



Nunavut Regional Office
P.O. BOX 2200
Iqaluit, NU X0A 0H0

April 16, 2021

Mr. Richard Dwyer,
Manager of Licensing
P.O. BOX 119
Gjoa Haven, NU X0B 1J0

RE: BAF-5 Resolution Island Remediation Project: 2019 Annual Report for Water Licence 1BR-RES1626

Dear Mr. Dwyer,

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC), on behalf of the Government of Canada, is the custodian of BAF-5 Resolution Island site for which Water Licence 1BR-RES1626 applies.

According to Condition 1 PART B – “The Licensee shall file an Annual Report on the Appurtenant Undertaking with the Board no later than the 31st of March of the year following the calendar year being reported [...]”. Please find enclosed the Annual Report for the BAF-5 Resolution Island Remediation Project for the year 2019.

If you have any questions, please contact the Project Manager, Rachel Theoret-Gosselin at Rachel.theoret-gosselin@canada.ca, or by telephone at (867) 222-0891.

Sincerely,

Charlotte Lamontagne
Director, Contaminated Sites
Crown-Indigenous Relations and Northern Affairs Canada
Nunavut Regional Office



NWB Annual Report

Year being reported:

Select ▼

2019

License No: 1BR-RES1626

Issued Date: December 12, 2016

Expiry Date: December 11, 2026

Project Name: Resolution Island Long Term Monitoring

Licensee: Crown-Indigenous Relations and Northern Affairs Canada

Mailing Address:

969 Qimigjuk Building
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 former BAF-5 Resolution Island Pole Vault Line Site is located 320 km southeast of Iqaluit at the mouth of Frobisher Bay. The facility was constructed in 1953 and abandoned in 1972.

Remediation of the site was completed in 2005 and a long term monitoring program was initiated. In 2013, 2014 and 2016, maintenance and supplementary assessments were completed to provide additional information to prepare the design and specifications for follow up remedial work at the site planned for 2018 and 2019.

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):	New Freshwater Lake	
Water Quantity:	5 per day	Quantity Allowable Domestic (cu.m)
	44.2	Actual Quantity Used Domestic (cu.m)
	5 per day	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:

During the 2019 construction season, camp solid waste was incinerated on-site in a dedicated fuelsupplied incinerator. Ash from the incinerator was cooled and stored in sealable metal barrels on a regular basis. Non-hazardous and non-incinerable waste, such as empty oil containers and cleaned fuel barrels, and hazardous waste, such as used oil filters, were containerized for offsite transport and disposal.

Camp sewage waste was collected via a network of aboveground piping and transported to a sewage lagoon located northeast of the main camp facilities. Prior to entering the lagoon, all wastewater was initially transferred to a sewage transfer tank located adjacent to camp. A mulcher pump was installed in this tank with the ability to grind any solids in the wastewater, creating a slurry, which was then pumped to the lagoon. Decommissioning of the sewage pond consisted of backfilling/regrading the pond to match the surrounding terrain; no wastewater had accumulated in the pond during the construction season therefore no discharging or sampling was required.

Resolution Island Water Consumption	
Date	Water Volume (m³)
19-Aug-19	N/A
20-Aug-19	N/A
21-Aug-19	N/A
22-Aug-19	N/A
23-Aug-19	N/A
24-Aug-19	5.00
25-Aug-19	0.00
Weekly Total	5
Season Total	5
Project Total	5
26-Aug-19	0.00
27-Aug-19	5.00
28-Aug-19	0.00
29-Aug-19	2.50
30-Aug-19	0.00
31-Aug-19	0.30
01-Sep-19	3.00
Weekly Total	10.8
Season Total	15.8
Project Total	15.8
02-Sep-19	0.00

03-Sep-19	3.10
04-Sep-19	0.00
05-Sep-19	3.10
06-Sep-19	0.00
07-Sep-19	3.10
08-Sep-19	3.20
Weekly Total	12.5
Season Total	28.300
Project Total	28.300
09-Sep-19	0.000
10-Sep-19	3.100
11-Sep-19	0.000
12-Sep-19	3.100
13-Sep-19	3.100
14-Sep-19	0.000
15-Sep-19	0.400
Weekly Total	9.700
Season Total	38.000
Project Total	38.000
16-Sep-19	3.10
17-Sep-19	0.00
18-Sep-19	0.00
19-Sep-19	3.10
20-Sep-19	0.00
21-Sep-19	0.00
22-Sep-19	0.00
Weekly Total	6.20
Season Total	44.200
Project Total	44.200

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

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)

The remediation activities conducted in 2019 include:

- Establish a temporary camp to support site operations
- Excavation of contaminated soil associated with the Permeable Reactive Barriers (PRBs) and replacement of PRBs as required
- Excavation and off-site disposal of contaminated soil
- Decommissioning of existing fuel storage tanks
- Off-site transport and disposal of waste fuel in barrels and fuel storage tanks
- Collection, containerization, and off-site disposal of hazardous materials (includes hazardous surface debris and PRB materials)
- Access roads and airstrip were repaired as necessary
- Burrow sources were developed and the material was used to assist in the remediation work
- Removal of the temporary camp and all waste produced was containerized for off-site disposal

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:

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:

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

Date Submitted:

April 20th, 2021

Submitted/Prepared by:

Rachel Theoret-Gosselin

Contact Information:

Tel: 867-222-0891

Fax: 867-975-4560

email: rachel.theoret-gosselin@canada.ca

GPS Coordinates for water sources utilized

[illegible]

GPS Locations of areas of waste disposal

Location Description (type)	Latitude			Longitude		
	° Deg	' Min	" Sec	° Deg	' Min	" Sec
Camp sewage lagoon	68	28	70.15	41	22	48.95
Temporary storage area for soil	61	35	00.1	64	38	50.3
Temporary storage area for soil	61	34	59.8	64	38	50.9
Temporary storage area for soil	61	35	00.4	64	38	51.7
Temporary storage area for soil	61	35	00.7	64	38	51.2
Discharge point for beach tank secondary containment water	51	34	57.6	64	38	39.0