

NWB Annual Report

Year being reported: 2022

License No: 1BR- KEI2245 (Formerly 1BR-KEI1722)

Issued Date: July 28, 2022

Expiry Date: July 27, 2045

Project Name: CAM-E Keith Bay Long Term Monitoring

Licensee: Crown-Indigenous Relations and Northern Affairs Canada
(CIRNAC) Contaminated SitesMailing Address: PO Box 2200
Iqaluit NU
X0A 0H0Name 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 CAM-E Keith Bay site—located at 68°15.37' N, 88°10.42' W—is approximately 75 kilometers (km) east of Kugaaruk, Nunavut on the eastern side of the Simpson Peninsula.

CAM-E Keith Bay was an Intermediate Distant Early Warning (DEW) site constructed by the Department of National Defense (DND) in 1957 and deactivated in 1963.

Remediation of the CAM-E site occurred between 2016 and 2018. A non-hazardous waste landfill (NHWL) and Tier II Facility were constructed to contain non-hazardous material, and Tier II soil, respectively. During construction, seven (7) groundwater monitoring wells were installed around the perimeter of the NHWL and Tier II Facility.

As per departmental commitments to monitor the NHWL post-closure, a 25-year long term monitoring (LTM) program was initiated at CAM-E in 2020 and includes visual inspection, groundwater sampling, thermal monitoring, soil sampling (as required), and natural environment monitoring. Refer to the *CAM-E (Keith Bay) Long Term Monitoring Plan (2019, addendum 2020)* for additional information.

Years 1 and 3 of LTM took place in 2020 and 2022. Future events will occur in 2024, 2026, 2029, 2034, 2039, and 2044.

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 and Tier II Facility (See GPS Coordinates Page)	
Water Quantity:	1/day	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:

CIRNAC was onsite on August 7th, 2022. No groundwater samples were taken as all seven (7) monitoring wells (MW17-01, MW17-02, MW17-03, MW17-04, MW17-05, MW17-06, and MW17-07) were dry within the active layer.

Monitoring activities were conducted within a single day and were based out of Gjoa Haven, NU so no camp was required. Solid wastes (packaging, paper towels, paper, kimwipes, filters, Teflon tubing) generated (< 0.5 m3) were collected and removed from the site at the completion of monitoring activities.

Refer to *CAM-E (Keith Bay) Lake Long Term Monitoring Plan (2019, addendum 2020)* and the *CAM-E 2022 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)

Revisions to the Spill Contingency Plan

Other: (see additional details) ▼

Additional Details:

A General LTM Spill Plan was submitted to the Nunavut Water Board on November 2, 2018 for consideration.

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 2022.

As per the *CAM-E (Keith Bay) Long Term Monitoring Plan (2019, addendum 2020)*, the next LTM event (Year 5) is scheduled for 2024. Future events are scheduled for 2026, 2029, 2034, 2039, and 2044. (Years 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 *CAM-E (Keith Bay) Long Term Monitoring Plan (2019, addendum 2020)*.

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 2018 and the only structures remaining at the site are the NHWL and Tier II Facility. No waste was deposited on site in 2022. 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

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 2022 LTM event indicate that the NHWL and Tier II Facility at CAM-E are in acceptable condition and are performing as designed to contain enclosed waste.

Date Submitted:

March 23, 2023

Submitted/Prepared by:

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