

## NWB Annual Report

Year being reported: 2010 ▼

License No: 1BR-BEA1015

Issued Date: April 1, 2010

Expiry Date: May 1, 2015

Project Name: Bear Island Mid-Canada Line Radar Station Remediation Project

Licensee: Indian and Northern Affairs Canada - Contaminated Sites

Mailing Address: PO Box 2200  
Iqaluit NU  
X0A 1H0

Name of Company filing Annual Report (if different from Name of Licensee please clarify relationship between the two entities, if applicable):

N/A

## General Background Information on the Project (\*optional):

Bear Island is approximately 5 km long, north to south, by 1.5 km wide. It is a low lying black basalt outcrop, covered with small lakes and ponds, which were created by glacial scouring. Typical plants found in this region include ground cover of dwarf birch, willow, cotton grass, lichen and moss. Seabird activity and bear and fox evidence was noted in the 1995 investigation. The wildlife typically found in this region includes black and polar bears, wolf, red fox, snowshoe hare, raven, osprey, shorebirds, seabirds, waterfowl, seal, walrus and whale.

The two Doppler radar stations operated on Bear Island from the 1950s to 1965 as part of the former Mid-Canada Early Warning Line. They were abandoned in 1965 without any cleanup operations although the majority of the buildings were removed to their foundations. The environmental issues at Bear Island include former landfills and site buildings, as well as abandoned hazardous materials (lead acid batteries, petroleum products, asbestos), barrels and scrap metal.

During 2010 remedial work began and was mostly completed at the site. The only work remaining for 2011 is to complete the demobilization activities.

Licence Requirements: the licensee must provide the following information in accordance with

Part B

▼ Item 1

▼

A summary report of water use and waste disposal activities, including, but not limited to: methods of obtaining water; sewage and greywater management; drill waste management; solid and hazardous waste management.

Water Source(s):

Water Quantity:

Bear Island Water Reservoir

20/day

13.5max/day

8.1avg/day

N/A

N/A

Quantity Allowable Domestic (cu.m)

Actual Quantity Used Domestic (cu.m)

Quantity Allowable Drilling (cu.m)

Total Quantity Used Drilling (cu.m)

**Waste Management and/or Disposal**

- ☒ Solid Waste Disposal  
☒ Sewage  
☐ Drill Waste  
☒ Greywater  
☒ Hazardous  
☐ Other:

**Additional Details:**

**Solid Waste Disposal:** Combustible soild waste was incinerated on-site. Non-combustable soild wastes were packaged and transported to a southern disposal facility.

**Sewage:** Sewage was directed into a tank adjacent to the camp where it was processed by a multure pump and pumped to a lagoon for treatment.

**Greywater:** Greywater was directed into a tank adjacent to the camp where it was processed by a multure pump and pumped to a lagoon for treatment.

**Hazardous Waste:** Hazardous wastes were packaged as per TDG requirements and shipped south to licenced disposal facilities.

**A list of unauthorized discharges and a summary of follow-up actions taken.**

Spill No.:  (as reported to the Spill Hot-line)

Date of Spill:

Date of Notification to an Inspector:

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

1 litre of hydraulic oil was spilled. I was cleaned up using absorbent. No impacts to water or monitoring required.

Spill No.:  (as reported to the Spill Hot-line)

Date of Spill:

Date of Notification to an Inspector:

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

15 litres of diesel was spilled. 1 cubic metre of soil was removed, packaged, and transported to a southern disposal facility for treatment. No impacts to water or monitoring required

Spill No.:  (as reported to the Spill Hot-line)

Date of Spill:

Date of Notification to an Inspector:

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

4 litres of kerosene was spilled. 0.2 cubic metres of soil was removed, packaged and transported to a southern disposal facility for treatment. No impacts to water or monitoring required.

Spill No.:  (as reported to the Spill Hot-line)

Date of Spill:

Date of Notification to an Inspector:

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

2 litres of hydraulic oil was spilled. 0.1 cubic metres of soil was removed, packaged and transported to a southern disposal facility for treatment. No impacts to water or monitoring required.

### Revisions to the Spill Contingency Plan

SCP submitted and approved - no revision required or proposed



#### Additional Details:

The Site Specific Spill Contingency Plan was revised as per the comments from the NWB. The revised plan was approved on January 13, 2011.

### Revisions to the Abandonment and Restoration Plan

AR plan submitted and approved - no revision required or proposed



#### Additional Details:

The Remedial Action Plan (acts as an Abandonment and Restoration Plan) was submitted and accepted with the water licence application.

### Progressive Reclamation Work Undertaken

Additional Details (i.e., work completed and future works proposed)

Work was completed as per the Remedial Action Plan. Two changes to the plan were made:

- untreated/unpainted wood was control burned on site, residual ash was shipped off site for disposal
- the Non-Hazardous Waste Landfill was not constructed at Bear Island, all wastes destined for the Landfill were packaged and shipped off site for disposal.

### Results of the Monitoring Program including:

**The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where sources of water are utilized;**

Details attached



#### Additional Details:

Bear Island Water Reservoir

**The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where wastes associated with the licence are deposited;**

Details attached



#### Additional Details:

Sewage Lagoon

**Results of any additional sampling and/or analysis that was requested by an Inspector**

No additional sampling requested by an Inspector or the Board ▼

Additional Details: (date of request, analysis of results, data attached, etc)

--

**Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.**

No additional sampling requested by an Inspector or the Board ▼

Additional Details: (Attached or provided below)

--

**Any responses or follow-up actions on inspection/compliance reports**

No inspection and/or compliance report issued by INAC ▼

Additional Details: (Dates of Report, Follow-up by the Licensee)

--

**Any additional comments or information for the Board to consider**

Attached is a draft copy of the Bear Island Interim Remediation Completion Report. This report will be finalized once the remaining equipment and materials on Bear Island are demobilized in 2011.

**Date Submitted:**

April 7, 2011

**Submitted/Prepared by:**

Mark Yetman

**Contact Information:**

**Tel:** 867-975-4733

**Fax:** 867-975-4736

**email:** [mark.yetman@inac-ainc.gc.ca](mailto:mark.yetman@inac-ainc.gc.ca)

### GPS Coordinates for water sources utilized

[illegible]

### GPS Locations of areas of waste disposal

[illegible]