

## NWB Annual Report

Year being reported: 2012



License No: 1BR-SAR0916

Issued Date: March 8, 2009

Expiry Date: January 30, 2016

Project Name: CAM-F Sarcpa Lake Long-Term Monitoring

Licensee: Aboriginal Affairs and Northern Development Canada (AANDC)

Mailing Address:

PO Box 2200  
Iqaluit NU  
X0A 0H0

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):

CAM-F was an Intermediate DEW line site constructed in 1957 and operated until 1963. The Site was used as a scientific research station between 1977 and 1988. The site is located on the Melville Peninsula, approximately 85 km west of Hall Beach, Nunavut.

The planned two year remediation phase of the CAM-F Sarcpa Lake Remediation Project was completed in April 2008. Activities included the demolition and disposal of buildings, structures and other debris, as well as the cleanup of hazardous materials. Contaminated soil was excavated and either shipped off site or placed in a secure soil disposal facility (SSDF) on site. A SSDF and non-hazardous waste landfill (NHWL) were constructed during the remediation to contain some of the demolished materials and excavated soils.

As per departmental commitments to monitor the NHWL and SSDF post-closure, a long term monitoring program was initiated at CAM-F in August 2008 . The first four years of the 25-year long-term monitoring at CAM-F were completed in August 2008, August 2009, September 2010, and August 2011.

The fifth year of the 25-year long-term monitoring at the CAM-F site was completed on August 5th and 6th, 2012, while based in the nearby community of Hall Beach.

Long term monitoring activities undertaken at the site on August 5-6, 2012 included visual and natural environment monitoring and groundwater sampling. The attached report *Long term Monitoring, 2012 CAM-F, Scarcpa Lake, Nunavut* provides more details and results of the monitoring activities undertaken in 2012.

**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):	Monitoring wells- water samples only		
Water Quantity:	N/A	Quantity Allowable Domestic (cu.m)	
	<0.025	Actual Quantity Used Domestic (cu.m)	
	N/A	Quantity Allowable Drilling (cu.m)	
	N/A	Total Quantity Used Drilling (cu.m)	

Waste Management and/or Disposal

☒ Solid Waste Disposal

☐ Sewage

☐ Drill Waste

☐ Greywater

☐ Hazardous

☐ Other:

Additional Details:

For the first time since the inception of the long term monitoring program at CAM-F, groundwater samples were collected from all of the wells present at the site, including those surrounding the NHWL. (In previous years many of the wells were not sampled because they were dry).

No sewage or grey water were generated during the 2012 long term monitoring event. Solid wastes generated during the monitoring event (< 0.5 m<sup>3</sup>) were collected and removed from the site at the completion of monitoring activities.

**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)

N/A

**Revisions to the Spill Contingency Plan**

SCP submitted and approved - no revision required or proposed ▼

Additional Details:

N/A

## Revisions to the Abandonment and Restoration Plan

AR plan submitted and approved - no revision required or proposed



Additional Details:

## Progressive Reclamation Work Undertaken

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

### WORK COMPLETED

- Long Term Monitoring
  - Years 1, 2, 3, 4, and 5 of the long term monitoring program were completed Aug. 2008, Aug. 2009, Sept. 2010, Aug. 2011 and Aug. 2012, respectively
  - During the 2012 event, 7 groundwater samples, including 1 field duplicate, were collected from 6 monitoring wells around the NHWL and SSDF
  - Concentrations of contaminants of concern in groundwater samples were below the upper limit of acceptability when compared with aggregate historical results with exception of total and dissolved cobalt in MW06-1 and dissolved copper in MW06-3.
  - Cobalt was 2 orders of magnitude higher while copper was marginally higher than historical mean levels
  - As a point of comparison, two CCME guidelines exist for cobalt for the protection of agricultural land: irrigation (50 µg/L) and livestock (1000 µg/L). The results for cobalt are well below the livestock watering guideline and within 1 order of magnitude of the irrigation guideline
  - The wells will continue to be monitored to see if any elements of concern continue to be above average levels

### FUTURE WORK PROPOSED

- Long Term Monitoring
  - Started in 2008, continues until 2032
  - Year 7 of the 25-year long term monitoring program is scheduled for August 2014
  - Future events, if warranted, will occur in 2017, 2022 and 2032

## 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:

**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



Details attached



Additional Details:

**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)

N/A

**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)

N/A

**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)

N/A

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

Physical and thermal observations of the landfills and results of the groundwater chemical analysis conducted during the 2012 field program indicate that the containment facilities at CAM-F continue to operate as designed and that the site continues to pose no threat to human health or the natural environment.

**Date Submitted:**

July 28, 2014

**Submitted/Prepared by:**

Natalie Plato

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