

WATER LICENCE INSPECTION FORM

☒ Original

☐ Follow-Up Report

Licensee	Licensee Representative
DeBeers Canada Inc.	David Willis
Licence No. / Expiry	Representative's Title
2BE-CHI1823	Environmental and Community Coordinator
Land / Other Authorizations	Land / Other Authorizations
N2012C0024	
Date of Inspection	Inspector
July 25, 2019	Joseph Monteith
Activities Inspected	
<div><input checked="" type="checkbox"/> Camp<input checked="" 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: Tailings (CH-07)<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					
B: GENERAL CONDITIONS				A	
C: CONDITIONS APPLYING TO SECURITY				NI	
D: CONDITIONS APPLYING TO WATER USE				A	3,12,13, 18, 19, 20
E: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT				A	9,19, 24
F: CONDITIONS APPLYING TO MODIFICATIONS				NI	
G: CONDITIONS APPLYING TO CONSTRUCTION				A	1, 21, 22
H: CONDITIONS APPLYING TO EMERGENCY RESPONSE AND CONTINGENCY PLANNING				A	2,4-8, 10,11,14-17,23
I: CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE PLANNING				NA	
J: CONDITIONS APPLYING TO MONITORING				A	
SCHEDULES				A	
*The observation number corresponds with specific comments provided below.					
Samples taken by Inspector:		Location(s): Discovery: Lat/Long; N64° 14.424' , W66° 20.757' CH-06: Lat/Long; N64° 19.410'N , W66° 31.506'W CH-07: Lat/Long ; N64.25707 W66.34506			
<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>Nunavut Water Licence 2BE-CHI1218 is issued to Peregrine Diamonds Ltd for the use of 246 cubic metres of water per day and the disposal of waste for camp operations and activities related to exploration including diamond drilling, large diameter reverse-circulation drilling, and other associated activities.</p> <p>Land Use Permit #N2012C0024 issued to Peregrine Diamonds Ltd May 25th, 2017 for the use of land for Mining exploration and associated activities.</p> <p>Water Use and Waste Disposal is authorized through this licence at the Chidliak Project, supported from the Discovery, Sunrise, Aurora, and CH-6 Camps located on the Hall Peninsula.</p> <p>On April 30, 2018 a renewal licence extending the water licence 2BE-CHI1218 to May 31, 2023.</p> Inspector Statement <p>On July 25, 2019 at 3:02pm, A Water Licence Inspection was conducted by Water Resource Officer(WRO) Joseph Monteith at Peregrine Diamond’s Chidliak sites, Qikiqtani Region, Nunavut, for water licence2BE-CHI1823. The inspection was conducted at Peregrine Diamond’s Chidliak sites Discovery Camp, CH-06 Drill site, Water Withdrawal Site(spill report 2017-320), and CH-07 Tailings. During the inspection the Chidliak sites were active. The inspection ended at 6:25pm on July 25, 2019.</p> General Condition <p>On May 24, 2019. Richard Dwyer, Manager of Licencing, Nunavut Water Board emailed a copy of the 2017 Annual Report, 2017 Annual Report Tech Review on May 1, 2019. In the review it was acknowledged that the information submitted addresses the requirements of the Licence.</p>			



Inspection

Discovery camp

1. Active Discovery Camp – Chidliak, DeBeers (photo 1).
2. 13 weather havens, 1 garage weather haven, 9 wooden buildings, 6 heavy equipment, 2 x mobile fuel tanks in secondary containment, 2x water storage tanks with housing, wood piles, approximately 10-15 sea cans, numerous drill core boxes.
3. Water withdrawal location. Water pump (photo 2) Hose in water, fish mesh screen observed. Stream hasn't been drawn down. But is a very low flow. Signs of algae growth (photo 3).
4. Fuel Cache 1 - 19 barrels of fuel in secondary containment. Signage observed, spill kit observed (photo 4).
5. Fuel Cache 2 -68 barrels of diesel in secondary containment. Signage observed (photo 5).
6. Fuel Cache 3 - approximately 65 drums of fuel in secondary containment with Spill Kit next to Fuel Cache and proper signage. (photo 5)
7. 2x Methanol drums (photo 6).
8. Refuelling station – covered (photo 7 & 8).
9. Empty Fuel Drums being flown to Iqaluit (photo 9).
10. Fuel barrel for weather haven heater – liquid in secondary containment (photo 10).
11. Fuel barrel for weather haven heater -liquid in secondary containment (photo 11).
12. 3 x Water Storage Tanks (photo 12).
13. 1 large water storage tank (photo 13).

Spill Report 2017-230

14. Site of Spill 2017-230. No Sign of spill or sheening (photo 14).
15. Site of Spill Report 2017-320 (photo 15).
16. Site of Spill Report 2017-320 – no signs of spills, no signs of spill migration. No samples taken.

CH-06 Drill site

17. 2 x drill rigs 1 x fuel cache with secondary containment, drill recycle sump pit, emergency campsite (photo 16).
18. Water pump for sump pit for recycling drill water (photo 17).
19. The natural Sump, for recycled drill water (photo 18).
20. Drill water storage tanks, water pumps, and fuel tanks for water pumps. Secondary containment for fuel storage (photo 19).
21. Drill shack – Drilling active. Shut down for our inspection of site (photo 20).
22. Drill motor base, has hydrocarbon absorbent pads to mitigate the impact of a hydrocarbon spill. Battery installed (photo 21).
23. Double walled fuel storage tank. With spill kit next to storage tank.
24. CH-07 Tailings – No issues.

SECTION 2	<input type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input checked="" type="checkbox"/> Action Required
Do the following below to bring yourself back into compliance:			
<div><div>-</div>Verify in 2020 with another sample result that the spill at Spill Report 2017-230 has been cleaned.</div> <div><div>-</div>Repair or replace damaged secondary containment observed in photo 11</div> <div><div>-</div>Label the company name on all drums (photo 6).</div> <div><div>-</div>Provide capacity of the water storage tanks at the discovery camp observed in photos 12 & 13</div>			
SECTION 3	<input checked="" type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input type="checkbox"/> Action Required
The Chidliak Sites are well managed. I am satisfied with the level of effort this company does to manage the environmental aspect of the site.			

Licensee or Representative	Inspector's Name
	Joseph Monteith
Signature	Signature
Date	Date
	January 7, 2020

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



PHOTO LOG

Date	Camera	Inspector
July 25, 2019	Nikon Cool Pix	Joseph Monteith
Photo Log #	Location	
Photo 1	Chidliak –Discovery Camp	



Description: Discovery Camp – Active site

Photo Log #	Location
Photo 2	Chidliak – CH-06



Description: Drill water storage tanks, water pumps, and fuel tanks for water pumps. Secondary containment for fuel storage.



Photo Log #
Photo 3

Location
Chidliak – CH-06



Description: fish mesh screen – algae growth

Photo Log #
Photo 4

Location
Chidliak – Discovery Camp



Description: Discovery Camp - Fuel Cache 1 - 27 barrels of Jet-A fuel in secondary containment



Photo Log #

Photo 4

Location

Chidliak – Discovery



Description: Fuel Cache – Approximately 60 drums of fuel in secondary containment, spill kit observed.

Photo Log #

Photo 5

Location

Chidliak – Discovery



Description: Fuel cache 3, Approximately 65 drums of fuel in secondary containment, with spill kit and Signage observed.



Photo Log #

Location

Photo 6

Chidliak – Discovery



Description: 2x barrels of Methanol.

Photo Log #

Location

Photo 7

Chidliak – Discovery



Description: Fuel Transfer Station for helicopter refuelling.



Photo Log #

Photo 8

Location

Chidliak – Discovery



Description: Spill Kit at the Helicopter Transfer Station. 2x berms. Waste oil drum

Photo Log #

Photo 9

Location

Chidliak – Discovery



Description: Empty fuel drums ready for departure.



Photo Log #

Photo 10

Location

Chidliak – Discovery



Description: Storage tank for camp in secondary containment.

Photo Log #

Photo 11

Location

Chidliak – Discovery



Description: Secondary containment on storage tank for heating damaged.



Photo Log #	Location
Photo 12	Chidliak – Discovery
	
Description: 3 x Water Storage Tanks	


Photo Log #	Location
Photo 13	Chidliak – Discovery
	
Description: larger water storage tank. Situated behind 3 x water storage tanks, and in added section to the building.	



Photo Log #	Location
Photo 14	Chidliak – Site of Spill Report 2017-320
	
Description: Site of Spill Report 2017-320. No signs of spill or spill migration	

Photo Log #	Location
Photo 15	Chidliak – Site of Spill Report 2017-320
	
Description: Site of Spill Report 2017-320 – No sign of spill, or spill migration	



Photo Log #	Location
Photo 16	Chidliak – CH-06
	
Description: 2 x drill rigs 1 x fuel cache with secondary containment, drill recycle sump pit , emergency campsite	

Photo Log #	Location
Photo 17	Chidliak – CH-06
	
Description: water pump, and fuel storage for water pump. Sump pit, and secondary containment next to recycled drill water sump pit.	



Photo Log #

Location

Photo 18

Chidliak – CH-06



Description: footprint of sump for recycling drill water pump on other side. Drill Core shacks and monitoring station on the horizon.

Photo Log #

Location

Photo 19

Chidliak – CH-06



Description: Drill water storage tanks, water pumps, and fuel tanks for water pumps. Secondary containment for fuel storage.



Photo Log #

Location

Photo 20

Chidliak – CH-06



Description: Drill shack – Drilling active. Shut down for our inspection of site.

Photo Log #

Location

Photo 21

Chidliak – CH-06



Description: Drill motor base, has hydrocarbon absorbant pads to mitigate the impact of a hydrocarbonspill. Battery installed.



Photo Log #

Location

Photo 22

Chidliak – CH-06



Description: double walled fuel storage tank. With spill kit next to storage tank.