

NWB Annual Report

Year being reported: 2017

License No: 1BR-ROS1727 Issued Date: September 11, 2017
 Expiry Date: September 10, 2027

Project Name: PIN-D Ross Point 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 PIN-D Ross Point Intermediate Distant Early Warning (DEW) Line Site was constructed in 1959, and subsequently deactivated in 1963. The nearest communities are Kugluktuk, located approximately 185 kilometres to the southwest, and Cambridge Bay, located approximately 250 kilometres to the east.

The remediation of the PIN-D Ross Point Remediation Project was successfully completed in 2012. A non-hazardous waste landfill (NHWL) was constructed to contain non-hazardous waste and is the only structure remaining on site.

As per departmental commitments to monitor the NHWL post-closure, a 25-year long term monitoring (LTM) program was initiated at PIN-D in August 2013 and includes visual inspection, groundwater sampling, soil sampling (as required), and natural environment monitoring. Refer to the *PIN-D Ross Point Long Term Monitoring Plan* (2013) for additional information.

Years 1 and 3 of the LTM Plan took place in 2013 and 2015, respectively. Year 5 was completed on August 2, 2017. The attached report *Long Term Monitoring 2017 PIN-D, Ross Point, Nunavut* (PIN-D 2017 LTM Report) contains results of the LTM activities conducted in 2017. Future LTM events are scheduled for 2019, 2022, 2027, and 2037.

Licence Requirements: the licensee must provide the following information in accordance with

Part B	▼	Item 1	▼
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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 Page)		
Water Quantity:	1/day	Quantity Allowable Domestic (cu.m)	
	<0.01	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 was collected from 1 monitoring well (MW3). The other 3 wells (MW1, MW2, and MW4) were dry (ice was noted at the bottom of MW4). The MW3 well went dry during purging but there was enough water following recharge to collect 1 set of samples. The collected purge water was used as a duplicate (although it is not a true duplicate). The total volume of water used/collected was less than 5 litres.

Monitoring activities were conducted within a single day and was based out of Yellowknife, NT and Kugluktuk, 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.

Additional information is provided in the *PIN-D Ross Point Long Term Monitoring Plan* (2013).

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

N/A - not applicable ▼

Additional Details:

Revisions to the Abandonment and Restoration Plan

N/A - not applicable

Additional Details:

Progressive Reclamation Work Undertaken

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

Year 5 of LTM occurred on August 2, 2017. A visual inspection of the NHWL and surrounding area was conducted in accordance with the Abandoned Military Site Remediation Protocol (AMSRP) and the site-specific LTM Plan. The NHWL was found to be in acceptable condition. Two new settlement features (2 minor depressions), a small mound of gravel (likely a result of frost action or erosion), and minor exposed construction debris were observed but all are minor in scale and are not considered to affect the integrity of the NHWL. Care will be taken to monitor the depressions and exposed debris during future monitoring events. No significant changes to other features were observed.

A total of 2 groundwater samples were collected (1 sample plus 1 duplicate) and the other 3 wells were dry/frozen. Because MW3 went dry during purging, a set of collected purge water was submitted as a duplicate sample (which explains the high RPD). Exceedances of the Federal Interim Groundwater Quality Guidelines (FIGQGs) for some metals were observed (particularly zinc). High metal concentrations in 1 particular year is not an immediate concern but groundwater will continue to be closely monitored and if high concentrations continue to increase, the LTM Plan will be adjusted accordingly. Soil samples were not collected because there was no indication of seepage or staining. Please refer to the PIN-D 2017 LTM Report for additional information.

As per the *PIN-D Ross Point Long Term Monitoring Plan* (2013), future long term monitoring events are scheduled for 2019, 2022, 2027, and 2037.

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 *PIN-D Ross Point Long Term Monitoring Plan* (2013).

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 2012 and the only structure remaining on site is the NHWL. No waste was deposited on site in 2017. 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 and results of groundwater chemical analysis conducted during the 2017 LTM event indicate that the NHWL at PIN-D is in acceptable condition, is performing as designed, and is containing the enclosed waste.

Date Submitted:

March 27, 2018

Submitted/Prepared by:

Jean Allen, 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) :						
MW1	68	35	43.45	111	6	53.11
MW2	68	35	39.77	111	6	41.92
MW3	68	35	44.19	111	6	46.43
MW4	68	35	44.78	111	6	42.71

GPS Locations of areas of waste disposal

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