Indigenous and Northern Affairs Canada | Affaires autochtones et du Nord Canada

WATER LICENCE / CROWN LAND INSPECTION FORM

☒ **Original**
☐ **Follow-Up Report**

Licensee	**Licensee Representative**
North Country Gold Corp./Auryn Resources	Bryan Atkinson
Licence No. / Expiry	**Representative's Title**
2BE-CRA1520	
Land / Other Authorizations	**Land / Other Authorizations**
N2014C0005 (Hayes) Lease 056J/12-1-2	N2014C0002 (Bullion)
Date of Inspection	**Inspector**
05/07/2016	Eva Paul

Activities Inspected

☒ Camp ☒ Drilling ☐ Mining ☐ Construction ☒ Reclamation ☒ Fuel Storage
☐ Roads/Hauling ☐ Other: ☐ Other:

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	A	1	Water Management Structures	A		Storage	A	5
Flow Measure. Device	A	2	Culverts / Bridges	N/A		Spills	A	
Source: Sandspit	A		Drainage	C	7	Spill Plan	A	
Water Use:	A	2	Erosion / Sediment	U	7			
Recirculation (y /**n**)	A		Mitigation Measures	A		**Administrative**		
			Reclamation Activities	A		Records	A	
			Materials Storage	A		Reports	A	
Waste Disposal			Signage	A		Plans	A	
Waste Water	A	3				Notifications	A	
Solid Waste	A	4	**Monitoring**			**Other**		
Hazardous Waste	A	5	Sample Collection / Analysis	A		Drilling	A	6

**The number in the comments field will correspond with specific comments provided below.*

Samples taken by Inspector:	Location(s):
☐ Yes ☒ No	

SECTION 1 ☒ **Comments** (s.1) ☒ **Non-Compliance with Act or Licence** (s.2) ☒ **Action Required** (s.3)

An inspection was conducted on July 5, 2016 for compliance with the water licence 2BE-CRA1520 and applicable legislation in INAC's jurisdiction. I was accompanied by Bryan Atkinson, representing the Licensee.

Hayes Camp (Lat 66°39'30"N / Long 091°32'11" W): 33 occupants. Hayes Camp was found to be clean and orderly with good waste segregation practices.

Bullion Camp (Lat 66°23'39" N / Long 093°06'55" W): 30 occupants. Bullion is also found to be in excellent condition.

1. Water intake and pump: Water intake is acceptable, and pump is brought up and down the hill as needed, not left beside the lake (at both Hayes and Bullion Camps).

2. Water use records: meters were just switched out the previous day, but logs are being maintained and are up to date.

3. Grey water sump: Hayes: sump is in a sandy well-drained area, and covered over. Grease trap is maintained. No flow is visible from sump. Grease trap at Bullion appears to have overflowed.

4. Waste: Hayes' incinerator is burning cleanly. Segregation of waste is occurring and only clean wood, kitchen waste, and pacto bags are being incinerated. Barrels from Bullion are being crushed and waste is flown back to Hayes for incineration/backhaul.

5. Laydown area / Fuel caches: Waste backhaul was extensive; the few barrels left on the Hayes airstrip are used for tying down the planes. Ash from incinerator and any other hazardous waste is being stored in a Quonset. A significant amount of fuel and the drill salts are also stored in the Quonsets. At the time of the inspection, a lot of equipment was moved out of the Quonsets for servicing, and for access to materials. Fuel berms were found to be in good condition, free of water, and are kept covered when not in use. Small berms were in place below the pallets of 4 drums stationed for helicopter use. Auryn is prepared to filter water from berms and submit samples prior to discharge, should discharge from the berms be required.

6. Drilling activities: Three-Bluffs drill area (Lat 66°38'08.6"N / Long 091°28'35.1"W): At the time of the inspection, Auryn is setting up diamond drill for 2-drill program. The water intake has not yet been placed in the water. Auryn will use the existing water distribution system at 3 Bluffs which pumps the water from the river to a central tank, and 2 satellite tanks from which the drills can draw. The drill being set up was not yet operational, and no location yet chosen for the cuttings. The drillers were in the process of servicing the drill which hasn't been in use since 2012. West Plains (Lat 66°07'07.2"N / Long 093°27'44.8)"W: RAB drills. Auryn is again using Ground Truth and the RAB drill, which has been augmented with an extra compressor to allow drilling to 200m. 2 RAB drills are in use. No water is used in the process. Chemicals and fuel were contained. Waste is produced in the form of dust and cuttings. The setup also appears to be modified from last year in that it no longer captures the dust with a vacuum. As such, the dust is wind-borne, and care must be taken to ensure the dust is not blown into nearby water bodies. Dry cuttings are left on the tundra. Ensure that drill waste is contained as per conditions 54 and 55 of the applicable LUP.

7. General site erosion and sediment control: Continued foot traffic and general use of Hayes camp is causing loss of the little vegetation that is present on the sandy esker. Limiting traffic (even foot traffic) to already de-vegetated areas will lessen the impact on vegetation and aid in maintaining natural sediment control (for example, the footpath forming from camp to the helicopter area). There is a large flow of esker sand from the camp area south past the incinerator that seems to be increasing every year (66°39'29.7"N / 91°33'01.9"W). While it is understood that freshet was very abrupt this spring, there was a significant amount of sand was deposited in the lake, despite efforts to sand-bag and slow the flow. The water simply channels around the sandbags. Explore options to divert and dissipate the flow to areas that are still vegetated or that don't flow directly into the lake. Removal of sandbags and restriction of usage along the airstrip is promoting vegetation re-growth and has reduced ponding in the ditches.

SECTION 2	☐ Comments	☒ Non-Compliance with Act or Licence	☐ Action Required

Water Licence:

Part C Item 6. Erosion to the bank of the lake to the south of the camp.

Part C Item 7. Measures undertaken to control erosion are not effective, resulting in sediment deposition to the lake.

Part E Item 2. Camp activities have impacted surface drainage, increasing flow of sediment into the lake.

Part J Item 4. Provide coordinates for all wastes (including cuttings from RAB drill).

SECTION 3	☐ Comments	☐ Non-Compliance with Act or Licence	☒ Action Required

1. Monitor grease trap at Bullion and address deficiencies as required.
2. Ensure dust from RAB drills is not blown into nearby water bodies.
3. Protect the vegetated areas around Hayes Camp to preserve existing vegetation, particularly through the gully between camp and the helicopter area.
4. Implement measures to mitigate the sediment deposition south of camp (eg: by diversion or and dissipation of the flow to areas that are still vegetated or that don't flow directly into the lake). Evaluate the efficacy of the measures and adapt as necessary.
5. Provide to the inspector coordinates of all drill activities for 2015. Provide the 2016 coordinates with the annual report as required.

Licensee or Representative	Inspector's Name
	Eva Paul
Signature	**Signature**
	Sent electronically
Date	**Date**
	12/07/2016

Office Use Only: Follow-up report to be issued by Inspector ☐ Yes ☒ No

CC: Licensing Department, NWB
Erik Allain, Manager of Field Operations, INAC
Baba Pedersen, RMO, INAC

PHOTO LOG

Date	Camera	Inspector	Authorization
05-07-2016	SONY DSC-HX50V	Eva Paul	2BE-CRA1520

Photo Log # 1	Location (NAD 83 DD MM SS.SS)
Photo DSC05405	N66 23 49.1 W93 07 39.6

Description: Grease trap at Bullion Camp shows signs of overflowing.

Photo Log # 2	Location (NAD 83 DD MM SS.SS)
Photo DSC05433	N67 07 07.2 W93 27 43.9

Description: Active RAB setup at hole 35. Chemicals/oils all in containment.

Photo Log # 3	Location (NAD 83 DD MM SS.SS)	
Photo DSC05438	N66 07 06.9	W93 27 45.4

Description: Dry cuttings left on tundra, similar to process with wet diamond-drill cuttings.

Photo Log # 4	Location (NAD 83 DD MM SS.SS)	
Photo DSC05305	N66 39 21.7	W91 33 24.9 (from air)

Description: Erosion stream seen from the air.

Photo Log # 5	Location (NAD 83 DD MM SS.SS)	
Photo DSC05327	N66 39 29.3	W91 33 02.1

Description: Esker sand deposited in lake, as seen from the ground.

Photo Log # 6	Location (NAD 83 DD MM SS.SS)	
Photo DSC01543 (2014)	N66 39 25.3	W91 33 10.4 (from air)

Description: Erosion channel as seen in 2014.