

NWB Annual Report

Year being reported: 2006 ▼

License No: 1BR-EKA0607 Issued Date: June 19, 2006
Expiry Date: December 31, 2007

Project Name: FOX-C Ekalugad Fjord Remediation Project

Licensee: Indian and Northern Affairs Canada

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 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, Nunavut on the south shore of Ekalugad Fjord. It is approximately 240 kilometres northwest of Qikiqtarjuaq and 260 kilometres south of Clyde River.

Year one of the planned two year remediation phase of the FOX-C Ekalugad Fjord Remediation Project has been completed. The current plan calls for the remediation phase to be completed in 2007 followed by the shipping of hazardous wastes and demobilization.

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):	River at River Crossing #4	
Water Quantity:	30/day	Quantity Allowable Domestic (cu.m)
	22.714/day	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:

Soild waste from the Camp was landfilled in the Lower Site Non-Hazardous Waste Landfill. Sewage and Greywater was stored in the sewage lagoons and was not discharged during the 2006 field season. All Hazardous Wastes were properly packaged and stored; these will be shipped to a southern disposal facility at the end of the project.

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: August 10, 2006

Date of Notification to an Inspector:

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

Approximately 100 litres of diesel was spilled in the garage. The free product collected with absorbent towels and impacted soil was excavated into a quatrex bag.

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

Date of Spill: August 11, 2006

Date of Notification to an Inspector:

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

Approximately 2 litres of used motor oil was spilled at the Lower Site Non-Hazardous Waste Landfill. The free product was collected with absorbent towels and put into a quatrex bag.

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

Date of Spill: September 8, 2006

Date of Notification to an Inspector:

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

Approximately 2000 litres of water was discharged from the Landfarm. The sample for this water was mistakenly tested for BTEX and F1-F4 hydrocarbons prior to discharge rather than the discharge criteria, as per the terms and conditions of the Water Licence. The analytical results are detailed in Appendix 1.

To ensure that a similar incident does not occur again, Indian and Northern Affairs Canada took steps to reinforce the requirements of the Water Licence with the onsite engineer and Contractor. This item was also added to the Lessons Learned file and reviewed within the Northern Contaminated Sites Program.

Revisions to the Spill Contingency Plan

SCP submitted and approved - no revision required or proposed



Additional Details:

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

- Camp Set Up
 - Completed
- Road Construction/Repair
 - Completed and ongoing
- Fuel Storage pad Set Up
 - Completed
- Landfarm construction
 - Completed and ongoing (note: Extension to landfarm required)
- Installation of monitoring wells at lower site
 - Completed
- Lower Site Non Hazardous Waste Landfill
 - Berm Construction 3 of 4 completed
- Sewage Lagoon
 - 4 berms installed need to increase height next season
- Lower Site Hazardous Waste Processing area
 - Completed
- Beach tank demolition and land filling
 - Completed
- Beach debris removal
 - 90% completed
- Lake area debris removal
 - Completed (except under Blasting Caps)
- Excavate the beach POL contaminated soil area
 - Soil excavated, additional soil found, to be excavated 2007
- Water Lake contaminated soil excavation
 - Soil excavated, additional soil found, to be excavated 2007
- Asbestos abatement
 - Completed
- Excavation of mid station pad contaminated soil to permafrost
 - excavated, additional soil found, to be excavated 2007
- Midstation Non Hazardous Landfill construction
 - Initiated, had to stop due to weather conditions and poor quality of type 2
- Mid Station Regrading
 - Initiated, work remaining for 2007
- Mid Station Debris removal and drum processing
 - Initiated, work remaining for 2007
- Beach Landfarm operation
 - Contaminated soil placed, fertilizer added, soil tilled 2 times
- Demobilization
 - Winterization of camp & equipment and demobilization of personnel

FUTURE WORK PROPOSED

- Community meetings
- Mobilization
 - Reopening of camp
 - Worker orientation
- Field activities
 - Road repair
 - Survey
 - Drum processing & incineration
 - Construction of temporary PCB & hazardous waste storage areas
 - Contaminated soil excavation
 - Construction of sewage lagoon
 - PCB amended paint removal
 - Demolition of structures
 - Construction of Midstation Non-Hazardous Waste Landfill
 - Debris removal
 - Regrading
 - Landfarm, Landfill & sewage lagoon closure
- Demobilization
 - Camp closure
 - Worker demobilization
 - Equipment demobilization

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 Page 6

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 Page 6

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

Some additional materials were encountered, details are provided below:

- Additional contaminated soil:
 - 146 cubic metres of F1/F2 soil from the lake area was stockpiled at the landfarm while we await approval for the landfarm extension
- Debris from the old site:
 - 2 cubic metres of wood was collected into a pile to be burned
 - 122 of drums were cleaned, crushed & land filled
- River dump debris:
 - a dump consisting of 53 cubic metres of waste cans, bottles, wooden crates, and paper was found at the start of the river from the lake to the fjord. The majority of this debris was collected and placed in the Non Hazardous Landfill.
 - some debris (approximately 11 cubic metres) remains and will be hand collected and land filled in 2007.

Photographs of the Lower Site Non-Hazardous Waste Landfill and the Landfarm are provided in Appendix 2

Date Submitted:
Submitted/Prepared by:
Contact Information:

March 26, 2007

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GPS Coordinates for water sources utilized

Source Description	Latitude			Longitude		
	° Deg	' Min	" Sec	° Deg	' Min	" Sec
River at River Crossing #4	68	43	38	68	39	10

GPS Locations of areas of waste disposal

Location Description (type)	Latitude			Longitude		
	° Deg	' Min	" Sec	° Deg	' Min	" Sec
Lower Site Non-Hazardous Landfill	68	43	21	68	38	56
Camp Wastewater - Temporary Sewage Lagoon	68	44	31	68	37	7
Camp Wastewater - Permanent Sewage Lagoon	68	44	34	68	39	11

APPENDIX 1: LANDFARM DISCHARGE WATER SAMPLE RESULTS

LANDFARM ANALYTICAL RESULTS	
Sample Parameter	Result
pH (6 to 9)	7.5
Benzene	nd
Toluene	nd
Ethylbenzene	nd
Total Xylenes	nd
F1 (C6-C10)	nd
F2 (C10-C16)	nd
F3 (C16-C34)	nd
F4 (C34-C50)	nd

APPENDIX 2: PHOTOGRAPHS

As built drawings are not being submitted because the Non-Hazardous Waste Landfills and Landfarm are not completed. Please see the pictures below:



Lower Site Non-Hazardous Waste Landfill



Landfarm (in Operation)