



WATER LICENCE INSPECTION FORM

☒ Original

☐ Follow-Up Report

Licensee	Licensee Representative
McGill University, Department of Geography	Christopher Omelon
Licence No. / Expiry	Representative's Title
8WLC-MGU2021	Base Manager, Arctic Research Station
Land / Other Authorizations	Land / Other Authorizations
N2016N0014	
Date of Inspection	Inspector
July 11, 2019	Joseph Monteith, Erik Allain, & Jeremy Fraser
Activities Inspected	
<div><input checked="" type="checkbox"/> Camp<input type="checkbox"/> Drilling<input type="checkbox"/> Mining<input type="checkbox"/> Construction<input type="checkbox"/> Reclamation<input checked="" type="checkbox"/> Fuel Storage</div> <div><input type="checkbox"/> Roads/Hauling<input checked="" type="checkbox"/> Other:<input type="checkbox"/> Other:</div>	

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		
C: CONDITIONS APPLYING TO SECURITY			NI		
D: CONDITIONS APPLYING TO WATER USE			A	1-5	
E: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT			A	6-9	
F: CONDITIONS APPLYING TO MODIFICATIONS			NI		
G: CONDITIONS APPLYING TO CONSTRUCTION			NI		
H: CONDITIONS APPLYING TO EMERGENCY RESPONSE AND CONTINGENCY PLANNING			A	10-14	
I: CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE PLANNING			NA		
J: CONDITIONS APPLYING TO MONITORING			NI		
SCHEDULES			A		
*The observation number corresponds with specific comments provided below.					
Samples taken by Inspector:		Location(s) Main Camp: N79 25 00.0 W90 43 00.0 Crusoe camp: N79 23 21.0 W91 01 25.0			
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

SECTION 1	<input type="checkbox"/> Comments (s. __)	<input type="checkbox"/> Non-Compliance with Act or Licence (s. __)	<input type="checkbox"/> Action Required (s. __)
BACKGROUND			
<p>The Station, located near expedition fiord on Axel Heiberg Island, NU, consisted of approximately 11 buildings situated on crown lands for the purpose of supporting scientific field work. The camp is spread out and contains buildings grouped together at two locations (see <i>Figure 1</i>). The locations of the camps, where water and waste were used and produced, is located at:</p> <p>Main Camp: N79 25 00.0 W90 43 00.0 Crusoe camp: N79 23 21.0 W91 01 25.0</p> <p>Summary of water licence issuances:</p> <ul style="list-style-type: none">-On May 9, 2016 3BC-MGU1015 was issued;-On May 4, 2018 8WLC- MGU was issued ;-On March 25, 2019 8WLC-MGU1920 was issued;-On March 25, 2020 8WLC-MGU2021 was issued, and set to expire on March 24, 2021. <p>The current water licence authorizes the withdrawal of 1 cubic metre per day, and deposit of sewage.</p>			
Inspector Statement			
<p>On July 11, 2018 at 1:50 pm, A Water Licence Inspection was conducted by Water Resource Officer (WRO) Joseph Monteith, Erik Allain, and Jeremy Fraser at Expedition Fiord, Axel Heiberg Island, Nunavut, for water licence 8WLC-MGU1920. The inspection was completed on July 11, 2019 at 4:45pm.</p>			
Water Supply Facilities			
<div><div>1. Water is withdrawn from a small lake downhill from the main camp (photo 1). The water supply is situated next to the old camp kitchen (photo2), and the airstrip (photo 3).</div><div>2. No sign of drawdown, erosion, disturbance or sedimentation was observed at the small lake.</div><div>3. A water pump (photo 6) is used to move the water uphill to a water storage tank (photo 17).</div></div>			



4. No water meter observed on site at the time of inspection.
5. No logs were observed on site.

Solid Waste

6. Bulk Metal was observed on site (photo 10).
7. Old Sump Pit (photo 8).
8. An incinerator toilet was observed on site called a Incinolet (photo 12). Incinolet waste in drum (photo 18, and 19).
9. Honey buckets (photo 13).

Fuel Cache

10. None of the fuel observed was within 31 metres of any water body.
11. Fuel caches were observed on site (photo 3, 14, 15, 20 & 21).
12. 24 drums counted total
13. Berm water release (photo 20, & 21).

Crusoe River Camp

14. Site appeared to be in a state of temporary closure (photo26 & 27).

SECTION 2	<input type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input checked="" type="checkbox"/> Action Required
-----------	-----------------------------------	---	---


Do the following items below to bring yourself back into compliance:

- Report all spills as per water licence requirements, as they happen.
- Review schedule 1, item 5 (c), (d), (e) of your current water licence.

SECTION 3	<input checked="" type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input type="checkbox"/> Action Required
-----------	--	---	--

Spill Contingency

- 5c. report spills immediately to the NWT/NU 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295;
- d. for each spill occurrence, submit to the Inspector, no later than thirty (30) days after initially reporting the event, a detailed report that will include reference to the assigned spill number, the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site; and
- e. in addition to Item 5c, regardless of the quantity of releases of harmful substances, report to the NWT/NU 24-Hour Spill Line if the release is near or into a Water body

Licensee or Representative	Inspector's Name
	Joseph Monteith
Signature	Signature
	
Date	Date
	December 12, 2019

CC: Licensing Department, NWB
Justin Hack, Manager of Field Operation

PHOTO LOG

Date	Camera	Inspector
July 11, 2019	Nikon Cool Pix	Joseph Monteith
Photo Log #	Location	
Photo 1	Axel Heiberg Island, Qiqiktani, NU	
		
Description: 5 weather havens, 3 buildings, 6 tents. Water source is the small lake in the left hand side of the photo.		

Photo Log #	Location
Photo 2	Axel Heiberg Island, NU
	
Description: McGill Camp, with water source next to camp infrastructure. Airstrip is on the opposite side of the small lake from the camp. On the white polygonal plane.	



Photo Log #	Location
Photo 3	Axel Heiberg Island
	
Description: Fuel Cache at Airstrip – Sign of spill. 9 drums out of secondary containment. 10 drums in secondary containment. Total 19 drums. 2 x spill kits on site. 4 waste barrels next to 2x spillkits.	

Photo Log #	Location
Photo 4	Axel Heiberg Island
	
Description: old flooring for helicopters, or building	



Photo Log #	Location
Photo 5	Axel Heiberg Island
	
Description: old kitchen 2 x propane tanks, 1 x storage tank for heating	

Photo Log #	Location
Photo 6	Axel Heiberg Island
	
Description: Water Pump	



Photo Log #	Location
Photo 7	Axel Heiberg Island
	
Description: Water Withdrawal hose, with fish mesh screen	

Photo Log #	Location
Photo 8	Axel Heiberg Island
	
Description: old sump pit	



Photo Log #	Location
Photo 9	Axel Heiberg Island
	
Description: Fuel Cache with secondary containment. And Spill kit	

Photo Log #	Location
Photo 10	Axel Heiberg Island
	
Description: Solid Waste	



Photo Log #	Location
Photo 11	Axel Heiberg Island
	
Description: mobile incinerator	

Photo Log #	Location
Photo 12	Axel Heiberg Island
	
Description: Incinolet – incinerator toilet in latrine.	



Photo Log #	Location
Photo 13	Axel Heiberg Island
	
Description: toilet	

Photo Log #	Location
Photo 14	Axel Heiberg Island
	
Description: fuel storage tanks in secondary containment, 2 x heating storage tank in secondary containment	



Photo Log #	Location
Photo 15	Axel Heiberg Island
 A photograph showing three drums in secondary containment. Two black drums and one red and white drum are sitting on a yellow spill containment tray on a gravel surface. The black drums have some text on them, including 'AXEL ISLAND' and 'SHEWAN/PCSP 2013'. The red and white drum is a standard hazard drum. In the background, there is a white building and some equipment.	
Description: 3 x drums in secondary containment.	

Photo Log #	Location
Photo 16	Axel Heiberg Island
 A photograph showing a building with a corrugated metal exterior. A large yellow and red drum is on a stand next to the building. Two white propane cylinders are standing upright next to the building. Several other white propane cylinders are lying on the ground in the foreground. A yellow spill containment tray with a red and white drum is also visible. The background shows a hilly landscape under a cloudy sky.	
Description: building heating storage tank not in secondary containment. 7 x propane cylinders. Water storage tank next to building.	



Photo Log #

Photo 17

Location

Axel Heiberg Island



Description: Water Storage Tank 20 gallon tank. Approximately 10 gallons in tank.

Photo Log #

Photo 18

Location

Axel Heiberg Island



Description: Burn box – drum cut in half, mesh screen overtop to mitigate



Photo Log #	Location
Photo 19	Axel Heiberg Island
	
Description: incinerated human waste from Incinolet.	

Photo Log #	Location
Photo 20	Axel Heiberg Island
	
Description: Fuel Cache at the airstrip. 8 drums out of secondary containment. Sign of spill. Berm water. No sign of spill in berm.	



Photo Log #	Location
Photo 21	Axel Heiberg Island
	
Description: 8 drums in secondary containment. Water from berm may of poured out during transfer of drums in and out of secondary containment	

Photo Log #	Location
Photo 22	Axel Heiberg Island
	
Description: 2 x spill kits	




Photo Log #	Location
Photo 23	Axel Heiberg Island
	
Description: building at airstrip	

Photo Log #	Location
Photo 24	Axel Heiberg Island
	
Description: 2x old drums behind building.	

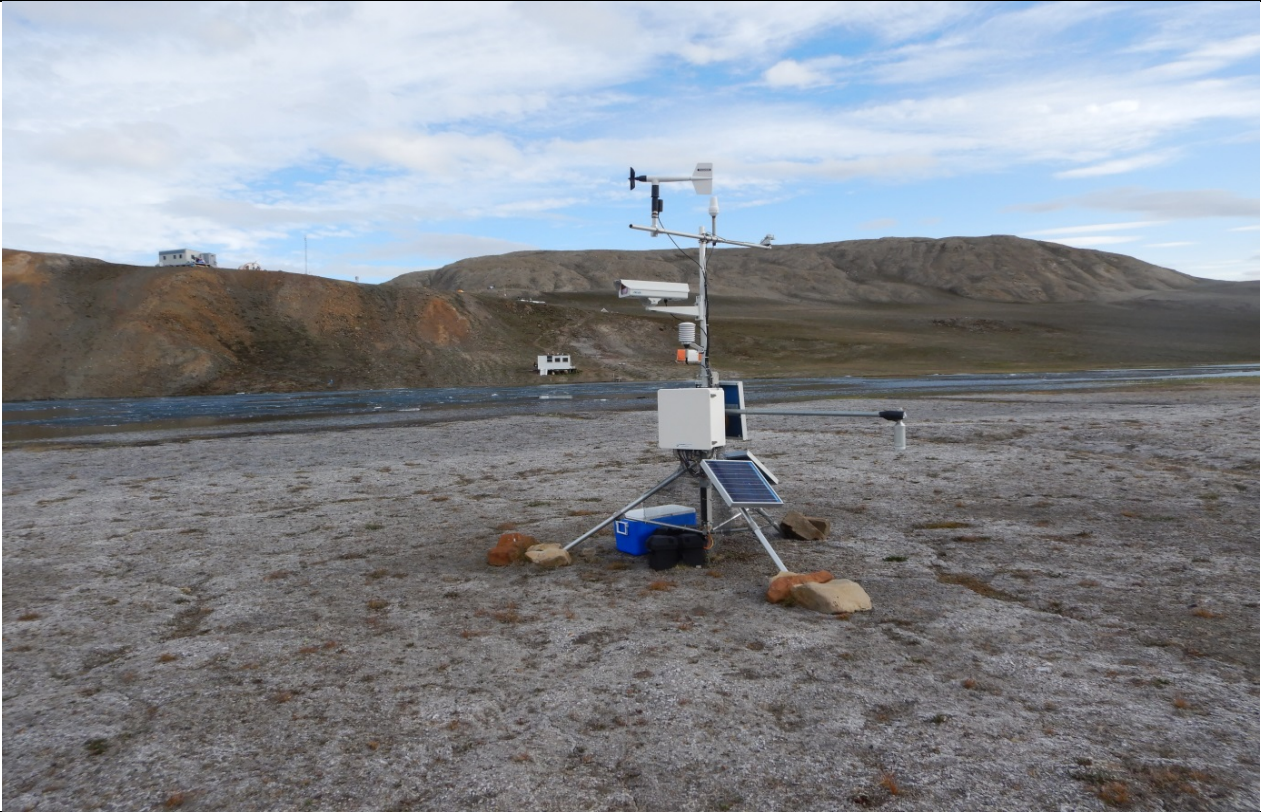


Photo Log #

Photo 25

Location

Axel Heiberg Island



Description: weather monitoring instruments powered by batter in cased in protective covering.

Photo Log #

Photo 26

Location

Axel Heiberg Island



Description: Site of the Crusoe Camp. Structures on site. Site appears to be in a state of temporary closure. Instruments on bottom left hand side of camp.



Photo Log #	Location
Photo 27	Axel Heiberg Island
	
Description: 1 weather haven at camp, 2 x flooring but no erected structure. Crusoe Camp.	