



WATER LICENCE INSPECTION FORM

☒ Original  
☐ Follow-Up Report

Licensee		Licensee Representative	
Alix Resources Corp.		Mike England	
Licence No. / Expiry		Representative's Title	
2BE-ARC0813 (expired)		President & Director	
Land / Other Authorizations		Land / Other Authorizations	
Date of Inspection		Inspector	
07/07/2016		Eva Paul	
Activities Inspected			
<input checked="" type="checkbox"/> Camp	<input checked="" type="checkbox"/> Drilling	<input type="checkbox"/> Mining	<input type="checkbox"/> Construction
<input type="checkbox"/> Roads/Hauling	<input checked="" type="checkbox"/> Other: Trenching	<input type="checkbox"/> Reclamation	<input checked="" type="checkbox"/> Fuel Storage
<input type="checkbox"/> 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	NA		Water Management Structures	NA		Storage	U	1
Flow Measure. Device	NA		Culverts / Bridges	NA		Spills	U	3
Source:	NA		Drainage	NA		Spill Plan	U	3
Water Use:	NA		Erosion / Sediment	NA				
Recirculation ( y /n)	NA		Mitigation Measures	U	2	Administrative		
			Reclamation Activities	U	2	Records	U	4
			Materials Storage	U	1	Reports	U	4
Waste Disposal			Signage	NA		Plans	NI	
Waste Water	NA					Notifications	NI	
Solid Waste	U	1	Monitoring			Other		
Hazardous Waste	U	1	Sample Collection / Analysis	NA				

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

Samples taken by Inspector:	Location(s):
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

SECTION 1	<input checked="" type="checkbox"/> Comments (s.1)	<input checked="" type="checkbox"/> Non-Compliance with Act or Licence (s.2)	<input checked="" type="checkbox"/> Action Required (s.3)
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May 31, 2016 Alix Resources Corp. was notified of my intent to carry out a compliance inspection with respect to the expired water licence 2BE-ARC0813. As demonstrated by correspondence from 2012 onward, Alix Resources Corp. is aware of its reclamation responsibilities under this licence, and two notices of non-compliance have been submitted to the Licensee in that time. This inspection served to confirm that Alix has thus far failed to undertake the required reclamation for the Arcadia Project and is accompanied by a Direction pursuant to the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSTRA). It is also noted that with respect to the Barge site / Staging area discussed below, the *Arctic Waters Pollution Prevention Act* (AWPPA) also applies. I was accompanied on the inspection by Officer Dovreshin MacRae of Environment and Climate Change Canada.

The following sites were inspected:

- a) Proposed 2005/2008 camp as listed in the Abandonment & Reclamation Plan (N67°44'16.0" W111°21'35.0"): The areas on both sides of the water of this inlet are littered with wood debris. Some of this debris falls below the ordinary high water mark (OHWM), and therefore on Crown Land adjacent to IOL Parcel CO-31.
- b) The Barge site / Staging area (N67°44'29.8" W111°22'07.4") where fuel and supplies were landed and Kikiak (on behalf of Alix) amalgamated some wastes: worsening conditions. This is located on IOL Parcel CO-31.
- c) Old camp and core storage area (N67°43'08.8" W111°22'59.3"): timbers and barrels. (IOL Parcel CO-31.)
- d) 2008 actual camp (N67°39'01.2" W111°22'50.7") as per the 2008 Annual Report: camp remains, fuel remains. This is on IOL Parcel CO-32.

All comments and requirements of the 2012 inspection report remain valid.

2016 observations:

- 1. Solid and hazardous waste in the form of barrels (both empty and full, some punctured and leaking), drill salts, scrap metal, and timbers remain at the locations listed above, the worst of which is the Barge site. Conditions have worsened since the 2012 inspection: barrels are strewn around (including punctured and leaking barrels) and bags of drill salts have dissolved into the ground, causing further salt contamination. A barrel of metal waste has rolled down from the barge site and now sits in the water of the Coronation Gulf.
- 2. No containment was ever put in place for any of the wastes or hazardous materials, thus the leaking barrels and dissolving salts are contaminating the environment. No mitigation or reclamation has occurred since the 2012 inspection, despite numerous communications and notices of non-compliance issued to Alix.
- 3. Spills and contamination, while brought to Alix's attention, have not been properly reported or addressed, contrary to the licence, the NWNSTRA, and the AWPPA.
- 4. The Licensee has failed to file Annual Reports, as well as plans and other reports as required by the Inspector as a result of the 2012 inspection and subsequent notices of non-compliance.



SECTION 2

☐ Comments

☒ Non-Compliance with Act or Licence

☐ Action Required

**Nunavut Waters and Nunavut Surface Rights Tribunal Act**

12(1)(b) ...no person shall deposit or permit the deposit of waste[...] under conditions in which the waste, or any other waste that results from the deposit of that waster, may enter waters in Nunavut.

**Arctic Waters Pollution Prevention Act**

4(1) ...no person or ship shall deposit or permit the deposit of waste of any type in the arctic waters or in any place on the mainland or islands of the Canadian arctic under any conditions where the waste or any other waste that results from the deposit of the waste may enter the arctic waters.

6 (1) The following persons, namely,

- (a) any person who is engaged in exploring for, developing or exploiting any natural resource on any land adjacent to the arctic waters or in any submarine area subjacent to the arctic waters,
  - (b) any person who carries on any undertaking on the mainland or islands of the Canadian arctic or in the arctic waters, [...]
- are respectively liable and, in the case of the owner of a ship and the owners of the cargo thereof, are jointly and severally liable, up to the amount determined in the manner prescribed by regulations made under section 9 in respect of the activity or undertaking so engaged in or carried on[...]

**Licence 2BE-ARC0813**

- B.2. Failure to file annual reports with the Nunavut Water Board.
- B.3. Failure to notify NWB of changes in plans (not returning to site).
- B.6. Failure to implement Abandonment and Reclamation plan (fuel caches not satisfactorily secured).
- D.4. Failure to provide documentation of authorization to backhaul waste.
- D.10. Failure to ensure that any hazardous materials receive proper treatment and disposal.
- H.4. Failure to ensure that chemicals, petroleum products, or wastes associated with the project do not enter water AND failure to inspect caches on a regular basis.
- H.6. Failure to employ the Spill Contingency Plan.
- I.3. Failure to complete restoration work prior to the expiry of the Licence.
- 1.6. Failure to remove site infrastructure and materials.
- I.10. Failure to address hydrocarbon contaminated areas.
- I.11. Failure to remove drill casings and cap holes upon the completion of drilling.

SECTION 3

☐ Comments

☐ Non-Compliance with Act or Licence

☒ Action Required

1. Alix Resources Corp., through the assignment of the licence from Full Metal Minerals Ltd., is responsible for all materials brought to site, and all activities conducted by either party; and all obligations imposed under both the original NWB2ARC0507 and subsequent 2BE-ARC0813 licences for the Arcadia Project. This includes the implementation of all activities outlined in both Abandonment and Restoration plans. Further, any activities not captured in those plans but carried out by either party, are to be addressed. This includes removal of the buildings and contents, equipment, fuel and chemicals; remediation of any spills or contamination by removal of the contaminated soil, and backfilling of all sumps, trenches, and pits with clean material; restoration of drill sites; backhaul of all materials and documentation of receipt of hazardous materials at an appropriate handling facility; and submission of thorough documentation of all reclamation work.
2. This reclamation work shall be carried out in the snow-free period of 2017, in accordance with the conditions of Part I of the licence, and any specific measures identified in the accompanying Direction.
3. The reclamation shall be thoroughly documented and a report submitted to the Inspector by September 30, 2017. This report will show before-and-after photos of each site identified in this (2016) and the 2012 inspection report with a short description of the work carried out at each location. If backhaul is to be conducted during the winter months, it will be carried out in accordance with the Direction, and with any permits, licences or other authorizations that may be necessary.
4. The Licensee shall submit to the NWB and copy to the Inspector, annual reports for 2009-2013 (the remaining years of the licence), including details of the reclamation work undertaken in 2011 by March 31,2017.

Licensee or Representative	Inspector's Name
n/a	Eva Paul
Signature	Signature
n/a	Original signed copy sent by mail
Date	Date
n/a	November 30, 2016

CC: Licensing Department, NWB  
Erik Allain, Manager of Field Operations, INAC  
Wynter Kuliktana, KIA

Att: Inspector's Direction #2016-KIT014-EP





PHOTO LOG

Date	Camera	Inspector	Authorization
July 07 2016	SONY DSC-HX50V	Eva Paul	2BE-ARC0813
Photo Log #		Location (NAD 83 DD MM SS.SS)	
Photo DSC05778		N67 44 29	W111 22 07



**Description:** Barge/staging area from the air. Waste is migrating towards and into the water.

Photo Log #	Location (NAD 83 DD MM SS.SS)	
Photo DSC07108 (2012)	N	W



**Description:** 2012 photo of same site. Barrels are piled neatly, plastic is seen in the water, but no barrel.





Photo Log #	Location (NAD 83 DD MM SS.SS)	
Photo DSC05789	N67 44 29.6	W111 22 1.2



**Description:** Barrel of waste metal is now in the water.

Photo Log #	Location (NAD 83 DD MM SS.SS)	
Photo DSC05795	N67 44 29.9	W111 22 04.6



**Description:** As seen in 2016. Punctured barrels, and barrels with caps that are now empty (leaked into soil). Digging in soil may be from wildlife; salt is an attractant, however, the soil is also heavily contaminated with hydrocarbons.





Photo Log #	Location (NAD 83 DD MM SS.SS)	
Photo DSC07116 (2012)	N	W

**Description:** As seen in 2012. Note bags of drill salts on top of barrels, and between. Punctured barrels are mostly upright.

Photo Log #	Location (NAD 83 DD MM SS.SS)	
Photo DSC05802	N	W

**Description:** As seen in 2016. Note absence of bags of salts; dissolved and blown away. Missing toboggan also indicates that humans are using this site (it was not seen in any of the aerial photos).





Photo Log #	Location (NAD 83 DD MM SS.SS)	
Photo DSC05809	N67 44 16.5	W111 21 18.8



Description: Debris seen along the water's edge.

Photo Log #	Location (NAD 83 DD MM SS.SS)	
Photo DSC05811	N67 11 13.5	W111 21 3.2



Description: Debris near the water.





Photo Log #	Location (NAD 83 DD MM SS.SS)	
Photo DSC05814	N67 43 10	W111 23 13



07 07 2016

**Description:** Old camp/core storage area; removed by contractor in 2011. Note barrels left at creek crossing.

Photo Log #	Location (NAD 83 DD MM SS.SS)	
Photo DSC05815	N67 43 8.8	W111 22 59.3 (approx.)



07 07 2016

**Description:** Barrels as identified in previous picture.





Photo Log #

Photo DSC05818

Location (NAD 83 DD MM SS.SS)

N67 42 45

W111 22 45 (approx.)



Description: Another core storage area, seen in flight.

Photo Log #

Photo DSC05824

Location (NAD 83 DD MM SS.SS)

N67 42 44

W111 22 37 (approx.)



Description: Note pits that were created and have not been reclaimed. Others were seen in flight en-route to 2008 camp.





Photo Log #

Photo DSC05833

Location (NAD 83 DD MM SS.SS)

N67 39 04

W111 22 52



**Description:** Camp remains in similar condition to 2012. See 2012 report for further details.