



WATER LICENCE INSPECTION FORM

Original
 Follow-Up Report

Licensee	Licensee Representative				
Department of National Defence	William Wyman				
Licence No. / Expiry	Representative's Title				
8BC-FOH1929	Environmental Officer				
Land / Other Authorizations	Land / Other Authorizations				
Date of Inspection	Inspector				
September 8, 2021	Joseph Monteith				
Activities Inspected					
<input type="checkbox"/> Camp <input type="checkbox"/> Drilling <input type="checkbox"/> Mining <input type="checkbox"/> Construction <input type="checkbox"/> Reclamation <input type="checkbox"/> Fuel Storage <input type="checkbox"/> Roads/Hauling <input checked="" type="checkbox"/> Other: Potable Water Source, Solid Waste Facility, Sewage Disposal Facility, Hazardous materials, and waste <input type="checkbox"/> Other:					

Conditions:	A- Acceptable	U-Unacceptable	C-Concern	NI-Not Inspected	NA- Not applicable
PART:				Condition	Observation No.*
A: SCOPE, DEFINITIONS AND ENFORCEMENT				A	
B: GENERAL CONDITIONS				A	1
C: CONDITIONS APPLYING TO SECURITY				NI	
D: CONDITIONS APPLYING TO WATER USE				A	2-5
E: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT				A	6-10
F: CONDITIONS APPLYING TO MODIFICATIONS				NA	
G: CONDITIONS APPLYING TO CONSTRUCTION				NA	
H: CONDITIONS APPLYING TO EMERGENCY RESPONSE AND CONTINGENCY PLANNING				A	
I: CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE PLANNING				NI	
J: CONDITIONS APPLYING TO MONITORING				A	
SCHEDULES				A	

*The item number corresponds with specific conditions within the licence and the observation number corresponds with specific comments provided below.

Samples taken by Inspector:	Location(s): Latitude: 68° 45' 35"N Longitude: 81° 11' 41"W
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

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

BACKGROUND

Water Licence 8BC-FOH1929 issued to the Government of Canada(GOC), Department of National Defence(DND) for the use of water from a man-made reservoir owned and operated by the Hamlet of Hall Beach(HHB), however, the Nunavut Water Board(NWB) still requires, for record keeping purposes, that the Licensee monitor its water intake from the reservoir in accordance with the Monitoring Program. Non-hazardous solid waste is disposed of at the Hall Beach landfill. Hazardous waste is back hauled outside of Nunavut. Sewage is treated on site, and discharged to the environment.

Relevant on site facilities include a shared water storage reservoir with a capacity of 60,000m³ with the hamlet of Hall Beach, a shared pump house with the Hamlet of Hall Beach. Also bio-reactor, sodium hydroxide injection system, 4 x filter membranes, Aqua Flo Ultra Violet Lamps, processing pumps, and activated carbon absorber to treat and recycle waste water for urinals, toilets and discharge to the receiving environment.

Inspector Statement

On September 8, 2021, a water licence inspection was conducted on was conducted by Water Resource Officer (WRO) Joseph Monteith at 8BC-FOH1929, also known as the North Warning Site (NWS), FOX-M in Hall Beach, Qikiqtani Region, Nunavut.

General Condition

- On March 22, 2021 Sylvia Ekelik emailed a acknowledge receipt of the 8BC-FOH1929 2020 Annual Report for FOX-M satisfying the general requirement to submit an annual report annually.

[http://ftp.nwb-oen.ca/registry/8%20MISCELLANEOUS/8B/8BC%20-%20Camp/8BC-FOH1929%20\(FOX-](http://ftp.nwb-oen.ca/registry/8%20MISCELLANEOUS/8B/8BC%20-%20Camp/8BC-FOH1929%20(FOX-)

[M\)/3%20TECH/1%20GENERAL%20\(B\)/2%20ANNUAL%20RPT](#)**Water Use and Related Structures**

2. Water withdrawal is conducted from South Lake (photo 1) to the Water Storage Reservoir(Photo 2). The Water from South Lake is recharged by opening up a gate on a dyke which is also a man-made reservoir. The lined Storage Reservoir has a capacity of 60,000m³ (Photo 2).
3. The pipe that historically delivered metered water to the NWS facility was damaged. Consequently the NWS has installed a truck pipe connector, and hose to withdraw water from the reservoir (Photo 3).
4. During the inspection their logs showed total of 35m³ withdrawn from trucked service (Photo 4).
5. Fox-M treats water through granular carbon filter, a multimedia filter and two UV filter lamps (see photo 5).

Solid Waste

6. Solid waste is disposed of at the Hamlet of Hall Beach's Land Fill.
7. Hazardous Waste is disposed of by palletizing the waste, store them in a warehouse to backhaul them to an approved hazardous waste Disposal Facility (Photo 6).
8. Copies of Hazardous Waste Manifest observed on site (Photo 7).

Sewage Disposal Facility

9. Sewage Waste is treated on site using a bio-reactor, sodium hydroxide injection system, membranes, and processing pumps, and activated carbon absorbers to remove color. This is all to recycle water for use in toilets and urinals (see photo 8 & 9).
10. After the waste water is treated it is used as toilet water. The excess treated water due to the input of showers, kitchens, wash basins, toilets and urinals, is discharged to the receiving environment (see photo 10).

Spill Reports

Since the last inspection in 2018, there has been 4 spill reports submitted to the NT/NU Spills Line.

SECTION 2	<input type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input checked="" type="checkbox"/> Action Required
No actions required.			
SECTION 3	<input type="checkbox"/> Comments	<input checked="" type="checkbox"/> Non-Compliance with Act or Licence	<input type="checkbox"/> Action Required
No non-compliance issues noted			

Licensee or Representative	Inspector's Name
William Wyman	Joseph Monteith
Signature	Signature
Date	Date
	November 29, 2021

CC: Licensing Department, NWB

Justin Hack, Manager of Field Operations, INAC



PHOTO LOG

Date	Camera	Inspector		
September 8, 2021	Nikon Coolpix	Joseph Monteith		
Photo Log #1	Location			
Photo 1	Hall Beach - North Warning Site FOX-M			
				
07 11 2018				
Description: South Lake in the background, with the pump house in the mid ground, and piping in the foreground. Photo from July 11, 2018.				

Photo Log #	Location
Photo 2	FOX-M
	
Description: Pump house recharges Trucks with the fresh water from South Lake.	

A photograph showing a large, silver, corrugated truck pipe connected to a black flexible hose. The pipe is supported by several white concrete blocks on a gravel surface. In the background, there is a white electrical box mounted on a wooden post, and an orange utility pole. A person's legs are visible on the right side of the frame.

Description: truck pipe and hose for water withdraw from the Community water reservoir.

Description: Potable Water Form, Dated Sept. 2021. Amount withdrawn from trucked service at the reservoir may read a total of 27,000 Litres.



Photo Log

Photo 7

Location

FOX-M

Description: Movement Document/ Manifest – Hazardous Waste Manifest

Photo Log

Photo 8

Location

FOX-M



Description: Bio Reactor

