



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

NWB#: 3BC-ERK
CIDMS#: 387101

February 2, 2010

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

**Re: New Application, Eureka Project (NWB#: 3BC-ERK), Department of
National Defence**

Please be advised that Indian and Northern Affairs Canada (INAC) has completed a review of the Department of National Defence's application for a new Type "B" Water License #3BC-ERK, Eureka Project located in the Qikiqtani Region of Nunavut. All associated documents related to this license posted on the NWB ftp website under 3BC-ERK were included in my review (please see attached technical memo for recommendations).

Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4738 or by email at Andrea.Cull@ainc-ianc.gc.ca

Yours truly,

Original Signed By

Andrea Cull
Water Management Specialist

Cc: Lou-Ann Cornacchio, Water Resources Manager, INAC



Technical Review Memo

To: Phyllis Beaulieu, Manager of Licensing, NWB

From: Andrea Cull, Water Management Specialist, INAC

Re: New Application, Eureka Project (NWB#: 3BC-ERK), Department of National Defence

BACKGROUND:

Col. R.C. Baker of the Department of National Defence (DND) submitted a New Type "B" Water License application to the Nunavut Water Board (NWB) on November 16, 2009. DND is applying for a water license for water use and waste disposal associated with activities located in a military detachment and training camp, Eureka Project in the Qikiqtani region of Nunavut.

The main camp at Fort Eureka is about 2km from the High Arctic Weather Station owned by Environment Canada (EC). Fort Eureka's facility includes an accommodations building, a vehicle maintenance garage, aircraft refuelling apron, fuel storage tanks and bladder, the sewage lagoon and two landfills.

INAC HAS REVIEWED THE FOLLOWING DOCUMENTS:

- Water Licence Application Form
- Exploration/Remote Camp Questionnaire
- Spill Contingency Plan
- Site Drawings
- National Research Council Final Report 2007/08
- Sewage Lagoon photos
- Site coordinates

All associated documents related to this license posted on the NWB ftp website under 3BC-ERK were included in my review.

As a result of the review INAC recommends that the Nunavut Water Board impose standard conditions suitable for camp/research projects of this size and magnitude. In addition, the following comments/recommendations are provided for your consideration in the license approval process.



COMMENTS/RECOMMENDATIONS:

1. Outstanding documents that were required as part of a complete application:

- Operation and Maintenance (O& M) Plan
- Abandonment and Restoration (A & R) Plan
- Wastewater treatment and Disposal Plan

2. Water use

Eureka has indicated that the potable water will be obtained from the source identified in water licence (NWB#: 3BC-EUR0611), issued for the Weather station. If the NWB deems this an appropriate use under licence #3BC-EUR0611 then EC should confirm that the demand can be adequately met by the permitted amount given under the licence.

3. Waste

a). Camps / Wastewater Disposal

INAC recommends that all sumps for the disposal of grey water should be located a minimum distance of 31m from any water body and such that there are no adverse effects to water quality. Furthermore, all sumps should be treated, backfilled and contoured to match the surrounding landscape prior to the end of the field program.

b). Hazardous Wastes

INAC recommends that Hazardous waste/ waste oil materials stored on-site should be clearly labelled so they will be visible under all conditions and in all seasons. This recommendation is intended to prevent possible damage to the containers.

INAC recommends that the proponent remove all hazardous materials/ waste oil from the site on a regular basis to prevent the over accumulation of these materials. Hazardous waste/ waste oils must be disposed of at an approved facility outside of the Territory of Nunavut (no known facilities within Nunavut). All transfer of this type of waste must be in accordance with the GN's "Guideline for General Management of Hazardous Waste - January, 2002". In addition hazardous wastes should be stored within a lined secondary containment structure to prevent any off site impacts (other secured structures would also be acceptable).



INAC recommends that the proponent be required to submit copies of all manifest forms related to the transport of hazardous waste/ waste oil as part of the Annual Report for this site (refer to question 25 of the Supplementary Questionnaire).

c). No Open Burning

According to EC's Technical Document for Batch Waste Incineration Guidelines, there should be no open burning of plastics, wood treated with preservatives, electrical wire, Styrofoam, asbestos or painted wood. This is to prevent the deposition of waste materials from incomplete combustion and/or leachate from contaminated ash residues from affecting any surrounding waters.

d). Incineration

According to EC's Technical Document for Batch Waste Incineration Guidelines, a facility incinerating more than 26 tonnes of waste per year, dual chamber, controlled air incinerators are the recommended configuration. The proponent shall make determined efforts to achieve compliance with the Canada-Wide Standards for Dioxins and Furans and the Canada-Wide Standard for Mercury Emissions. Efforts should include the implementation of a comprehensive waste management strategy (especially waste segregation) that is designed to reduce and control the volumes of wastes produced, transported, and disposed of.

2. Spill Contingency Plan

The Emergency contacts Section (5.5) of the Spill Contingency Plan should make reference to the Nunavut Spill Report Line and include a copy of the Nunavut Spill Report Form. This form can be obtained from the Nunavut Water Board public registry at <http://www.nunavutwaterboard.org>. Please note that the 24-hour Spill Report Line telephone number is (867) 920-8130 and facsimile number is (867) 873-6924. Furthermore, INAC requests the proponent report all spills to Peter Kusugak, INAC Manager of Field Operations, phone: 867-975-4295, fax 867 975-6445 as well as the Nunavut Spill Report Line.

Cc: Lou-Ann Cornacchio, Water Resources Manager, INAC