

## NWB Annual Report

Year being reported: 2016

License No: 1BR-EKA1017 Issued Date: March 1, 2010  
 Expiry Date: September 30, 2017

Project Name: FOX-C Ekalugad Fjord Long Term Monitoring

Licensee: Indigenous and Northern Affairs Canada (INAC)  
 Contaminated Sites

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):

The FOX-C Intermediate Distant Early Warning (DEW) Line Site was constructed in 1957 and subsequently abandoned in 1963. It is located on the Northeast coast of Baffin Island on the south shore of Ekalugad Fjord and is approximately 240 km from Qikiqtarjuaq and 260 km from Clyde River. Remediation at the FOX-C site was completed between 2006-2008 and involved the construction of a non-hazardous waste landfill (NHWL), the only structure remaining onsite.

As per departmental commitments to monitor the NHWL post-closure, a long term monitoring (LTM) program was initiated at FOX-C in 2009 and includes visual inspection, groundwater sampling, soil sampling (as required), and natural environment monitoring. Please refer to the attached *FOX-C Ekalugad Fjord Long Term Monitoring Plan (2008)* for additional information.

Year 8 (in place of year 7) of the 25-year LTM Plan was completed in August 2016. The attached report *Long Term Monitoring, 2016 FOX-C Ekalugad Fjord, Nunavut (FOX-C Ekalugad Fjord 2016 LTM Plan)* contains more details and results of the LTM activities undertaken in 2016.

The next LTM event is scheduled for the fall of 2018. Future events will occur in 2023, 2028, and 2033.

**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 the NHL (See GPS Coordinates Page)	
Water Quantity:	5/year	Quantity Allowable Domestic (cu.m)
	<0.05	Actual Quantity Used Domestic (cu.m)
	0	Quantity Allowable Drilling (cu.m)
	0	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 not collected due to frozen groundwater in all 5 monitoring wells.

Monitoring activities were conducted within a single day and was based out of Clyde River so no camp was required. Solid wastes (packaging, paper towels, paper, kimwipes, filters, Teflon tubing) generated (< 0.5 m<sup>3</sup>) were collected and removed from the site at the completion of monitoring activities.

Refer to the *FOX-C Ekalugad Fjord Lake Long Term Monitoring Plan (2008)* and *FOX-C Ekalugad Fjord 2016 LTM Report* for details.

**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**

N/A - not applicable



Additional Details:

N/A

**Revisions to the Abandonment and Restoration Plan**

N/A - not applicable



Additional Details:

N/A

**Progressive Reclamation Work Undertaken**

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

Year 8 of LTM occurred on August 15, 2016 (monitoring was attempted in year 7 but a site visit was not possible due to weather conditions). A visual inspection of the NHWL and surrounding area was conducted in accordance with the Abandoned Military Site Remediation Protocol (AMSRP). The NHWL was found to be in acceptable condition, with some minor features observed. The 5 monitoring wells could not be sampled because the groundwater was frozen. Soil samples were not collected because there was no indication of seepage or staining. A detailed natural environmental survey was not conducted because time was limited on site due to fog approaching Clyde River. Please refer to the *FOX-C Ekalugad Fjord 2016 LTM Report* for additional information.

As per the *FOX-C Ekalugad Fjord Long Term Monitoring Plan (2008)*, future LTM events are scheduled for 2018, 2023, 2028, and 2033 (years 10, 15, 20, and 25 respectively).

**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:

Additional details regarding water sources (monitoring wells) can be found in the *FOX-C Ekalugad Fjord Long Term Monitoring Plan (2008)*.

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

Not Applicable (N/A)



Additional Details:

Remediation was completed in 2008 and the only structure remaining at the site is the NHWL. No waste was deposited on site in 2016. Any solid waste generated was removed from site at the completion of monitoring activities.

**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 observations of the NHWL conducted during the 2016 LTM event indicate that the NHWL at FOX-C is in acceptable condition, is performing as designed, and is containing the enclosed waste.

**Date Submitted:**

March 28, 2017

**Submitted/Prepared by:**

Jean Allen, A/Contaminants Specialist, INAC

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### GPS Coordinates for water sources utilized

Source Description	Latitude			Longitude		
	Deg °	Min ,	Sec "	Deg °	Min ,	Sec "
Non-Hazardous Landfill Monitoring Wells (MW):						
MW South	68	43	46.9	-68	39	12.76
MW East	68	43	50.02	-68	39	7.523
MW North	68	43	50.71	-68	39	15.45
MW Northwest	68	43	48.54	-68	39	17.39
MW Southwest	68	43	47.66	-68	39	16.36

### GPS Locations of areas of waste disposal

Location Description (type)	Latitude			Longitude		
	Deg °	Min ,	Sec "	Deg °	Min ,	Sec "
N/A						