

NWB Annual Report

Year being reported: 2017

License No: 1BR-ELR1419 Issued Date: March 31, 2014
 Expiry Date: March 30, 2019

Project Name: Ennadai Lake 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 Ennadai Lake site was a former weather station, located approximately 370 km west of Arviat (the nearest community) and 500 km southwest of Rankin Inlet, Nunavut, at approximately 61° 07' 51" N latitude and 100° 53' 14" W longitude. The site was developed in the 1950s and was operated both as a manned and unmanned station, at different times since its construction and was abandoned in the late 1980s to early 1990s.

Remediation activities at the site were undertaken between 2014-2015, and included the construction of a non-hazardous waste landfill (NHWL), demolition and disposal of onsite structures, and clean-up of hazardous materials and contaminated soil.

As per departmental commitments to monitor the NHWL post-closure, a long term monitoring (LTM) program was initiated at Ennadai Lake in 2016 and includes visual inspection, groundwater sampling, soil sampling (as required), and natural environment monitoring. Please refer to the attached *Ennadai Lake Long Term Monitoring Plan (2016)* for more details.

Year 1 of the 25-year LTM Plan was completed in August 2016. INAC was not on site in 2017. The next LTM event is scheduled for the fall of 2018. Future events will occur in 2020, 2022, 2025, 2030, 2035, and 2040.

An amendment application to reduce the scope of water licence 1BR-ELR1419 from remediation to monitoring is now with the Nunavut Water Board for their consideration.

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 NHWL (See GPS Coordinates Page)		
Water Quantity:	6/day	Quantity Allowable Domestic (cu.m)	
	0	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:

Refer to the *Ennadai Lake Long Term Monitoring Plan (2016)* and *Ennadai Lake 2016 LTM Report* for details.

INAC was not onsite in 2017. Thus, no water samples were collected and no solid waste was generated in 2017.

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)

No progressive reclamation work was undertaken in 2017.

As per the *Ennadai Lake Long Term Monitoring Plan* (2016), future LTM events are scheduled for 2018, 2020, 2022, 2025, 2030, 2035, and 2040 (years 3, 5, 7, 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 can be found in the *Ennadai Lake Long Term Monitoring Plan* (2016).

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 2015 and the only structure remaining at the site is the NHWL. No waste was deposited on site in 2017. Any solid waste generated is removed from the site at the completion of LTM 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

Inspection Report received by the Licensee (Date):



Additional Details: (Dates of Report, Follow-up by the Licensee)

The last inspection at Ennadai Lake was in 2015. The 2015 Inspection Report is available on the NWB ftp site. The majority of issues were identified during remediation and no issues remain applicable to post-remediation monitoring activities.

Any additional comments or information for the Board to consider

Physical observations of the NHWL conducted during the last LTM event (2016) indicate that the NHWL at Ennadai Lake is in acceptable condition, is performing as designed, and is containing the enclosed waste.

Date Submitted:

March 26, 2018

Submitted/Prepared by:

Jean Allen, Contaminants Specialist, INAC

Contact Information:

Tel: 867-975-4732

Fax: 867-975-4560

email: jean.allen@canada.ca

GPS Coordinates for water sources utilized

Source Description	Latitude			Longitude		
	Deg °	Min ,	Sec "	Deg °	Min ,	Sec "
Non-Hazardous Landfill Monitoring Wells (MW):						
MWLF-1	61	7	56.64	-100	53	0.632
MWLF-2	61	7	56.68	-100	53	4.553
MWLF-3	61	7	58.02	-100	53	1.082

GPS Locations of areas of waste disposal

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