Affaires autochtones et du Nord Canada

WATER LICENCE INSPECTION FORM

☑ Original☑ Follow-Up Report

Conditions:	A - Acceptable	C - Concern	U - Unacceptable	NA - Not Applicable	NI - Not Inspected
Roads/Hauling	Other: Water Dis	_	☐ Other: Mur		
Camp	Drilling	Mining	☐ Construction	n Reclamation	
Activities Inspected					
August 9, 20)16		Justin Hack		
Date of Inspection			Inspector		
Land / Other Author	izations		Land / Other Autho	rizations	
3BM-HAL15	20		Foreman		
Licence No. / Expiry			Representative's Tit	tle	
Hamlet of H	all Beach		Johnny Kad		
	U.D. I				
Licensee			Licensee Represent	ativo	

Conditions:	A - Acceptable		C - Concern U - Unacc	eptable	NA –	Not Applicable	NI – Not Ins	pected
Water Use	Condition	Comment	Site Conditions	Condition	Comment	Haz/Mat Management	Condition	Comment
Intake/Screen	NI		Water Management Structures	U	5,6	Storage	A	
Flow Measure. Device	А		Culverts / Bridges	С	7	Spills	A	
Source:	А		Drainage	NA		Spill Plan	А	
Water Use:	А		Erosion / Sediment	Α				
Recirculation (y /n)) NA		Mitigation Measures	Α		Administrative		
			Reclamation Activities	NA		Records		
			Materials Storage	NA		Reports	NI	
Waste Disposal			Signage	Α		Plans	NI	
Waste Water	А					Notifications	NI	
Solid Waste	С	15-17	Monitoring			Other		
Hazardous Waste	А		Sample Collection / Analysis	NI		Inspection report compliance	A	
						Compliance with issued Direction	A	
	*The numbe	er in the co	omments field will correspo	ond with sp	ecific com	nments provided belo	N.	l
Samples taken by I	nspector:		Location(s):					
☐ Yes ☒ No								

SECTION 1	Comments (s.1-2)	Non-Compliance with Act or Licence (s.	3) Action Required (s.4)
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Inspectors Statement

On August 9 2016, a water licence inspection was conducted at the Hamlet of Hall Beach, Qikiqtani Region, Nunavut. The Hamlet of Hall Beach has been granted a new licence that is valid until April 29, 2020. This licence allows for the use of 299 cubic meters of water per day (35,000 cubic meters annually) and the deposit of treated effluent from the Sewage Treatment Facility. The Licensee is not permitted to have any leachate discharges from other waste management areas in the Hamlet.

Inspection

Water Use:

Water Reservoir:

- 1. Water is being withdrawn from Water Supply Lake and discharged into the Water Reservoir for storage.
- 2. The berm walls around this water storage structure are in good condition. No indications of slope instability, ground instability, or seepages were evident from this facility.
- 3. The jetty entering the reservoir was in good condition. No signs of erosion were evident.
- 4. Records of water use were available and in good order at the time of inspection.

Water Supply Lake:

- 5. It was noted during the Inspection that Water Supply Lake is surrounded by manmade berms and INAC has determined that these structures trigger a regulated water use and will need to be authorized by the Nunavut Water Board. This can be done through the issuance of a new licence or through an amendment to the existing municipal licence.
- 6. Furthermore, Water Supply Lake has a dam structure located at the South-West corner of the lake.
 - a. This structure has a plaque on it specifying it was built in 1968.
 - b. From information provided in the water licence application and the water licence, it does not appear



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this dam is authorized to exist as a structure to hold and/or divert water.

- c. The Hamlet uses this facility to recharge Water Supply Lake from an inflowing stream; however, when asked about ownership of this structure, the Hamlet said it does not belong to them (see *Figure 1*).
- d. Given the date of construction and location of the structure, this facility was likely built by the military and should be authorized within a water licence.
- e. Follow-up regarding this structure will be done with the North Warning System site located in Hall Beach and with the Hamlet.
- f. At the time of inspection, erosion was evident on this structure and may affect its integrity.
- 7. Culverts are installed around this facility to divert contact water from the municipality and airport from entering Water Supply Lake (Figure 4).
 - a. From information provided in the water licence application and the water licence, it does not appear that these culverts have been authorized by the Nunavut Water Board to divert water.
 - b. During the inspection, it was communicated that these culverts wash-out every few years and are reinstalled by the airport.

Waste Water Treatment Facility:

- 8. The sewage lagoon is a two cell facility where cell 1 is designed to exfiltrate to cell 2, and the effluent from cell 2 exfiltrates to a ditch that enters the environment. This facility is located approximately 200m from the ocean.
- 9. At the time of inspection, cell 1 was completely empty due to a leak in the facility (see Figure 2)
 - a. The hamlet is working on constructing a new lagoon which should be operational in 2017.
- 10. Berm walls surrounding Cell 2 appeared to be in good condition, no signs of slope instability, leakage, cracking were evident (see *Figure 3*).
- 11. Freeboard height was sufficient.

Hazardous Waste Facility (lined):

- 12. The Hazardous waste is being stored on a lined facility.
- 13. There were no signs of slope instability, ground instability, or seepages from this facility.
- 14. At the time of the inspection no water was accumulating in this facility.

Domestic Waste Facility (unlined):

- 15. The Licensee manages domestic waste through a burning and covering procedure.
- 16. This facility is not lined and does not have the ability to capture leachate or run-off; however, no signs of run-off or leachate were evident.
- 17. The licence does not allow the Licensee to discharge leachate from this facility; however, the Licensee should consider an amendment to the licence for leachate criteria.

PHOTO LOG

Date	Camera	Inspector	Authorization
27/07/2016	SONY DSC-HX50V	Justin Hack	3BM-HAL1520





Figure 1: dam at the southwest corner of the water supply lake









Figure 3: Cell 2 of the old lagoon



Figure #4 (Culverts near the water reservoir)

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Licensee or Representative	Inspector's Name			
	Justin Hack			



*	Indigenous and Northern Affairs Canada	autochtones ord Canada
Signature		Signature
Date		Date
		September 8, 2016

Office Use Only: Fol	ollow-up report to be issued by Inspector	☐ Yes ☐ No
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