community was 896 persons.

Upon review of the application, EC provides the following comments for the NWB's consideration:

**General**

- The proponent shall not deposit, nor permit the deposit of any wastes or sediment into any water body. This includes the unauthorized discharge of sewage along the road outside of the sewage treatment facility. 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.
- EC requests that a spill contingency plan be prepared for this license, outlining a clear path of response in the event of a spill, indicating that all spills shall be documented and reported to the NWT Spill Response Line at (867) 930-8170.

**Waste Disposal**

- The proponent states that solid waste will be incinerated. 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.

- 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:  
<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. This information should be incorporated into an incineration management plan for the camp. EC would like the opportunity to review this plan prior to implementation.
- Solid wastes that are conditionally suitable for open burning are paper products, paperboard packaging and untreated wood. Plywood, painted wood or other treated wood should not be disposed of in this manner. All residual waste from the burning be thoroughly collected, removed, and disposed of at a suitable facility. For reference, below is a link to the Nunavut Municipal Open Burning Policy:  
<http://www.gov.nu.ca/env/Open%20burning.pdf>  
and below is a link to information from EC regarding open burning:  
[http://www.ec.gc.ca/gdd-mw/684B44DD-5780-4F73-BC58-A97E31A19EDC/COM1170\\_Open\\_Burning\\_Brochure\\_e\\_v6\\_for%20web.pdf](http://www.ec.gc.ca/gdd-mw/684B44DD-5780-4F73-BC58-A97E31A19EDC/COM1170_Open_Burning_Brochure_e_v6_for%20web.pdf)
- EC recommends that the proponent segregate hazardous wastes, including batteries and waste oil, from the general waste stream and ensure that all hazardous wastes, including waste oil, are disposed of at an approved facility.

#### **Sewage Treatment Facility and Solid Waste Facility**

- An Operation and Maintenance (O&M) Manual should be in place for all infrastructure that is currently in use, regardless of new infrastructure that is planned for the future. Until such time as new systems are commissioned, waste will continue to be deposited at the current Sewage Treatment Facility and the current Solid Waste Facility. Effective management requires an Operation and Maintenance Manual for both of these facilities. Effective monitoring of the discharge to the environment requires a Quality Assurance Quality Control (QA/QC) manual for consistency and accuracy of sampling. These plans were required in 2004 and remain outstanding. EC recommends that the proponent submit an O&M Manual and QA/QC Manual for both the Sewage Treatment Facility and the Solid Waste Facility, and that these plans should be submitted for approval by the Board.
- A geographic reference point was submitted for a tentative Final Discharge Point of the Sewage Treatment Facility as 79°15'2.104"W, 56°32'36.1085"N. This point can be described as immediately downstream of the berm that contains the sewage in the lagoon. The location is 2km upstream of the ultimate discharge to the ocean. A final discharge point should also be identified for the Solid Waste Facility where surface water may transport leachate into the surrounding environment. A map of the Sanikiluaq Watershed and Site Map has been provided, but fails to identify the location of these final discharge points. EC recommends that the proponent submit a short report including annotated map, of the Final Discharge Points of both the Sewage and Solid Waste Facilities, labeling them according to the monitoring program (SAN-1 and SAN-4). The proponent has identified that drinking water is routinely sampled. However, there is no record of sampling the Final Discharge Points SAN-1 and SAN-4. EC recommends that the proponent collect monthly samples during periods of flow from the Final Discharge Points of the Sewage and Solid Waste Facilities and have these analyzed by an accredited laboratory.

EC has the following questions regarding this renewal application:

- Is there currently fencing around the entire perimeter of the solid waste disposal area in order to decrease the amount of windblown refuse?

If there are any changes to the renewal application 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](mailto:Paula.C.Smith@ec.gc.ca).

Yours truly,



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