

NWB Annual Report**Year being reported:**

2014

License No: 1BR-SAR0916**Issued Date:** March 8, 2009**Expiry Date:** January 30, 2016**Project Name:** CAM-F Sarcpa Lake Remediation Project**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 five monitoring events of the 25-year long-term monitoring at CAM-F were completed in August 2008, August 2009, September 2010, August 2011, and August 2012.

The sixth year of the 25-year long-term monitoring at the CAM-F site was completed on August 24th and 25th, 2014, while based in the nearby community of Hall Beach.

Long term monitoring activities undertaken at the site on August 24-25, 2014 included visual and natural environment monitoring and groundwater sampling. The attached report *Long term Monitoring, 2014 CAM-F, Sarcpa Lake, Nunavut* provides more details and results of the monitoring activities undertaken in 2014.

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

Part B	▼	Item 1	▼
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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:

Groundwater samples were collected at three predetermined locations: one at the SSDF (MW0604) and two at the NHL (MW0602 and MW0603). No sewage or grey water were generated during the 2014 long term monitoring event. Solid wastes generated during the monitoring event (< 0.5 m³) were collected and removed from the site at the completion of monitoring activities. Sampling locations were selected as described in *CAM-F Sarcpa Lake Long Term Monitoring Plan* and were the same as those sampled during the previous monitoring events.

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	▼
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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, 5, and 7 of the long term monitoring program were completed Aug. 2008, Aug. 2009, Sept. 2010, Aug. 2011, Aug. 2012, and Aug. 2014 respectively
 - During the 2014 event, 4 groundwater samples, including 1 field duplicate, were collected from 3 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 the exception of total lead in MW0602 and dissolved copper and total lead in MW0603. This indicates an increasing trend in concentration.
 - This increase is believed to be a result of non-standard sampling techniques (i.e. limited purging due to low recharge in monitoring well) and does not represent an actual trend.
 - 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 10 of the 25-year long term monitoring program is scheduled for August 2017
 - Future events will occur in 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



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 2014 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:

June 26, 2014

Submitted/Prepared by:

Lilianne Arsenault

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GPS Coordinates for water sources utilized

Source Description	Latitude			Longitude		
	Deg °	Min ,	Sec "	Deg °	Min ,	Sec "
Monitoring Well (MW) 1	68	33	6.798	-83	18	52.25
MW 2	68	33	5.982	-83	18	42.54
MW 3	68	33	5.244	-83	18	43.87
MW 4	68	32	49.03	-83	18	17.8
MW 5	68	32	45.21	-83	18	20.28
MW 6	68	32	45.52	-83	18	22.94

GPS Locations of areas of waste disposal

[illegible]