



WATER LICENCE INSPECTION FORM

☒ Original
☐ Follow-Up Report

Licensee			Licensee Representative		
Johan Skoglund Group Environmental Manager, Americas Nyrstar 2840 – 650 West Georgia Street P.O. Box #11552 Vancouver, BC V6B 4N8 1AR-NAN0914			Arlene Laudrum, Stu McPhee (SRK Consulting)		
Licence No. / Expiry			Representative's Title		
1AR-NAN0914 March 31 st , 2014 (Expired)			Senior Consultant, and Staff Consultant respectively		
Land / Other Authorizations			Land / Other Authorizations		
Date of Inspection			Inspector		
13/07/14			A. Keim		
Activities Inspected					
<input type="checkbox"/> Camp		<input type="checkbox"/> Drilling		<input type="checkbox"/> Mining	
<input type="checkbox"/> Roads/Hauling		<input type="checkbox"/> Other: Water Discharge		<input type="checkbox"/> Construction	
				<input checked="" type="checkbox"/> Reclamation	
				<input type="checkbox"/> Fuel Storage	
				<input checked="" type="checkbox"/> Other: Fuel tank farm remediation	

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			Storage	NA	
Flow Measure. Device	NA		Culverts / Bridges	NA		Spills	NA	
Source:			Drainage	A		Spill Plan	A	
Water Use:	A		Erosion / Sediment	NA				
Recirculation (y /n)	N		Mitigation Measures	A		Administrative		
			Reclamation Activities	A		Records	A	
			Materials Storage	NA		Reports	A	
Waste Disposal			Signage	NA		Plans	A	
Waste Water	A					Notifications		
Solid Waste	A		Monitoring			Other		
Hazardous Waste	NA		Sample Collection / Analysis	NI		Observations		1
<i>*The number in the comments field will correspond with specific comments provided below.</i>								
Samples taken by Inspector:			Location(s): Twin Lakes Creek adjacent to Tank Farm reclamation project site # 159-6 and Breached Dam at East Adit Treatment Facility 159-12 A ..					
<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.____)
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Administration:

On July 13th, 2014 a Water License Inspection was completed at the Nanisivik Mine site. On site at the time of the Inspection were 2 representatives of SRK consulting and 2 Arctic Bay residents. All were actively working on the PH impacted soils at the site of the old tank farm approximately 200 M from the deep water port.

Nanisivik Mine was in operation from 1976 until 2009 when the most recent, now expired license was issued to CanZinco Ltd for the Abandonment and reclamation of the facility.

A renewal application for a continuation of the Class A Water License for reclamation activities was submitted by Canzinco Ltd on November 20th, 2013. That application is in the final stages of renewal and a Public Meeting is scheduled for October 8th and 9th, 2014 in Arctic Bay, Nunavut.

Site Conditions:

Since the last inspection of the site the Licensee has completed the Closure of the Mine site and in accordance with the issued Water License maintained activities in the following areas;

- Use of Water – For on-going PHC soils at the Shoreline tank farm
- Discharge of Waste- Effluent discharges to Twin lakes Creek
- Geotechnical Monitoring
- Water Quality Monitoring
- Remediation of Impacted soils at the Shoreline tank farm

These activities were found to have been documented in a 2013 Annual Report, Submitted to the Nunavut Water Board for approval in accordance with the issued Water License.

During the period of Inspection work was found to be continuing on the PHC soils at the shoreline tank farm. Estimates on the volume of contaminated/ impacted soils to be treated have reached up to approximately 20,000 M³. It was impossible to estimate what volume remained within the original footprint of the facility however it remains a substantial pile as documented and photographed during the Inspection.



Remediated soils are being placed to the West of the Shoreline Tank Farm remediation site. The contractor on site indicated that as of September 2013 approximately 7,000m³ of soils have been treated and placed in this area.

The contractor also indicated as of the date of inspection (pending lab results for confirmation) an additional 2,000 m³of soils had been treated so far in 2014 and would be placed in the recovered soils area.

Areas of Higher PH contamination have been identified throughout the facility and are being excavated. These soils may take an additional season to remediate which may extend the duration of the project past the expected 2016 time frame currently planned. However, it was also identified that the contractor is currently working on and is expected to propose new site specific guidelines to the remediation criteria that would allow the site to progress in it’s work within the time frame currently in place.

It is unclear what the guidelines will come back at as the work is currently still in the development stage but it is expected to be ready for the Public hearing in October 2014. At that time it will be open for review by all participants.

Treatment continues on site with the upper, lower cells as well as soils placed on the concrete pad cleared by DND (was the ore concentrate shed floor).

Moving forward as new area of contamination are identified and upon removal of all of the contaminated soils, over whatever period this extends for there will be a requirement to provide evidence that all soils from the area around the shore line tank farm have been removed from that site. This will require the submission of test results from the final depth of the excavations and an inspection prior to the back filling or re-contouring of the site to facilitate new construction.

As the project progresses the licensee should keep this in mind and insert into the work plan a tentative date for this inspection so that it may be completed in a timely fashion.

In one area of the lay down adjacent to the deep water port a number of barrels were identified. These barrels were found strapped to pallets and looked to have been there for a number of seasons. The contractor advised the inspector that Coast Guard had left these barrels at the dock site a number of years previously and were in fact the property of Environment Canada from Eureka. It is not clear what they contain but these should be removed from the site as soon as possible.

Water Use:

During the period of Inspection no water from a licensed source was being utilized on site. It was noted that water from Arctic Bay was being used on site to maintain moisture levels within the upper cells as well as at the “garden plot”. A question regarding the use of other sources of water for the on-going soil reclamation activities was posed by the contractor on site. A review of the license identifies the sources as listed and the use of any others would require the approval of the board.

Waste Disposal:

Wastes associated with the use of the facility are deposited back in the community of Arctic bay. No discharges of waste were identified on site.

Recommendations:

None.
The site was found in good order and work continues in compliance with the issued license.

SECTION 2	<input type="checkbox"/> Comments (s.____)	<input type="checkbox"/> Non-Compliance with Act or Licence (s.____)	<input type="checkbox"/> Action Required (s.____)
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SECTION 3	<input type="checkbox"/> Comments (s.____)	<input type="checkbox"/> Non-Compliance with Act or Licence, (s.____)	<input type="checkbox"/> Action Required (s.____)
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Licensee or Representative	Inspector's Name
	A. Keim
Signature	Signature
	Original On file – Sent by Email
Date	Date
	1/8/2014

Office Use Only:	Follow-up report to be issued by Inspector	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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Figure 1 Overview July 13, 2014



Figure 2 Looking east toward unprocessed pile



Figure 3 Excavation into berm wall



Figure 4 Adding water to upper land farm cells



Figure 5 test garden



Figure 6 Barrels found on Dock side



Figure 7 over view of lower cells



Figure 8 Breached Dam at East Adit 159-1



Figure 9 Tailings pond location and cover

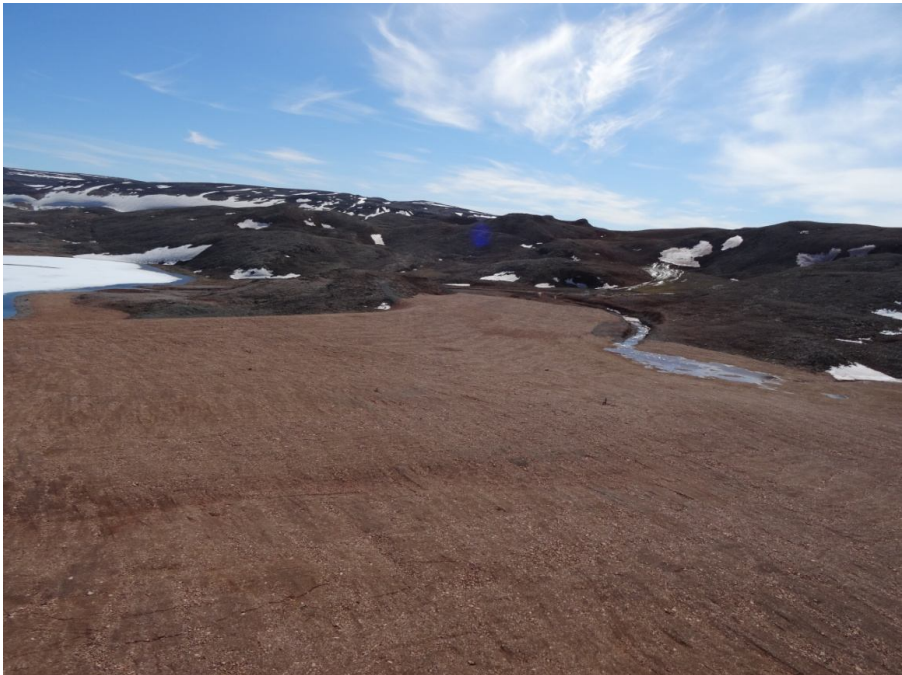


Figure 10 Tailings pond and spillway



Figure 11 Pad where soils have been deposited for treatment