

WATER LICENCE INSPECTION FORM

☒ Original

☐ Follow-Up Report

Licensee		Licensee Representative	
Agnico Eagle Gold Mines Limited		David Frenette	
Licence No. / Expiry		Representative's Title	
2BE-MEA1318/ March 6 th , 2018		Environmental Coordinator	
Land Authorization No. / Purpose / Expiry		Land Authorization Expiry	
N2013F0030/ Winter trail		April 15 th , 2016	
Date of Inspection		Inspector	
July 22nd, 2015		WRO Wilson	
Activities Inspected			
<input checked="" type="checkbox"/> Camp	<input checked="" type="checkbox"/> Drilling	<input type="checkbox"/> Mining	<input checked="" type="checkbox"/> Construction
<input checked="" type="checkbox"/> Roads/Hauling	<input checked="" type="checkbox"/> Other: Water Discharge		<input type="checkbox"/> Reclamation
			<input type="checkbox"/> Fuel Storage
			<input type="checkbox"/> Other:

Conditions:	A - Acceptable	C - Concern	U - Unacceptable	NA – Not Applicable	NI – Not Inspected			
Water Use	Condi tion	Comment	Site Conditions	Condition	Comment	Haz/Mat Management	Condition	Comment
Intake/Screen	A	1,4	Water Management Structures	NI	--	Storage	NA	
Flow Measure. Device	A	3	Culverts / Bridges	NI	--	Spills	NA	
Source: Whale Lake	A	1	Drainage	U	10	Spill Plan	NI	
Recirculation (y /n)	N	2	Mitigation Measures	U	6,11	Administrative		
Waste Disposal			Signage	U	9	Plans	A	6
Solid Waste	NI	--	Monitoring	Other				
Waste Water	U	12	Sample Collection / Analysis	U	5,7,8			
*The number in the comments field will correspond with specific comments provided below.								
Samples taken by Inspector:			Location(s): Due to hold time restrains of the parameters the samples are to be taken at a different time.					
<input type="checkbox"/> Yes <input checked="" 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>Agnico Eagle Mines Limited (AEML), Meadowbank Exploration Project’s water licence 2BE-MEA1318 was amended on July 31st, 2014 to include the installation/operation of the IVR (Amaruq) camp located at N 65° 24’ 36”, W 96° 41’ 41”. The Licence was amended a second time on February 27th, 2015 to include an increase in water use for drilling; the installation of a waste water treatment plant (bionest) at Amaruq; development and operation of a quarry and road construction from quarry # 7 to the IVR camp.</p> <p>On July 23rd, 2015 a regularly scheduled compliance inspection was completed by Aboriginal Affairs and Northern Development Canada’s Water Resource Officer (WRO), Christine Wilson. This was the first water licence inspection of the Amaruq Project. This inspection was completed with the assistance of AEML’s Environmental Coordinator, David Frenette.</p> <p>The following report was produced with the findings from the July 23rd inspection.</p> <p><i>Pre Inspection Meeting</i></p> <ul style="list-style-type: none">— Construction of the Amaruq camp pad will be completed in the 2015— 117 people onsite— The camp has been open since March 2014— Nine drills are currently operating; seven fly drills and two mobile (overland) drills— An authorization with the Department of Fisheries and Oceans has been approved for a culvert to be installed between quarry # 7 and Amaruq.— (photo 5). The culvert is needed to access materials in quarry #7 for construction of the Amaruq camp pad.— The road to quarry # 7 is located on IOL along with all current activity (etc.: camp, drilling)— AEML has request another amendment to their licence to include additional domestic water usage or global water allotment, drilling from a barge, additional bionest and accomodations.— The Meadowbank Exploration camp has been dismantled and moved to Amaruq Project, no water or waste water is deposited at this location.— Over 200 trips were made using the winter trail this past season <p><i>Observations</i></p> <p><i>Water Use</i></p> <ol style="list-style-type: none">1. The Amaruq Camp (photo 1) utilizes a raw water intake for domestic use from Whale Lake at N65° 24’ 09.1”, W96° 41’ 04.9”. The water is drawn as needed using a hose that is equip with a screen.2. The raw water intake line is heat traced which eliminates the need for recirculation during freezing conditions and reduces the overall water usage.3. The camp using on average approximately 16 m³ of raw water a day. The water used at the Amaruq camp is metered (photo 2). The meter reads 01551.8 m³ the inspector would like some clarification about the meter reading.4. No water is used at the Meadowbank Exploration camp. <p><i>Waste Water</i></p> <ol style="list-style-type: none">5. Amendment No. 2 amends the licence to include the installation and operations of a Wastewater Treatment Plant (WWTP) referred to as the Bionest by the AEML. Currently two Bionest are in operation at the site which produced on average			



approximately 12 m³ of effluent per day. AEML advised that the Bionest effluent does not meet the licence criteria for fecal coliforms.

- 6. AEML submitted the required “Amaruq WWTP Management Plan” as per part E item 6. The inspector was not able to locate this document on the Nunavut Water Board (the Board) ftp site for review, with specific interest in the section detailing “emergency procedures” as identified in part E item 6.
- 7. The Bionest is being sampled four times a month for the parameters outlined in part D item 13 of the licence.
- 8. AEML is currently required to submit the MEA-1 results with the annual report.
- 9. The inspector determined the monitoring station MEA-1 will be the effluent of both bionest (end of pipe).

Camps, Access Infrastructure, and Operations

- 10. Rutting has occurred around the interior of the camp during construction of the site. This rutting appears to be affecting the natural surface drainage (photo 3).
- 11. The AEML Environment Department has established a 31 meter buffer zones around water bodies near the camp to ensure compliance with a number of terms and conditions in the Licence. The inspector was very pleased to see this type of measure in place.

Drilling

- 12. Stephane Villeneuve, Chief Geologist, AEML, accompanied the inspector during the drill site inspection. Three drills sites in total were inspected all located on IOL.
 - AMQ15-364, drill rig 3– Condemnation drill hole with a 200 meters targeted. The drill rig is fitted with a plastic funnel like device to collect cuttings and direct them to a “sludge tray” under the rig. The cuttings are then pumped into a low lying area.
 - AMQ15-370, drill rig 6– Exploration drill hole with a 300 plus meters targeted. The rig is fitted with a cutting collection setup. The meter at the hole reads 585.1 m³. A lot of drilling waste is visible in the area around this hole is located (the west side of the lake).
 - Drill site inspection (the drill number was not recorded in error by the inspector) - This drill rig has been removed and the hole is completed. The anchor is still in place with some metal wire and wood on the ground around the site but is generally clean.

Improvements need to be made to the reclamation of the drill holes, cutting sumps, and sink holes produced during drilling programs.

- 13. To clarify, the inspector would like to note AEML is authorized by part F item 2 to drill within 31 meters of the high water mark during the winter conditions as per amendment No. 2 of the previous licence 2BE-MEA0813. Amend No. 2 was granted by the Board November 8th, 2011 this decision was pending approval by the land owner and with part F item 5 of the current license still applying.

SECTION 2 ☐ Comments (s.____) ☒ Non-Compliance with Act or Licence (s.2) ☐ Action Required (s.____)

PART I item 10- Failure to reclaim drill sites to a natural condition immediately upon completion of drilling

PART I item 13- Failure to confirm effluent quality found in part D item 13 prior to release.

SECTION 3 ☐ Comments (s.____) ☐ Non-Compliance with Act or Licence, (s.____) ☒ Action Required (s.3)

- AEML will submit two sets of samples from the Bionest for June, and one set from July to the Inspector before August 7th, 2015.
- AEML will provide to the Inspector available baseline information about the creek located to the south of the camp and also “Whale Lake” as referred to by the AEML Environment Department before August 7th, 2015.
- AEML will submit a situational report regarding the Bionest to the inspector and other relevant agencies.
- AEML will complete the requirements found in Part I item 10 or apply to amend their water licence to reflect the current situation.

Closing Remarks

AEML shall direct waste water to the Bionest upon commissioning of the facility as per Part D item 8 and 9 of Amendment No. 2 of the current licence. At such a time when the facility is ready to be commissioned (commissioned defined as “bringing something new into working order”) the Inspector requests notification as per part D item 11 of the current Licence.

AEML is encouraged to remediate unused components of the Meadowbank exploration camp that are no long required for the operations of the undertaking (etc.: the sump).

Licensee or Representative	Inspector's Name C. Wilson
Signature	Signature Sent by e-mail
Date	Date July 22nd, 2015

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

Attached: 2BE-MEA1318, Photo Log- July 22nd, 2015
cc. Erik Allain, Manager Field Operations, AANDC
David Frenette, Environmental Coordinator, AEML



PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
July 23 rd , 2015	2BE-MEA1318	Sony DSC-HX50V Cyber shot	WRO Wilson
Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)		
Photo 1	N65° 24' 6.6", W 96° 40' 32.6"		



Description:
Amaruq camp

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 2	Inside the IVR Camp



Description:
Domestic Water Use Meter

Photo No. Photo 3	Lat/Long (DD.MM.SS.SS, NAD83) N65° 24' 17.74", W96° 40' 44.18"
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07 22 2015

Description:
Interior camp, surface drainage

Photo No. Photo 4	Lat/Long (DD.MM.SS.SS, NAD83) N65° 24' 10.2" W 96° 41' 0.81"
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07 22 2015

Description:
31 meter off limit marker



Photo No.
Photo 5

Lat/Long (DD.MM.SS.SS, NAD83)
Looking North West



Description:

Quarry #7in the foreground, access road, with IVR camp in the background