

NWB Annual Report

Year being reported: 2013 ▼

License No: 1BR-LOR0813

Issued Date: April 30, 2008

Expiry Date: May 1, 2013



Project Name: Cape Christian Site 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):

General Background Information on the Project (*optional):

The Cape Christian site is situated on a lowland coastal bluff located on the northeast coast of Baffin Island about 16 km northeast of the Hamlet of Clyde River, Nunavut. The site was a former US Coast Guard Long Range Navigation communication station constructed and operated between 1954 and 1974.

The site was abandoned in 1975 without decommissioning. While some remedial works were carried out at the site by different federal and provincial government teams, after it was abandoned, there were still significant environmental concerns at the site, prompting remediation by AANDC. The remediation of the site occurred between 2008 and 2011. It involved removal and off-site disposal of hazardous materials, demolition of buildings and structures, excavation of non-hazardous metals and petroleum hydrocarbon contaminated soils, and clean-up of other site debris. All of the non-hazardous wastes were placed in a non-hazardous waste landfill (NHWL) constructed on-site for that purpose. The NHWL was constructed at the site between 2009 and 2010 and was closed in 2010.

As per departmental commitments to monitor the landfill post-closure, a long term monitoring program was initiated at Cape Christian in August 2011. Long term monitoring activities were undertaken at the site in August 2011 and August 2013 and included visual and natural environment monitoring along with soil and groundwater sampling around the perimeter of the landfill. The attached report *Long term Monitoring, 2013 Cape Christian, Nunavut* provides more details and results of the monitoring activities undertaken in 2013.

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 at Non-Hazardous Landfill (See GPS Coordinates tab for well locations)	
Water Quantity:	15/day	Quantity Allowable Domestic (cu.m)
	<0.010	Actual Quantity Used Domestic (cu.m)
	None	Quantity Allowable Drilling (cu.m)
	None	Total Quantity Used Drilling (cu.m)

Waste Management and/or Disposal

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

Additional Details:

Samples were taken from 3 of 4 groundwater monitoring wells (i.e., MW-1, MW-2, MW-4) on August 9, 2013. The cumulative volume of groundwater perged from the 3 wells was < 10 L.

No sewage or grey water were generated during the 2013 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.

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)

None

Revisions to the Spill Contingency Plan

SCP submitted and approved - no revision required or proposed ▼

Additional Details:

None

Revisions to the Abandonment and Restoration Plan

AR plan submitted and approved - no revision required or proposed ▼

Additional Details:

None

Progressive Reclamation Work Undertaken

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

WORK COMPLETED

Long Term Monitoring

- Year 3 monitoring event occurred August 9, 2013
- Groundwater samples taken from 3 of 4 monitoring wells
- 5 soil samples taken at 1 depth (0-0.15 m) including 1 background and duplicate, where staining was observed around the toe of the landfill
- No anomalous concentrations of contaminants of concern were noted

FUTURE WORK PROPOSED

Long Term Monitoring

- Started in 2011, continues until 2035
- Year 5 of the 25-year long term monitoring plan is scheduled for the summer of 2015
- Future events, if warranted, will occur in 2017, 2020, 2025, 2035

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:

See GPS Details attached

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:

See GPS details attached

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

Overall, physical observations of the NHWL confirm it is in very good condition and performing as designed. Chemical analysis of the soil and groundwater samples did not yield any levels of concern.

A license amendment and renewal application was submitted electronically to the NWB July 18, 2014 for the *Cape Christian Long Term Monitoring Program*. The renewed license will permit AANDC to continue its long term monitoring activities at the site.

Date Submitted:

July 23, 2014

Submitted/Prepared by:

Natalie Plato

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GPS Coordinates for water sources utilized

Source Description	Latitude			Longitude		
	Deg °	Min '	Sec "	Deg °	Min '	Sec "
MW-1	70	31	32.19	68	18	19.87
MW-2	70	31	34.97	68	18	11.64
MW-3 - well dry, no sample taken	70	31	32.53	68	18	7.952
MW-4	70	31	29.87	68	18	12.88

GPS Locations of areas of waste disposal

[illegible]