



WATER LICENCE INSPECTION FORM

☐ Original
☐ Follow-Up Report

Licensee		Licensee Representative	
Teck Resources Ltd. (Teck Cominco Ltd.)		None on site – Bruce Donald	
Licence No. / Expiry		Representative's Title	
1AR-POL0311		Manager, Dormant Properties	
Land / Other Authorizations		Land / Other Authorizations	
N2002Q0017, 68H/8-1-3, 68H/8-2-2, 68H/8-3-3, 68H/8-8-2, 68H/8-9-2.		Mining Lease 2346	
Date of Inspection		Inspector	
10/07/2014		A. Keim	
Activities Inspected			
<input type="checkbox"/> Camp <input type="checkbox"/> Drilling <input type="checkbox"/> Mining <input type="checkbox"/> Construction <input checked="" type="checkbox"/> Reclamation <input type="checkbox"/> Fuel Storage			
<input type="checkbox"/> Roads/Hauling <input type="checkbox"/> Other: Water Discharge <input checked="" type="checkbox"/> Other : Monitoring			

Conditions:		A - Acceptable		C - Concern		U - Unacceptable		NA – Not Applicable		NI – Not Inspected	
Water Use		Condition	Comment	Site Conditions		Condition	Comment	Haz/Mat Management		Condition	Comment
Intake/Screen	NA			Water Management Structures	NA			Storage	NA		
Flow Measure. Device	NA			Culverts / Bridges	NA			Spills	NA		
Source:	NA			Drainage	NA			Spill Plan	NA		
Water Use: Frustration Lake	NA			Erosion / Sediment	NA						
Recirculation (y /n)	NA			Mitigation Measures	NA			Administrative			
				Reclamation Activities	NA			Records	C		1
				Materials Storage	NA			Reports	C		1
Waste Disposal				Signage	NA			Plans	U		2
Waste Water				Subsidence	C		2	Notifications			
Solid Waste				Monitoring		Other					
Hazardous Waste				Sample Collection / Analysis	U		2	Actions Required			3
*The number in the comments field will correspond with specific comments provided below.											
Samples taken by Inspector:				Location(s): Garrow Creek Dam- at location of breach (Tailings lake) and Frustration lake Raw water source							
<input checked="" type="checkbox"/> Yes <input 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.____)
<p>On July 10th, 2014 a Compliance Inspection was completed at the Polaris Mine site. This inspection was done to determine the state of the facility with respect to post closure reclamation activities and to determine the state of compliance with the now expired Water License terms and conditions which are still in effect during the period of application for renewal.</p> <p>Administration:</p> <p>The Licensee, Tech Resources Ltd. (Teck) submitted an application for renewal to the Nunavut Water Board on August 30th, 2013 approximately 18 months following the expiry of the issued License NWB1POL0311, (now referred to 1AR-POL03011). It is understood that there was, at the time, a need for clarification for the benefit of the licensee regarding the renewal process and the class of license required for on-going monitoring. However this should have been addressed prior to the expiry of the existing License.</p> <p>The Licensee is reminded that while these discussions were on-going and now during the period of the renewal of the exiting class A license, there remains the requirement for the licensee to fulfill all of their obligations under the old license. This includes monitoring and sampling as detailed and explicitly laid out in the terms and conditions of the now expired license. While the Licensee has not fulfilled their requirements for the 2011, 2012 and 2013 seasons, it is fully expected that for the year 2014 all of the requirements of the current (expired license) will be met.</p> <p>Water Use:</p> <p>The Site has not been occupied since 2010 during the last period of monitoring as reported and found on the Nunavut Water Board's (NWB) Public Registry. No Use of water has taken place by the Licensee since that time.</p> <p>Waste Disposal:</p> <p>The Site has not been occupied since 2010 during the last period of monitoring as reported and found on the Nunavut Water Board's (NWB) Public Registry. No deposit of waste has taken place by the Licensee since that time.</p> <p>Site Conditions:</p> <p>During the period of Inspection the following locations (sites) were visited either as a fly over in the helicopter or ground traverse on foot. Garrow Creek, Frustration lake, Little Red Dog Quarry and Land fill, The location over the covered over and regarded Mine Portals, the Operational landfill, the location of past subsidence, the dock area. It remained unclear to the Inspector where the temporary camp was located during the period of closure monitoring as all equipment and structures belonging to Teck have been</p>			

removed from the site.

Samples were collected from the area around the breached dam at Garrow Creek and at the far side of Frustration lake. This was the only location where open water was found that could be accessed at the time of the Inspection.

Landfills were found to be well covered with little to no signs of slippage or sloughing of cover material.

The little Red Dog Quarry had a quantity of snow remaining on the steps (benches) cut during the use of the facility. Large stones and a constructed buttress at the end of the run way all preclude access to the top edge of the quarry. It is noted that there remained no signage on site to warn the public about the Quarry however, it is unclear if there remains a requirement (post closure) for this to remain on site.

Site of past incidences of subsidence.

Upon entering this location the Inspector noted a number of areas where the ground was noted to have sunk a depth of approximately 1 meter. Other areas where the substrate had either washed away or fallen away leaving a small hole at the surface but much larger hollow below it were photographed and appended to this report. Finally a number of locations were old “vent raises had been established during the operational life of the mine and then subsequently filled in were found to have settled or slumped around the diameter of the pipe.

General Observations.

At the same location as the subsidence was identified there were metal rods, glass and wires poking up out of the ground. It was the understanding of the Inspector that all materials from the mine infrastructure were placed within the underground sections prior to the Portal being sealed. There appears to be a large area where materials may have been buried on surface that was not identified in the literature that was investigated prior to the inspection. If the licensee could shed light on this it would be most helpful to the Inspector.

SECTION 2

☐ Comments (s. __)

☒ Non-Compliance with Act or Licence (s.B(6))

☐ Action Required (s. __)

The Licensee, Teck Resources Ltd, is found to be in contravention of the following provisions of the now expired License;

Part B(6) : Failure to file an **Annual Report** with the Board no later than March 31 of the year following the calendar year reported, which shall include, but not be limited to the following information; Subsections i though iX.

- For the years; 2011, 2012 and 2013.

Part H (6) : Failure to conduct annual inspections of all earthworks, to include but not limited to landfill covers and remaining sections of the Garrow Lake Dam, by a Geotechnical Engineer. The Geotechnical Engineer's report shall be submitted to the Board within sixty (60) days of the inspection, with a covering letter from the Licensee outlining an implementation plan to respond to the Engineer's recommendations.

- For the years; 2011, 2012 and 2013.

SECTION 3

☐ Comments (s. __)

☐ Non-Compliance with Act or Licence, (s. __)

☒ Action Required (s. __)

The Licensee (Teck Resources Ltd.)shall, within 90 days following receipt of this report provide to the Inspector and the Manager of Licensing, Nunavut Water Board the following:

- Complete and accurate Annual reports for 2011, 2012 and 2013
- The results of sampling conducted on site for the 2014 year
- A geotechnical report on all earth works as required by Part H (6). This report is to be generated on a site inspection conducted between July and September 2014.

Failure to ensure compliance with the above requirements will result in further enforcement actions pursuant to the ACT.



Photo Log			
Date	Authorization	Camera	Inspector
July 10, 2014	1AR-POL0311	Sony Cyber shot	A. Keim



Figure 1 Red Dog Quarry. Land fill located at bottom.



Figure 2 Beach and dock side area



Figure 3 Main Land fill.



Figure 4 Subsidence holes.



Figure 5 Vent raise .. Settling around and within the Culvert



Figure 6 Settling of surface materials - subsidence



Figure 7 Pipes, steel rods and Electrical bacles poking through the earth in locations



Figure 8 Vent raise - settling and subsidence

Licensee or Representative	Inspector's Name
	A. Keim
Signature	Signature
	Sent by Email. – Original on file
Date	Date
	10/7/2014

Office Use Only:	Follow-up report to be issued by Inspector	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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