



Water Resources Division
Nunavut Regional Office
Iqaluit, NU X0A 0H0

January 11, 2011

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
PO Box 119
Gjoa Haven, NU X0A 1J0

**Re: 3BC-ERK - Department of National Defence – Canadian Forces
Station – Eureka – Operation and Maintenance (O&M) Plan**

Please be advised that Indian and Northern Affairs Canada (INAC) has completed a review of the above noted O&M Plan.

The Nunavut Water Board (NWB) distributed the application for comment on December 10, 2010.

In conducting this review, I have referred to all documents on the Nunavut Water Board FTP site as it relates to 3BC-ERK. Attached is a Technical Review Memorandum for your consideration.

Please feel free to contact me should you have any questions or comments. I can be reached at (867) 975-4566 or by email at tanya.trenholm@inac.gc.ca.

Sincerely,

Original signed by

Tanya Trenholm
Pollution Policy Specialist



Technical Review Memorandum

To: Phyllis Beaulieu, Manager of Licensing - Nunavut Water Board

From: Tanya Trenholm, Pollution Policy Specialist - Indian and Northern Affairs
Canada – Water Resources Division

**Re: 3BC-ERK - Department of National Defence – Canadian Forces
Station – Eureka – Operation and Maintenance (O&M) Plan**

Sewage Treatment:

It is unclear if the digester is appropriate for the level of treatment the proponent hopes to achieve. Design specification of the digester should be included in the operation and maintenance plan. In addition, the proponent should identify in the O&M Plan how they intend to manage sewage sludge.

Solid Waste Disposal:

It is understood that the ravine is used for the purposes of solid waste disposal. According to the O&M Plan, "This landfill is situated in a ravine and has been in operation since the inception of EC's Weather Station in 1947. Historically both hazardous and non-hazardous materials were deposited here. Currently the landfill is still active and is used to dump non-combustible solid waste. Garbage is collected daily in sealed containers or plastic bags. No data exists for determining the composition of the solid waste generated at the station. The landfill is covered as time/equipment is available."

Via water licence 3BC-ERK1015, the NWB indicates that "For the existing landfill facility, the NWB will require stamped as-built engineered drawings, to be submitted for review and approval, in order that the NWB has on record engineered drawings for the approved facilities."

DND has not submitted design drawings, as the solid waste disposal area is historic, with wastes being deposited in a ravine (i.e., not an engineered landfill). The O&M Plan further states that the landfill is "covered as time/equipment is available." DND should provide the NWB with information regarding whether the solid waste disposal area (and which particular area of it) has been capped, each year with their annual report.

DND is proposing to conduct monitoring of the solid waste disposal area runoff/leachate. However, the NWB should also consider remediation options of this site, given that historic waste materials of an unidentified but presumed hazardous nature are resting in an environmental feature (ravine) sensitive to seasonal changes (i.e. spring melts, and other hydrological events).



Indian and Northern
Affairs Canada

Affaires indiennes
et du Nord Canada

Please feel free to contact me at your convenience should you wish to further discuss any part of this submission to the Board. I can be reached at 867-975-4566 or via email, tanya.trenholm@inac.gc.ca.

Cc. Lou-Ann Cornacchio, Manager, Water Resources Division – Indian and Northern Affairs Canada;