



WATER LICENCE INSPECTION FORM

☒ Original
☐ Follow-Up Report

Licensee	Licensee Representative
Peregrine Diamonds Ltd	Alan O'Connor
Licence No. / Expiry	Representative's Title
2BE-CHI1218	Program Manager
Land / Other Authorizations	
N2012C0024	
Date of Inspection	Inspector
05 September 2017	Jonathan Mesher
Activities Inspected	
<input type="checkbox"/> Municipality <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: CH-6 Water Source <input checked="" type="checkbox"/> Other: fuel spill	

Conditions: **A - Acceptable** **C - Concern** **U - Unacceptable** **NA - Not Applicable** **NI - Not Inspected**

Water Use			Site Conditions			Haz/Mat Management		
	Condition	Comment		Condition	Comment		Condition	Comment
Intake/Screen	NI		Water Management Structures	NI		Storage	C	
Flow Measure. Device	NI		Culverts / Bridges	NI		Spills	C	
Source:	A		Drainage	NI		Spill Plan	C	
Water Use:	A		Erosion / Sediment	NI				
Recirculation (y /n)	NI		Mitigation Measures	NI		Administrative		
			Reclamation Activities	NI		Records	NI	
			Materials Storage	NI		Reports	NI	
Waste Disposal			Signage	NI		Plans	NI	
Waste Water	NI					Notifications	A	
Solid Waste	NI		Monitoring			Other		
Hazardous Waste	NI		Sample Collection / Analysis	NI				
*The number in the comments field will correspond with specific comments provided below.								
Samples taken by Inspector:			Location(s): Samples were taken at the spill location and downstream of the spill					
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No								

SECTION 1 ☒ **Comments** ☐ **Non-Compliance with Act or Licence** ☐ **Action Required**

Background

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.

Land Use Permit #N2012C0024 issued to Peregrine Diamonds Ltd May 25th, 2017 for the use of land for Mining exploration and associated activities.

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.



Inspectors Statement

On September 5, 2017, Inspectors Jonathan Mesher with INAC and David MacDonald with ECCC and summer student Jeremy Fraser arrived at the licensee's Camp for the inspection of a fuel spill (Spill #17-320) at CH-6 water source seven days after the spill had occurred on August 29, 2017. Inspectors met with Alan O'Connor, the on-site program manager to go over the spill site, remedial action and action taken pertaining to this spill.

After arriving to the spill location photos of the spill site were taken and samples were collected to test for Total Petroleum Hydrocarbons (TPH) as well as Oil & Grease.

The inspector noted that Peregrine had removed contaminated soil, placed into 45 gallon drums and placed the drums in a lined holding area to wait for removal. The affected soil will be shipped to Nunatta Environmental a certified waste handler (#NUR-30002). In the affected water body, petroleum absorbing pads and booms were placed to absorb fuel, however, no booms or pads had been place downstream of the spill at the time of the inspection. The justification provided to the inspector for lack of downstream containment is that the recent rainfall had raised water levels creating a new outlet.

Inspection

1. The licensee informed the inspector prior to arriving at the spill site that they have recovered 8 drums of soil and 2 drums of absorbent pads.
2. The spill was first identified at approximately 2130hrs on August 29, 2017 and the cleanup of the spill had started that evening.
3. At approximately 1330Hrs on September 5, 2017 Inspectors arrived to the spill location.
4. Small amounts visible sheen was noted during the inspection, less than 1 metre squared at the spill location. On the day of the spill the licensee had estimated 100 square metres.
5. The spill was caused by a loose drain plug on the fuel supply tank for the water heater (see figure1). This water heater had recently been brought to site.
6. The secondary containment was inadequate and unable to contain the spill.
7. While on site it appeared that the licensee had only partially sealed off the spill area with booms and left the downstream area of the containment open. The licensee informed the inspector that rainfall on September 4th and 5th had significantly changed the water level and that the spill had been contained prior to the rains. You can see the different water levels by comparing Figure 2 and figure 4 below.

SECTION 2

☐ Comments

☒ Non-Compliance with Act or Licence

☐ Action Required

It was noted that the pump and all appurtenant structures, including the fuel tank required to pump water from its original source to the drill, appears to be located with-in 31 metres of a water body.

This is in contravention of the current Land Use Permit N2012C0024 section 31 (1) (k)- Petroleum fuel storage;

63. The Permittee shall not place any petroleum fuel storage containers within Thirty-one (31) metres of the normal high water mark or any water body.

65. The Permittee shall not allow petroleum products to spread to surrounding lands or water bodies

67. The Permittee shall use adequate secondary containment or a surface liner (eg. Self-supporting instalberms and fold-a-tanks) when storing barreled fuel and chemicals at all locations as well as fueling stations.

Determination:

INAC will not be closing this spill until it is fully remediated. Follow up of this spill will be done during the next site inspection.



Inspector's Name	
Jonathan Mesher	
Signature	
Signature on original document	
Date	
September 25, 2017	



Figure 1: drain plug at the bottom of fuel tank for the diesel fuel operated water pump.



Figure 2: pump, fuel and spill response kit. **Note:** that the original position of the water pump and fuel tank during the incident was between the standing barrels closer to the effected water body.



Figure 3: Note no oil absorbing pads or booms places downstream, toward Left of the picture.

