



WATER LICENCE INSPECTION FORM

Original
 Follow-Up Report

Licensee	Licensee Representative
Department of National Defence	Don Beattie
Licence No. / Expiry	Representative's Title
3BC-FOH0919	Environmental Officer
Land / Other Authorizations	Land / Other Authorizations
Date of Inspection	Inspector
July 11, 2018	Joseph Monteith & Jonathan Mesher
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 <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	<input checked="" type="checkbox"/> Comments (s. __)	<input type="checkbox"/> Non-Compliance with Act or Licence (s. __)	<input type="checkbox"/> Action Required (s. __)
BACKGROUND			
<p>Water Licence 3BC-FOH0919 issued to the Government of Canada, Department of National Defence for the use of water from a man-made reservoir owned and operated by the Hamlet of Hall Beach, however, the Nunavut Water Board 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.</p> <p>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.</p>			
Inspector Statement			
<p>On July 11, 2018 A water licence inspection was conducted on was conducted at 3BC-FOH0919, also known as the North Warning Site (NWS) FOX-M in Hall Beach, Qikiqtani Region, Nunavut.</p>			
Compliance with General Conditions of the Licence			
<ol style="list-style-type: none"> On March 28, 2018 The Nunavut Water Board uploaded 3BC-FOH0919 2017 Annual Report for FOX-M to the NWB ftp site, satisfying the general requirement to submit an annual report annually. 			
Water Use and Related Structures			
<ol style="list-style-type: none"> Water withdrawal is conducted from South Lake (photo 1) 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 lined Storage Reservoir has a capacity of 60,000m³ (See photo 2). The pump house was operating at the time of the inspection. Logs showed that both trucked and pump house 			



meter were used to calculate water usage at the time of the inspection (see photo 3).

4. During the inspection their logs showed total of 35m³ withdrawn from both trucked service, and through the pump house water meter (see 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 palleting the waste, store them in a warehouse to backhaul them to an approved hazardous waste Disposal Facility (see photo 6).
8. Copies of Hazardous Waste Manifest observed on site(See 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

2018-222 originally labelled GN- EED lead agency was changed to reflect CIRNAC Lead agency. On June 13, 2018, Spill Report 2018-222 was submitted to report a 1 litre spill of hydraulic fluid from a failed O-Ring on the hydraulic line of a Loader. On July 11, 2018 an inspection was conducted on the spill site, and no observations of hydraulic fluid were present. It is my belief that the spill was cleaned up as reported, and I am satisfied with the measures taken to clean up the spill. This spill can be closed.

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
Don Beattie	Joseph Monteith
Signature	Signature
Date	Date
	January 30, 2019

CC: Licensing Department, NWB
Justin Hack, Manager of Field Operations, INAC



PHOTO LOG

Date	Camera	Inspector
July 11, 2018	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 Log #	Location
Photo 2	FOX-M
 07 11 2018	
Description: Pump house recharges Trucks with the fresh water from South Lake.	

Description: Water meter reads 3387299.9

Description: July water usage log – 35,000 Litres withdrawn in July. 12,000 Litres of trucked withdraw, and 23,000 litres withdrawn from the pump house.



Photo Log #	Location
Photo 5	FOX-M
 <p>11.07.2018 14:07</p>	

Description: 4 x water filters, 2 x Aqua Flo Ultra Violet Lamps

Photo Log #	Location
Photo 6	FOX-M
 <p>07 11 2018</p>	

Description: Hazardous Waste, in drums awaiting to be palleted and shipped out to an approved waste disposal site.

Photo Log

Photo 7

Location

FOX-M

MOVEMENT DOCUMENT / MANIFEST DOCUMENT DE MOUVEMENT / MANIFESTE											
This document is issued in accordance with the Act respecting dangerous goods and protective measures and environmental protection, and is issued in accordance with the regulations made thereunder. It is the responsibility of the consignor to ensure that the information contained in this document is correct and complete. Any information that is false or misleading may result in the cancellation of the consignment and the imposition of administrative penalties. The consignor is responsible for the correctness of the information contained in this document.											
20											
2581551-5											
MOVEMENT DOCUMENT / MANIFEST Reference No. N° de référence du document de mouvement/manifeste											
B Carrier / transporteur Registration No. / Provinicial ID No. N° d'enregistrement / N° provincial											
C Recipient / consignee Recipient/consignee / destinataire											
Registration No. / Provincial ID No. N° d'enregistrement / N° provincial											
D Reference No. of the document of identification/identification document reference no. N° de référence du document de l'identification/ N° de l'identification document											
E Receiver / consignee information name in the Part A Nom du destinataire/consignee dans les énoncés de la Partie A											
F Yes / Out / No, complete the box below if you wish to use it. Si Oui / Non, complétez la case suivante si vous souhaitez l'utiliser.											
G Shipping address / Address de la compagnie Shipping address / Adresse de la compagnie											
H Hall Beach NR 104 0K0											
I Shipping address / consignee information name in the Part A Nom du destinataire/consignee dans les énoncés de la Partie A											
J Safety - Kleen 201824-1											
K Clean Harbors Ville St Catherine QC 6755 RUE DE L'ISLE 132 JSC 1B6											
L 2800 BOULEVARD (C) INDUSTRIEL CLERMONT QC J3K 4U2											
M WASTE, SOLIDS, COMPRESSED FLUIDS, LIQUIDS, LIQUEFIED CRUEL, AVIATION, TURBINE ENGINE, WASTE, FUEL, AVIATION TURBINE, ENGINE *											
N 3175 4.1 II 0008 KG 9 07 S											
O 1963 3 III 589 L 2 07 L											
P 10 11 12 13 14 15 16 17 18 19 20 21											
Q 10 11 12 13 14 15 16 17 18 19 20 21											
R 10 11 12 13 14 15 16 17 18 19 20 21											
S 10 11 12 13 14 15 16 17 18 19 20 21											
T 10 11 12 13 14 15 16 17 18 19 20 21											
U 10 11 12 13 14 15 16 17 18 19 20 21											
V 10 11 12 13 14 15 16 17 18 19 20 21											
W 10 11 12 13 14 15 16 17 18 19 20 21											
X 10 11 12 13 14 15 16 17 18 19 20 21											
Y 10 11 12 13 14 15 16 17 18 19 20 21											
Z 10 11 12 13 14 15 16 17 18 19 20 21											
* FLASH POINT 38°C											
EMERGENCY CONTACT 24 HR CANUTEC 9-613 976 6666											
Instructions on reverse Instructions au verso											
Signature Tel. No. / N° de tel.											
Bar code handling / Marquage à code-barres Attached Copy / Copie jointe As Above / Comme ci-dessus											
21 Date shipped / Date d'expédition Your / Avez / Month / Mois / Day / jour Time / Heure 22 Scheduled arrival date / Date d'arrivée prévue Année / Month / Mois / Day / jour											
23 Instructions 07 11 2018 Copy / Copie 1 (white - blanche)											

Description: Movement Document/ Manifest – Hazardous Waste Manifest

Photo Log

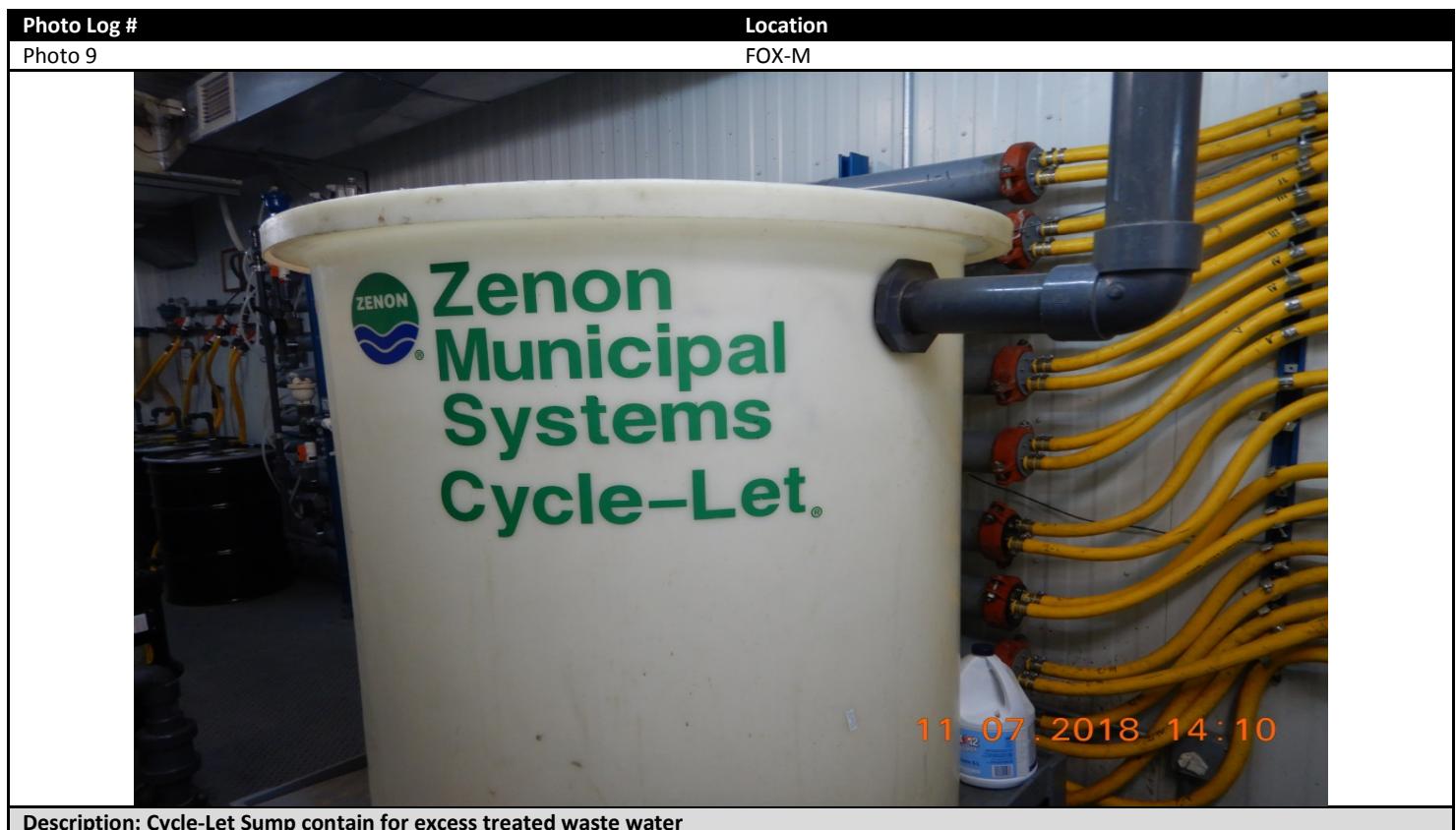
Photo 8

Location

FOX-M



Description: Bio Reactor



Description: Cycle-Let Sump contain for excess treated waste water



Description: Discharge point of treated waste water excess