

WATER LICENCE INSPECTION FORM

Original Follow-Up Report

Linnan			Linnana Danmanah	- t	
Licensee Hamlet of Hall Bea	a ch		Bhabesh Roy	auve	
Licence No. / Expiry	acii		Representative's Tit	·la	
3BM-HAL2025 Municipal Engi					
			Land / Other Author		
			·		
Date of Inspection			Inspector		
August 12, 2019			Joseph Monte	eith	
Activities Inspected					
☐ Camp	Drilling	Mining	Construction	Reclamation	☐ Fuel Storage
☐ Roads/Hauling	Other: Potable Water Treatment Facility, and S	•	Other:		
Conditions:	A- Acceptable	U-Unacceptable	C-Concern	NI-Not Inspected	NA- Not applicable
PART:				Condition	Observation No.*
A: SCOPE, DEFINITION	IS AND ENFORCEME	NT		Α	
B: GENERAL CONDITION	ONS			A	
C: CONDITIONS APPLY	YING TO SECURITY			NI	
D: CONDITIONS APPL	YING TO WATER USE			Α	1-5
E: CONDITIONS APPL	YING TO WASTE DISF	OSAL AND MANAGE	MENT	С	6-14
F: CONDITIONS APPLY	ING TO MODIFICATI	ONS		NI	
G: CONDITIONS APPL	YING TO CONSTRUC	TION		NI	
H: CONDITIONS APPL	YING TO EMERGENC	Y RESPONSE AND CO	ONTINGENCY	Α	
PLANNING					
I: CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND			NA		
CLOSURE PLANNING					
J: CONDITIONS APPLYING TO MONITORING			Α		
SCHEDULES			Α		
*Th	ne licence and the obs	servation number co	rresponds with sp	pecific comments provide	d below.
		Location(s): Latitud	de: 69°23'N and	l Longitude: 81°46'W C	oordinates takes you
Samples taken by Ins	nector:	into the ocean are		•	,
	pector:	Cocan an	2		
☐ Yes ☐ No					

SECTION 1	Comments (s.)	Non-Compliance with Act or Licence (s.)	Action Required (s.)

BACKGROUND

The Hamlet of Hall Beach (Hamlet), with an estimated population of 829 (2010), is located on the western shore of Foxe Basin within the Qikiqtani Region of Nunavut.

The Hamlet owns and operates several municipal facilities aimed at providing relevant services to the residents of the community including a potable Water Supply Facility (WSF), Solid Waste Disposal Facility (SWDF), and a Sewage Disposal Facility (SDF). The Hamlet is authorized for 70,000m³ of water for community use and up to a maximum of 35,000m3 annually.

The Hamlet shares the same Potable Water Source with the Department of National Defence – North Warning Sites.

Inspector Statement

On August 12, 2020, a water licence was conducted by Water Resource Officer Joseph Monteith at the Hamlet of Hall Beach, Qikiqtani Region, Nunavut.

Water Use Related Structures

- 1. Water withdrawal is conducted from South Lake to the Water Storage Reservoir. The Water from South Lake is recharged by opening up a gate on a dyke which is also a man-made reservoir. The Storage Reservoir has a capacity of 60,000m³ Erosion is happening on dyke that separates water source and contaminated man made lake (See photo 1). The road on the dyke is only used by Transport Canada, or NavCanada to access an antenna. Discussions with CGS is ongoing into who maintain the road/dyke.
- 2. At the time of the inspection a yellow triangle sign was observed titled HAL 1 at the pump house of the water treatment facility indicating a monitoring site.



- 3. The water reservoir appeared to be working as intended(photo 4).
- **4.** Two pumping stations at the Water Storage Reservoir. One for community, and another for the North Warning Site.
- 5. It was suggested that the flow metre wasn't working at the time of the inspection. But, upon closer inspection the flow metre appeared to be working, and used to record usage amounts. At the time of the inspection the flow metre read 53422.8m³ (photo 2), and the logs read the same amount as of July 11, 2018 on the log sheet (See photo 3). The monthly water consumption report recorded 0053422.8m³ used for August 12, 2020 totals for the month.

Water Treatment Facility

- 6. The Water Treatment Facility consists of two cells. Cell #1 is the south side cell of the two; whereas, Cell #2 is the north side of the two cells. At the time of the inspection their was testing of the repairs, so sewage was transferred from one lagoon to the other (photo 5).
- 7. The fencing looked like it was operating as intended, but the base of the fencing looked as if it was causing some structural damage to the lagoon walls, this may need to be maintained and should be monitored.
- **8.** The freeboard was in good standing above 1 metre.
- 9. A leak was observed at the South East corner of Cell # 1 at the time of the inspection (See photo 6). A spill report was requested to be submitted. On June 24, 2019 at 16:00 hrs a Spill Report Spill 2019-253 was submitted to the Spill Line as per Part B: Subsection 6. On June 26, 2019 an update was submitted to the Spills line with an estimated quantity of 593317 litres, and a 10,000 square metres area of contamination. The reason was a cracked liner, damaged as result of sewage seeping/leaking through the berm to the sandy wetlands. The migration of waste travelled through the sandy wetlands for 3km before being received by the receiving marine environment. The type of lagoon is exfiltration, and its natural migration was the same migration path of the spill. No concerns of spill migrating to any fresh water, or impacting any fish bearing waters. This spill will not be closed off till all obligations for follow up have been met. Another occurrence at the same lagoon generated another spill report 2020-198. The leak spilled 7843869 Litres of sewage. These two spill reports will be closed together when the obligations for post clean-up have been met (photo 7).
- 10. At the time of the inspection it was observed that an unauthorized use of water was taking place the site of the testing of the repairs to the sewage lagoon by the contractor. the SAO said it was the Government of Nunavut's contract, and reminded the SAO and BR of the obligation to receive authorization to withdrawal water, look for clarification from NWB, and the activity should be stopped, until further authorization is obtained. Although this is a serious contravention of the license, the contractor wasn't aware that they needed authorization to withdrawal water from an unauthorized source. They stopped the withdrawal of water from the unauthorized source when informed. It was not determined how much was withdrawn from the unauthorized location (photos 8-10).

Solid Waste Facility

- **11.** The Solid Waste Facility located next to the Water Treatment Facility segregates their waste into metals, burnable waste, hazardous waste, and woods.
- **12.** Fencing requires maintenance around burnable waste section.
- **13.** Hazardous waste is located throughout in the Solid Waste Facility. This should be removed and segregated appropriately and deposited into the Hazardous Waste Disposal Facility. (See photo 11).
- **14.** The Hazardous Waste section is a non engineered berm, with a liner. The liner may not be a proper liner. (See photo 13).

SECTION 2	Comments	Non-Compliance with Act or Licence	X Action Required
•	nation is a summary	y of the actions Required by the licensee to prom	ote and ensure
compliance:			
 Maintain fe 	encing at burnable w	aste facility	
 Remove has see photo 1 		bulk metal storage facility, deposit in the Hazard	lous Waste Storage Facility (
 Seek consul 	Itation about the inf	eraction of wildlife at the water reservoir.	
 Only withdr 	rawal water from an	authorized source.	
 Report all s 	pills within hazardo	us waste facility, the solid waste facility, the 2 cel	l sewage lagoons, the water
source, wat	er storage, and wat	er treatment/pump house facility as per condition	ns of water license
SECTION 3	Comments	Non-Compliance with Act or Licence	Action Required



Nunavut Waters and Nunavut Surface Rights Tribunal Act

Subsection 11. (1) Subject to subsection (2), no person shall use, or permit the use of, waters in Nunavut except in accordance with the conditions

of a licence.

3BM-HAL2025 Water License

Part C: Item 1

1. The Licensee shall obtain all fresh water from Water Supply Lake using the Water Supply Facility or as otherwise approved by the Board. The annual quantity of water use for all purposes under this Licence shall not exceed forty thousand (40,000) cubic metres per year and a maximum of two hundred and ninety-nine (299) cubic metres per day.

Licensee or Representative	Inspector's Name
Bhabesh Roy	Joseph Monteith
Signature	Signature
Date	Date
	August 25, 2020

CC: Licensing Department, NWB

Justin Hack, Manager of Field Operations, INAC

PHOTO LOG

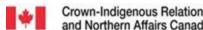
August 12, 2020 Nikon Coolpix N16D3-52000738 Joseph Monteith Photo Log #1 Photo 1 Hall Beach	Date	Camera	Inspector
Photo Log #1 Location:			
Photo 1 Hall Beach			
	Photo 1		Hall Beach
Description: Water Source on left hand side of road wall. – 60,000 metres cubed capacity	Description: Water Source on left h	and side of road wall 60,000 metro	es cubed capacity





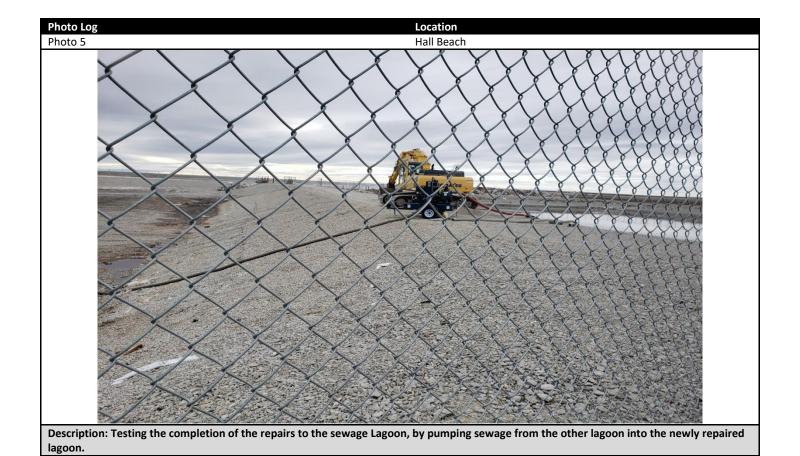
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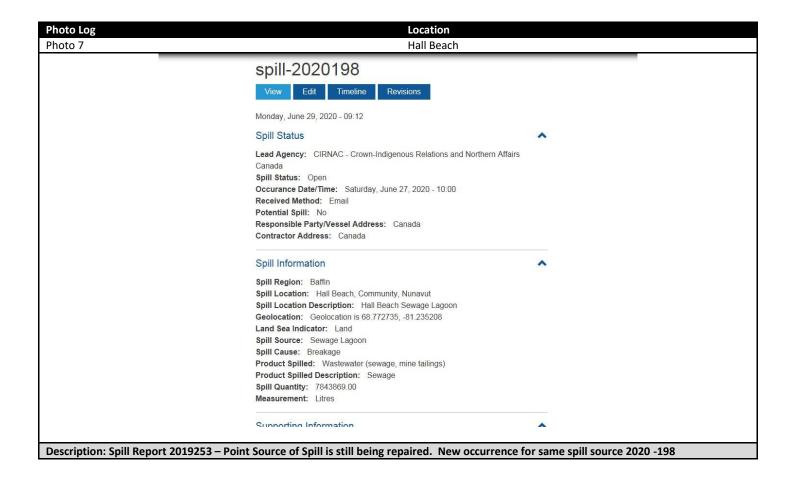


Description: Water Source: Bird Droppings were observed throughout the perimeter of the water source. The Community members expressed concern of contamination from foxes and birds.

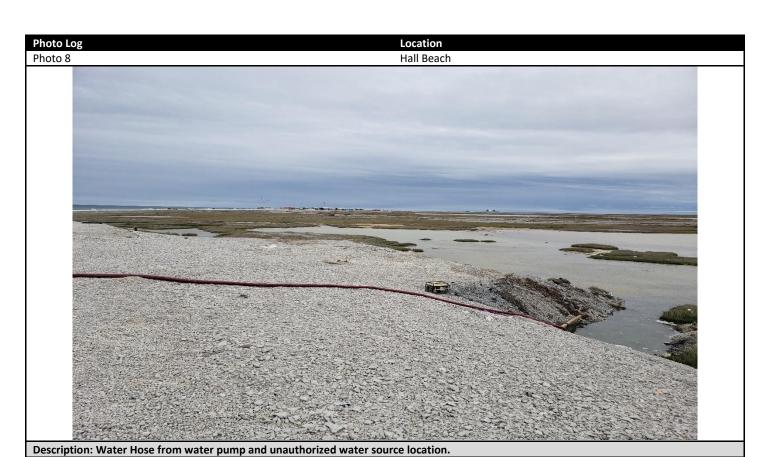












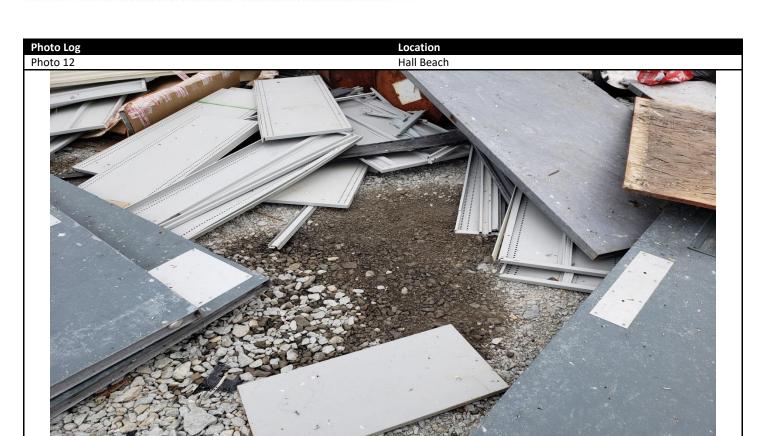












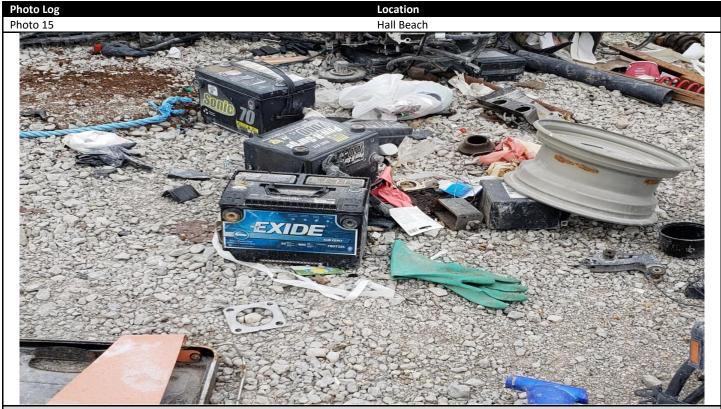
Description: Unreported spills observed throughout the Solid Waste Facility.



Description: Hazardous Waste Section of the Solid Waste Facility. Non-engineered walls prevent water from entering and mixing with Hazardous waste.







Description: Hazardous Waste: Battery within the bulk metals section. Hazardous Waste should be segregated from the rest of the domestic and metal waste.





Description: Bulk Metals : Signs of hazardous waste spill unreported, and unsegregated hazardous waste.



