



March 25, 2011

Our reference  
IQALUIT-#45309

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

Phyllis Beaulieu  
Manager of Licensing  
Nunavut Water Board  
Gjoa Haven, Nunavut  
X0E 1J0

Your reference  
3BC-TER0811

**Re: 3BC-TER0811 Tern Island Project Spill Containment Plan and  
Abandonment & Restoration Plan Canadian Wildlife Service**

Dear Phyllis,

Thank you for your March 24, 2011 copy of the Spill Containment Plan and Abandonment & Restoration Plan by Environment Canada for 3BC-TER0811 Tern Island Project. I have attached a Technical Review Memorandum with INAC Waters comments for the Board's consideration.

Please contact me at 867 975-4550 or email at Jim.Rogers@inac-ainc.gc.ca if you have any questions about this submission.

Regards,

J. Rogers  
Water Resources Manager  
Operations Directorate  
Nunavut Regional Office  
Iqaluit, Nunavut  
X0A 0H0

Encl.

c.c.: David W. Abernethy, Water Resources Regional Coordinator  
P. Kusugak, Field Operations Manager

**TO** Phyllis Beaulieu  
Manager of Licensing  
Nunavut Water Board

**OUR REFERENCE**  
File #IQA-N 9545-2-3.3BC.TERR  
IQALUIT-#453079

**FROM** Jim Rogers  
Manager, Water Resources  
Indian and Northern Affairs Canada

**YOUR REFERENCE**  
3BC-TER0811

**DATE:** March 25, 2011

**SUBJECT** **3BC-TER0811 Tern Island Project Spill Containment Plan and Abandonment & Restoration Plan Canadian Wildlife Service – Qikiqtani Region**

#### **A. PROJECT DESCRIPTION**

Tern Island is a small island located east of Bathurst Island in Nunavut. The Canadian Wildlife Service branch of Environment Canada has been monitoring migratory birds on Tern Island since 2007. This site was originally looked at in 2002 and has been in use periodically since 2007 to monitor marine birds during the breeding season (summer months). The site consists of two buildings (living quarters and an outhouse). Tents have been also set up during the monitoring season. This site also has a battery operated warning fence to keep polar bears away. The living quarters can accommodate 4 people for two months.

In INAC Waters review of Environment Canada's 2008 annual report for water license 3BC-TER0811 (Tern Island), the following items are noted as outstanding requirements of the water license:

- 1) GPS Coordinates/Locations of sumps used for wastes.
- 2) Daily quantities of water used.
- 3) Spill Plan has to include all items in Part H Item 1 of the water license.
- 4) Abandonment and Restoration Plan as per Part I of the water license.
- 5) Water Monitoring as per Part J of the water license.
- 6) List of any unauthorized discharges or spills. If none occurred then this should be stated in the Annual Report.

INAC recommended that the Canadian Wildlife Service of Environment Canada provide the Nunavut Water Board with outstanding information to comply with the requirements of Part B Item 1 of the water license.

#### **B. RESULTS OF REVIEW**

On behalf of the INAC Water Resources Division the following comments/ recommendations are provided to the Board.

## **1. Spill Response Plan**

Environment Canada provided the outstanding information by providing the location of the camp and sump and the daily water use. However the spill plan does include the location the fuel storage with respect to the cabin nor the sump. I assume that the sump is for domestic waste and is inside the bear fence yet spill plan does not provide confirming information. A schematic drawing should be provided with the Spill Plan and with the Annual Reports.

The spill response plan does not indicate what will be done with any contaminated materials resulting from a spill. Unless a proper container is available, the air charter is unlikely to allow contaminated pads or soils to be loaded on the air craft. I suggest that the spill plan should include a methodology to clean or dispose of contaminated excavated organic soils, sands and gravels and absorbent pads.

## **2. Abandonment and Restoration Plan**

Environment Canada's abandonment and restoration plan for the site upon completion of the Land Use Operation lacks details. I assume that Environment Canada will follow best practices when abandoning the site however so greater detail should be included.

- Grey water pits at the camp will be back-filled and mounded to discourage water ponding and allow settlement.
- The NRCan/Polar Continental Shelf Program (PCSP) waste haulage agreement with Resolute Bay should be referenced, preferably to a file on the NWB ftp site.
- Environment Canada should inform the NWB and the land owner that the camp sites are ready for final inspection well in advance of abandonment so an inspection trip can be planned.

c.c.: P. Kusugak, Field Operations Manager