

**WATER LICENCE INSPECTION FORM**☒ Original
☐ Follow-Up Report

Licensee	Licensee Representative
Petroleum Products Division Government of Nunavut	Sulaimon Ayilara
Licence No. / Expiry	Representative's Title
1BR-RAN2131	Acting Manager, Technical and Environmental Services
Land Authorization No. / Expiry	Land Authorization Expiry
Date of Inspection	Inspector
July 5, 2022	WRO, K. AMSEL
Activities Inspected	
<input type="checkbox"/> Camp <input type="checkbox"/> Drilling <input type="checkbox"/> Mining <input type="checkbox"/> Construction <input checked="" type="checkbox"/> Reclamation <input type="checkbox"/> Fuel Storage <input type="checkbox"/> Roads/Hauling <input type="checkbox"/> Other: <input type="checkbox"/> Other:	

SECTION 1	<input checked="" type="checkbox"/> Comments (s. __)	<input type="checkbox"/> Non-Compliance with Act or Licence (s. __)	<input type="checkbox"/> Action Required (s. __)
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On July 5, 2022 an inspection of the Government of Nunavut Petroleum Product Division's Rankin Inlet Landfarm was conducted by Crown Indigenous Relations and Northern Affairs Canada (CIRNAC), Water Resource Officer K. Amsel (Inspector).

The Inspection was conducted to ensure compliance with the applicable terms and conditions of water licence, no. 1BR-RAN2131 (Licence).

The following report was produced from observations noted by the Inspector at the Rankin Inlet Landfarm (Landfarm) and information provided by licence representative Sulaimon Ayilara Acting Manager, Technical and Environmental Services (representative).

Preliminary Information

The annual report was available for review on the Nunavut Water Board FTP website, as required by the Licence Part B Item 1.

An application for amendment to the water licence is currently underway for construction of a new Landfarm cell.

The Landfarm was constructed in 2008 and transferred to the ownership of Government of Nunavut Petroleum Products Division in 2017. Previously, the Landfarm was owned by the Department of Community Government Services of the Government of Nunavut.

The Landfarm Integrity Assessment and Improvement Report was not included in the 2021 annual report as required by Part E Item 2 of the Licence.

Observations

- The Landfarm has several piles of soil on a pad within the Landfarm. (photo 1) The Representative indicated that;
 - Soil on the South side of the Landfarm and on the West or rear of Landfarm are over 5 years old and will be screened this year, then remediated.
 - Soil on the North side is from 2021 and will be turned over this year.
- A crate and pallet of fertilizer are near the West side of the Landfarm amongst piles of soil, as well as an empty spill kit located at N 62° 49' 50.3" W 92° 10' 22.9". (photo 2)
- There are no signs displayed at the sampling wells near the Landfarm as required under the licence Part B Item 3.
 - The sampling well on the West side of the structure is at N 62° 49' 50.1" W 92° 10' 23.4". (photo 3)
 - The sampling well on the East side of the structure is at N 62° 49' 48.7" W 92° 10' 19.1". (photo 4)
- The berms of the Landfarm are slumping on the West and South sides which is of concern to the Inspector. The Inspector believes that water ponding near the toe of the berm and steep berm walls are contributing factors. These concerns were noted in the 2020 inspection (Appendix A) and appear to not have been addressed. The cracks noted in the 2020 inspection appear to have naturally filled in. (photo 5)
- Representative stated that the pad in the Landfarm will be expanded to the walls of the berm on the West and North side to allow for more usable room inside the Landfarm. Water surrounds the pad inside the landfarm. (photo 6)
- Plastic soil bags, fertilizer bags and other garbage are evident throughout the Landfarm. Several pieces of garbage appear to be the same garbage as noted in the 2020 inspection (Appendix A) and had not been addressed since last inspection.
- On the South side of the Landfarm, a brown felt-like membrane and black plastic-like membrane are exposed and are a concern



to the Inspector. Similar issues were noted in the 2020 Inspection (Appendix A). (photo 7).

8. The water within the Landfarm is high with a freeboard estimated at 50cm. Representative stated that a discharge is planned later in the summer to remove excess water.
9. Fencing on the South-West corner of the Landfarm is damaged and falling down. This concern was noted during the 2020 inspection (Appendix A) and appears to have not been addressed. (photo 8)
10. Representative stated that an addition to the existing Landfarm is planned for 2023 on the South side of the Landfarm. (photo 9)
11. The Representative informed the Inspector that as part of the summer operations a local contractor was to repair the fencing, and would be engaged to repair some of the concerns mentioned by the Inspector.

SECTION 2

☐ Comments (s. __)

☒ Non-Compliance with Act or Licence (s.2)

☐ Action Required (s. __)

Licence

- Part B Item 3-Failure to post signage at monitoring stations.
- Part D Item 4-Failure to maintain the Landfarm to the satisfaction of the inspector, to wit: garbage in the Landfarm, damaged fencing, and un-stabilized berm walls.
- Part F Item 3-Failure to submit the Landfarm Integrity Assessment and Improvement Report
- Part B Item 8-Failure to implement plans as approved by the water licence, to wit: *Rankin Inlet Landfarm Operation and Maintenance Plan*
- and Part E Item 1-Failure to implement *Rankin Inlet Landfarm Operation and Maintenance Plan*

SECTION 3

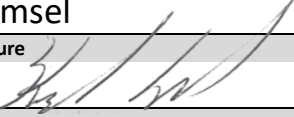
☐ Comments (s. __)

☐ Non-Compliance with Act or Licence, (s. __)

☒ Action Required (s.3)

The Licensee must submit to the Inspector prior to August 5, 2022 a written response to address the concerns listed in the inspection report and their expected timeframe of completion. The concerns are as follows:

- Removal of garbage in the Landfarm
- Installation of signage at monitoring points as per Part B Item 3
- Repair of fencing surrounding the Landfarm
- Covering the liner with sand
- Submit to the Inspector a plan to conduct an assessment of the Landfarm to Complete the Landfarm Integrity Assessment

Licensee or Representative	Inspector's Name
Sulaimon Ayilara	K. Amsel
Signature	Signature
	
Date	Date
	2022/07/15

Office Use Only: Follow-up report to be issued by Inspector

☐ Yes ☒ No



PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
July 5, 2022	1BR-RAN2131	Sony DSC-HX50V	WRO K. Amsel
Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)		
Photo 1	N 62° 49' 50.9" W 92° 10' 20.9"		



Description:

Piles of soil in Landfarm. Photo taken near entrance on East side facing West. Pile on left ready for remediation this year, piles in forefront and right will be turned this year.



Photo No.

Photo 2

Lat/Long (DD.MM.SS.SS, NAD83)

N 62° 49' 50.3" W 92° 10' 22.9"



Description:

Fertilizer in crate and on pallet on right, empty spill kit on left. Photo on North side of Landfarm, facing East.

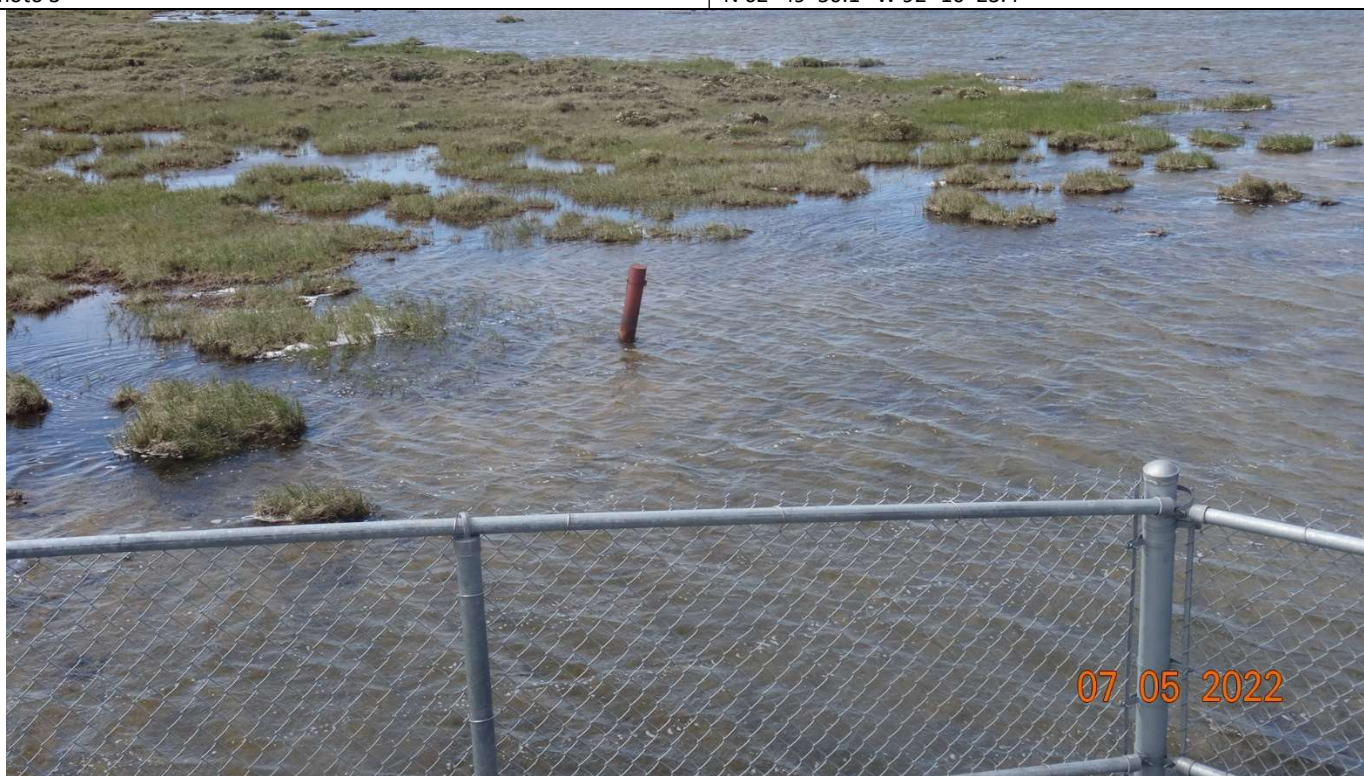


Photo No.

Photo 3

Lat/Long (DD.MM.SS.SS, NAD83)

N 62° 49' 50.1" W 92° 10' 23.4"



Description:

Sampling well on the West side of Landfarm. Photo taken on North-West corner.



Photo No.

Photo 4

Lat/Long (DD.MM.SS.SS, NAD83)

N 62° 49' 48.7" W 92° 10' 19.1"



Description:

Sampling well on the Sout-East side of Landfarm.



Photo No.

Photo 5

Lat/Long (DD.MM.SS.SS, NAD83)

N 62° 49' 48.7" W 92° 10' 19.1"



Description:

Slouching on West berm of Landfarm



Photo No.

Photo 6

Lat/Long (DD.MM.SS.SS, NAD83)

N 62° 49' 48.3" W 92° 10' 22.4"



Description:

Pad constructed inside the Landfarm. Open water in left background in photo will be filled in as part of construction activities. Photo taken on South side of Landfarm facing North.



Photo No.

Photo 7

Lat/Long (DD.MM.SS.SS, NAD83)

N 62° 49' 48.7" W 92° 10' 19.1"



Description:

Exposed liner in Landfarm. Photo on South berm of Landfarm.



Photo No.

Photo 8

Lat/Long (DD.MM.SS.SS, NAD83)

N 62° 49' 48.7" W 92° 10' 19.1"



Description:

Damaged fence in South-West corner.



Photo No.

Photo 9

Lat/Long (DD.MM.SS.SS, NAD83)

N 62° 49' 48.6" W 92° 10' 23.7"



Description:

Planned are for Landfarm expansion on South side of existing Landfarm.



Appendix A

WATER LICENCE INSPECTION FORM

☐ Original
☒ Follow-Up Report

Licensee Government of Nunavut	Licensee Representative Nathaniel HUTCHINSON
Licence No. / Expiry 1BR-RAN0914	Representative's Title Director, Petroleum Products Division
Land / Other Authorizations --	Land / Other Authorizations --
Date of Inspection July 24 th 2020	Inspector WRO J. VOISEY
Activities Inspected <input type="checkbox"/> Camp <input type="checkbox"/> Drilling <input type="checkbox"/> Mining <input type="checkbox"/> Construction <input checked="" type="checkbox"/> Reclamation <input type="checkbox"/> Fuel Storage <input type="checkbox"/> Roads/Hauling <input type="checkbox"/> Other:	

SECTION 1	<input checked="" type="checkbox"/> Comments (s.1)	<input type="checkbox"/> Non-Compliance with Act or Licence (s. __)	<input type="checkbox"/> Action Required (s. __)
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Summary

In 2019 the Government of Nunavut determined that a water licence was no longer required for the current operational activities of the landfarm (facility) located at N62° 49' 48.36", W92° 10' 22.15". The facility's water licence expired November 1st, 2014.

On July 24th, 2020 Crown Indigenous Relations and Northern Affairs Canada's Water Resource Officer (WRO), Jakob VOISEY completed an inspection of this facility, pursuant to section 11 and 12 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*. The following report was produced with the findings of this inspection

Observations

1. The facility appears to be to in the same condition as the 2019 inspection (appendix 1).
2. The containment berms show signs of increased slouching and cracking along the inner and outer faces of the berm (photo 1).
3. There are five Quartex bags located outside of the facility filled with unknown materials (photo 2). Signs have been put up at the facility explaining that unauthorized dumping is not permitted (photo 3).
4. In multiple places around the facility the HDPE liner appears to be damaged (photo 4).
5. There is garbage and debris located inside and around the facility (photo 5-10). A hose is also noted by on of the pools of water (photo 11).
6. The water level inside the facility is high. The southern corner of the facility's fencing has fallen down (photo 12) and the berm wall in this corner is lower. The majority of the water in the facility sits against this berm wall.
7. No culverts are noted along the road adjacent to the facility. The facility is surrounded with water and not well drained due to the road (photo 13-14).
8. A duplicate sample was collected at approximately N62° 49' 48", W92°10' 22". The following parameters were collected: BTEX, PHC F2-F4, total hydrocarbons, and total metals. The results of these were.....

SECTION 2	<input type="checkbox"/> Comments (s. __)	<input checked="" type="checkbox"/> Non-Compliance with Act or Licence (s.2)	<input type="checkbox"/> Action Required (s. __)
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Non-Compliance with the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*:

Concern: Section 12(1)(b): "No person shall deposit or permit of waste in any other place in Nunavut under conditions in which the waste or any other waste that results from the deposit of that waste may enter waters in Nunavut."

SECTION 3	<input type="checkbox"/> Comments (s. __)	<input type="checkbox"/> Non-Compliance with Act or Licence, (s. __)	<input checked="" type="checkbox"/> Action Required (s.3)
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A number of concerns are noted at the facility related to operation and maintenance. The Inspector is concerned with the integrity of the berms, the water surrounding the facility, unauthorized pumping and the Quartex bags located outside the facility's containment. The Government of Nunavut shall submit a plan to the Inspector as to how the facility will be improved by



May 28th, 2021. The Government of Nunavut shall contact the Inspector WRO Jakob Voisey, Jakob.voisey@canada.ca by March 31st to discuss the action plan moving forward.

Licensee or Representative	Inspector's Name
	J. Voisey
Signature	Signature
	<i>Original signed on file</i>
Date	Date
	July 28 th , 2021
Office Use Only: Follow-up report to be issued by Inspector <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

PHOTO LOG



Date: July 24 th , 2020	Authorization Number: 1BR-RAN0914	Camera/Model: Sony DSC-HX50V Cyber shot	Inspector WRO Voisey
Photo No. Photo 1		Lat/Long (DD.MM.SS.SS, NAD83) N62° 49' 51.28", W92° 10' 19.70"	
			
Description: Cracking and slouching on bank of containment berm.			

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
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Photo 2

N62° 49' 51.01", W92° 10' 18.20"



Description

Five Quartex bags filled with material outside the facility.

Locations name:

Photo 3

Lat/Long (DD.MM.SS.SS, NAD83)

N62° 49' 50.65", W92° 10' 18.28"



Description

Signage outside of facility.

Locations name:

Lat/Long (DD.MM.SS.SS, NAD83)



Photo 4

N62° 49' 51.30", W92° 10' 18.86"



Description

HDPE liner appears to be damaged.

Locations name:

Lat/Long (DD.MM.SS.SS, NAD83)



Photo 5

N62° 49' 50.74", W92° 10' 21.86"



Description

Water ponded inside facility, also a plastic barrel noted inside.

Locations name:

Lat/Long (DD.MM.SS.SS, NAD83)



Photo 6

N62° 49' 50.51", W92° 10' 22.61"



Description

Garbage and debris located inside of facility.

Locations name:

Lat/Long (DD.MM.SS.SS, NAD83)



Photo 7

N62° 49' 50.42", W92° 10' 22.97"



Description

Plastic barrel located inside of facility.

Locations name:

Lat/Long (DD.MM.SS.SS, NAD83)



Photo 8

N62° 49' 50.29", W92° 10' 24.15"



Description

Garbage and debris located inside of facility

Locations name:

Lat/Long (DD.MM.SS.SS, NAD83)



Photo 9

N62° 49' 48.43", W92° 10' 20.65"



Description

Quartex bag located outside of facility.

Locations name:

Lat/Long (DD.MM.SS.SS, NAD83)



Photo 10

N62° 49' 48.66", W92° 10' 19.52"



Description

Water ponded inside facility, garbage/debris located inside facility.

Locations name:

Lat/Long (DD.MM.SS.SS, NAD83)



Photo 11

N62° 49' 48.71", W92° 10' 19.24"



Description

Water hose and garbage/debris located inside facility.

Locations name:

Lat/Long (DD.MM.SS.SS, NAD83)



Photo 12

N62° 49' 48.30", W92° 10' 23.37"



Description

Broken fencing.

Locations name:

Lat/Long (DD.MM.SS.SS, NAD83)



Photo 13

N62° 49' 51.59", W92° 10' 17.98"



Description

Water surrounding facility.

Locations name:

Lat/Long (DD.MM.SS.SS, NAD83)



Photo 14

N62° 49' 48.36", W92° 10' 22.15"



Description

Broken fencing and pond of water outside facility.