



WATER LICENCE INSPECTION FORM

☒ Original
☐ Follow-Up Report

Licensee	Licensee Representative
1BR-CUL1118	Paul Brugger
Licence No. / Expiry	Representative's Title
July 21st, 2024	Closure Properties Manager
Land / Other Authorizations	Land / Other Authorizations
065G07001, 065G07002, 065G08001	CROWN
Date of Inspection	Inspector
June 27 th , 2016	WRO C. Wilson
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: <input checked="" type="checkbox"/> Other:	

SECTION 1	<input checked="" type="checkbox"/> Comments (s._1_) <input type="checkbox"/> Non-Compliance with Act or Licence (s.__) <input type="checkbox"/> Action Required (s.__)
<p>On June 27th, 2016 Indigenous and Northern Affairs Canada’s (INAC) Water Resource Officer, Christine WILSON completed an inspection of water licence no. 1BR-CUL1118 issued to Barrick Gold Inc. for the long term monitoring of a closed gold mine at Cullaton Lake.</p> <p><i>File Notes:</i></p> <p>-The annual reports have been submitted for the term of the licence.</p> <p>-The 2015 annual reports appears to be lacking implementation schedule and reclamation cost estimates as required by PART I item 3.</p> <p>-Since 2007 the licensee has reported issues with the thermistors data collection. Test pits have been hand dug once annually to recorded permafrost depths at the tailing facility.</p> <p>-In the licence under the heading ‘Procedural History’ on page iii, paragraph 2, line 7 it is suggests that monitoring station 940-25 would be added to monitoring program though appendix ‘A’ reads as not required.</p> <p>-An updated Abandonment and Reclamation Plan needs to be submitted. The current document with its multiple revisions does not reflect the current status of the site.</p> <p>-The licensee plans to attend site three times this year, with sampling for the mass loading assessment in June.</p> <p>-The licensee committed to INAC to carry out a dam safety review based on the Canadian Dam Association, Dam Safety Guidelines for Dam # 1. A copy of this review has not been received by INAC.</p> <p>-The licensee has requested a reduction in geotechnical inspections. This request is reasonable and should be considered during the licence renewal.</p> <p>-The 2015 annual report details one site visit on September 3rd, 2015. During this visit 6 out of 10 of the required sampling station were sampled with the remainder recorded as dry.</p> <p><i>Observation</i></p> <ol style="list-style-type: none">1. Appears that peak freshet may have been two to four weeks previous to the inspection date.2. Sampling stations lacking signage.3. A monitoring station should be established at the locations identified as ‘the low pH pool’ (photo 7)located approximately at N61° 18’ 16.36”, W98° 30’ 7.66”. Though flow was not observed at the time of inspection it could be assumed that during freshet this pool would flow into a nearby water body.4. Sampling stations that are dry during September should be sampled during freshet.5. The licensee discussed the relevance of sampling from monitoring station 940-23 and 940-24 located at the quarry water filled pit. According to the licensee, the quarry water has a lower elevation than the tailing pond # 1 which would cause the water to run into the quarry not out. Upon review of the April 4th 2014 letter from INAC to the licensee, it was determined that the relevance would be to assess if contaminates are leaching out of the landfill waste. The location should continue to be monitored until the monitoring program is renewed.6. The area east of Shear Lake where the waste rock was stored prior to 2001 is showing signs of erosion on the most northern corner. Some revegetation has occurred on the land (photo 4).7. Several sinkholes on the cover of the quarry landfill; some with exposed metal waste. There appears to be inadequate cover in this area. The sink holes also may allow water to pond and cause further degradation to the permafrost.8. A smell of hydrocarbons at the Shear Lake portal area. The source of the smell was not determined but noted.9. Water is ponding on the surface of the dry covered tailings in two locations (photo11 and 12).10. Areas of erosion on the surface of the dry covered tailings in a number of locations.	
SECTION 2	<input type="checkbox"/> Comments (s.__) <input checked="" type="checkbox"/> Non-Compliance with Act or Licence (s.2) <input type="checkbox"/> Action Required (s.__)
<p>— Failure to maintain monitoring station signage pursuant to PART B item 7</p> <p>— Failure to maintain relevant timetables for implementation of the Abandonment and Reclamation Plan Pursuant to PART B item 9.</p> <p>— Failure to maintain plans pursuant to PART I item 2.</p> <p>— Failure to submit a revised status report and implementation schedule PART I item 3</p>	
SECTION 3	<input type="checkbox"/> Comments (s.__) <input type="checkbox"/> Non-Compliance with Act or Licence, (s.__) <input checked="" type="checkbox"/> Action Required (s.3)



- A review of the monitoring program station should be undertaken by the licensee with that information submitted to the Nunavut Water Board no later than January 31st, 2017.
- As per PART I item 2 of the licence, plans are to be amended as operation and technology changes. A review of the current Abandonment and Restoration Plan reveals a need for an updated document with current timetables (pursuant to PART B item 9 and Part I item 3). The Licensee will submit a new Abandonment and Restoration Plan with the renewal application documents no later than January 31st, 2017.

Licensee or Representative	Inspector's Name
	WRO C Wilson
Signature	Signature
	Original signed on file
Date	Date
	July 15 th , 2016

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

Erik Allain, Manager Field Operations, INAC
Paul Brugger, Closure Manager, Barrick Gold
Ian Parson, Regional Coordinator, INAC
Manager of Licensing, NWB

Attached:

Photo Log, June 27th, 2016



PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
June 27th, 2016	1BR-CUL1118	Sony DSC-HX50V Cyber shot	WRO Wilson
Photo No.		Lat/Long (DD.MM.SS.SS, NAD83)	
Photo 1		N61° 18' 24.73" W98° 30' 23.23"	



Description:
Facing West: Remnants of the Shear Lake diversion Dam, stagnant water in the breached portion of the dam.

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 2	N61° 18' 25.08", W 98° 30' 26.580"



Description
Looking North from Shear Lake diversion Dam



Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 3	N61° 18' 21.79", W 98° 30' 13.15"



Description
Facing South from Encapsulated Waste Rock: Top surface of waste rock pile

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 4	N61° 18' 21.78", W 98° 30' 13.13"



Description
Facing East from Encapsulated Waste Rock: Regrowth on the PAG waste rock storage area identified in 2001

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 5	N61° 18' 22.15", W 98° 30' 7.68"



Description
Facing East North East: Bulky metal located in old waste rock storage area

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 6	N61° 18' 16.48", W 98° 30' 7.39"



Description
Facing North West: Appears to be a high water mark of the low pH pool



Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 7	N61° 18' 16.36", W 98° 30' 7.66"



Description
Facing West: Low pH pool

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 8	N61° 15' 59.33", W 98° 29' 23.63"



Description
Facing South: Tailing Pond # 1 spill way facing west: Sampling station 940-18 marker



Locations name:		Lat/Long (DD.MM.SS.SS, NAD83)
Photo 9		N61° 15' 46.22", W 98° 29' 10.65"
		
Description		
Sink holes in Quarry Pit		

Locations name:		Lat/Long (DD.MM.SS.SS, NAD83)
Photo 10		N61° 15' 45.99", W 98° 29' 10.94"
		
Description		
Sink hole in Quarry Pit 2		



Locations name:		Lat/Long (DD.MM.SS.SS, NAD83)
Photo 11		N61° 16' 0.42", W 98° 29' 47.429"
		
Description		
Facing East: Water ponded on the tailings cover		

Locations name:		Lat/Long (DD.MM.SS.SS, NAD83)
Photo 12		N61° 16' 0.42", W 98° 29' 47.429"
		
Description		
Facing North west North: Water Ponded on tailings cover 2		