



WATER LICENCE INSPECTION FORM

☒ Original  
☐ Follow-Up Report

Licensee		Licensee Representative	
Agncio Eagle Mines Limited		Kevin BUCK, Jeff PRATT	
Licence No. / Expiry		Representative's Title	
2AM-MEA0815		AEML Environmental Division; A/Superintendant, Environmental Co-ordinator	
Land / Other Authorizations		Land / Other Authorizations	
66A/8-71-2		66A/8-72-2	
Date of Inspection		Inspector	
22/03/15-24/03/15		WRO Wilson	
Activities Inspected			
<input checked="" type="checkbox"/> Camp <input type="checkbox"/> Drilling <input checked="" type="checkbox"/> Mining <input type="checkbox"/> Construction <input checked="" type="checkbox"/> Reclamation <input type="checkbox"/> Fuel Storage			
<input checked="" type="checkbox"/> Roads/Hauling <input type="checkbox"/> Other: Water Discharge <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	NI	--	Water Management Structures	A	--	Storage	NI	--
Flow Measure. Device	A	1	Culverts / Bridges	NI	--	Spills	NI	4
Source: Third Portage	A	--	Drainage	NI	--	Spill Plan	A	--
Water Use: 3599m3/march 22	A	1	Erosion / Sediment	NI	--			
Recirculation ( y /n)	NI	--	Mitigation Measures	A	--	Administrative		
			Reclamation Activities	A	2	Records	A	5
			Materials Storage	A	--	Reports	A	6
Waste Disposal			Signage	A	3	Plans	C	7
Waste Water	A	--				Notifications	A	--
Solid Waste	NI	--	Monitoring			Other		
Hazardous Waste	NI	--	Sample Collection / Analysis	A	8			
*The number in the comments field will correspond with specific comments provided below.								
Samples taken by Inspector:			Location(s): No samples were taken due to freezing site conditions					
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No								

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._)
<u>Background</u> <p>The Meadowbank Gold Project’s water licence, 2AM-MEA0815 expires on May 31<sup>st</sup>, 2015. On July 23rd 2014, the Proponent submitted a renewal application for the type ‘A’ licence. To minimize the risk of operating without a valid Licence, Agnico Eagle Gold Mines Limited (AEML), owner and operators of the Meadowbank Gold Project has requested a short term renewal (STR) as provided in the <i>Nunavut Water Regulations Section 9(1)(b)</i> for the maximum term of 180 days. AEML submitted this application with the understanding that no changes will be made to the existing licence. At the time of the inspection this STR had not yet been approved by the Minister.</p>	
SECTION 2	<input checked="" type="checkbox"/> Comments (s._2_) <input type="checkbox"/> Non-Compliance with Act or Licence (s._) <input type="checkbox"/> Action Required (s._)
<div>1. The Proponent provided the current daily water use totals to the inspector for March 22, 2015. That document has been attached to this report (appendix 1). The inspector was advised that fresh water was being trucked to the emulsion plant and those amounts are considered in the overall table provided.</div> <div>2. As identified in the Interim Closure and Reclamation Plan (January 7<sup>th</sup>, 2014), the proponent continues to progressively reclaim the Waste Rock Storage Facility with the 4 m of non potential acid generating materials (N-PAG) as well as stockpiling the N-PAG materials near pits Bay Goose and Portage for future closure activities. At the time of the inspection, the Portage Central Dump had been brought up to an elevation approximately 7m below East Dyke elevation.</div> <div>3. All monitoring stations inspected were found to be fitted with signage.</div> <div>4. Due to freezing conditions, the spill titled “Assay Road spill # 13-379” was not inspected. The inspector was provided detailed summary of activities and a final engineering report titled “Meadowbank Assay Seepage Report- Phase 2.REV 2”, which discussed the spill and AEM actions to date.</div> <div>To following is a summary of the information provided;</div> <div><ul style="list-style-type: none"><li>A trench and pumping system has been constructed to catch seepage water.</li><li>A remediation program, which involved filling and sealing the Meadowbank Mill containment structure, was completed in 2014.</li><li>The spill will incorporated into the freshet action plan 2014.</li><li>The amount of contaminated water has drastically reduced since the initial spill.</li><li>As built drawing for the interception trench was received by the Inspector.</li></ul></div>	

5. Records requested by the Inspector were provided promptly during the inspection.
6. The January and February 2015 monthly reports, as required by PART I item 25, have been received by the Inspector.
7. During the 2014 implementation of the Freshet Action Plan v 1(April 2014), AEML identified the need for an additional sump to act as a settling pond on the North West arm of the Non-contact Water Diversion Ditch system. This sump is located near Saddle Dam 1. At the time of the inspection a construction summary for this sump had not been provided to the Board.
8. Pursuant to PART I item 7 a review was completed by the Inspector of the monitoring locations provided in Schedule I, Table 2 of 2AM-MEA0815. This review was to identify the monitoring stations currently utilized at Meadowbank site as changes have occurred over the life of the mine to date. The review identified the following findings;
  - The monitoring program states the current stage of Meadowbank’s operation (e.g.: Early operation, late operation) to associate which monitoring group (found under schedule I) applies to that monitoring station. The Inspector requests AEML to provide the current operational stage of the Portage, Goose and Vault areas separately; this will assist the Inspector and AEML Environment Division during upcoming Inspections until the new license is issued. The Inspector understands that AEML has proposed changes to Schedule I in their renewal application.
  - In most cases, AEML has been sampling for more than required in the water licence. A list of all current monitoring stations and their co-ordinates has been provided to the Inspector and attached to this report (appendix 2).
  - ST-18: Portage Attenuation Pond is no longer a valid sampling location. In late 2014 AEML started tailings deposition into the South Cell of the tailings facility, which was once the Portage Attenuation Pond. Water will no longer be discharged from the Third Portage Lake Diffuser.
  - ST-9: Effluent to Third Portage Lake via the diffuser is no longer valid.
  - ST-21: Tailing Reclaim Pond will be in the south cell of the tailings facility. Once the final deposit in the North Cell occurs (approximately November 2015), the water in the north cell will be pumped down to the South Cell of the tailings facility.
  - ST-24: Vault Waste Rock Storage Facility is active; the station is labelled as late operation.
  - ST-7: Vault Area Diversion Ditches and ST-15, Non- Contact water Diversion Ditches, have not yet been constructed and therefore remain inactive.
  - ST-2 and ST-3 are stations for measuring volume of reclaimed water.

Additional Notes

- At the time of inspection tailings deposition was into the South Cell of the Tailings Facility. From approximately June to November, tailing will be deposited into the North Cell.
- Capping of the North Cell of the Tailing Facility is expected to start this year.
- Upcoming construction is planned for, Saddle Dam 3, 4 and 5, which will surround the south cell of the Tailings Facility,
- The Water Treatment Plant (near ST-9) will be dismantled this year in order for the construction of Saddle Dam 3 to commence.

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_)
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- The Licensee shall take note construction summary for the North West contact water collection system sump is required pursuant to PART D item 26:  
*The Licensee shall submit a construction summary report to the Board within ninety (90) days following completion of each structure designed to contain, withhold, divert or retain Waters or wastes. The construction Summary Report shall be prepared by a qualified Engineer(s) in accordance with Schedule D, item 1.*
- The Inspector hereby requests a copy of the revised Freshet Action Plan for 2015. In addition to this Plan, the Inspector request notice during the beginning of freshet so that an inspection may be scheduled

Resolved Outstanding Concerns

- Waste construction materials, which were used in the construction of the runway extension were noted adjacent to Third Portage Lake in a previous inspection have been removed.

Licensee or Representative	Inspector's Name
	C. WILSON
Signature	Signature
	Origin Signed on File
Date	Date
	March 31 <sup>st</sup> , 2015

Office Use Only:

Follow-up report to be issued by Inspector

☐ Yes ☒ No

- Appendices;
- Appendix 1- Freshwater consumption table for March 2015
- Appendix 2- Monitoring Stations description with GPS

Append 1: March Water Consumption rev2

Daily Flows		
Day	Fresh water - new	Reclaim Water
	m3/day	m3/day
1	3514	4
2	7737	8
3	6909	1653
4	3597	6279
5	3611	5670
6	3604	4980
7	3609	5886
8	3603	5392
9	3597	5719
10	3593	5554
11	3605	5453
12	3603	5677
13	5752	2741
14	3425	5515
15	3606	5485
16	3602	5930
17	3593	5706
18	3597	6225
19	3614	6446
20	3599	6113
21	3607	6092
22	3599	5689
23		
24		
25		
26		
27		
28		
29		
30		
31		
Total m3	88578	108216

**1921 m3**

**Table 8.1: 2013 GPS Coordinates of Meadowbank Mine Site Sampling Location**

Sample Location Description	Sample ID	GPS Coordinates Easting / Northing	
<b>MMER and EEM</b>			
Portage Attenuation Pond effluent water quality monitoring and toxicity testing	ST-9/ ST-MMER-1	14W 0637593	7215174
Vault effluent water quality monitoring and toxicity testing	ST-10/ ST-MMER-2	15W 0359842	7219555
East Dike effluent water quality monitoring and toxicity testing	ST-8/ ST-MMER-3	14W 0639336	7213920
Portage Attenuation Pond water quality monitoring in receiving environment - discharge area	TPN	14W 0636531	7214581
Vault water quality monitoring in receiving environment - discharge area	WLE	15W 0360880	7220513
East Dike water quality monitoring in receiving environment - discharge area	SPLE	14W 0639459	7213913
Water quality monitoring in receiving environment - reference area	TPS	14W 0633840	7208079
<b>Sewage Treatment Plant</b>			
STP discharge to stormwater management pond	STP	14W 0638042	7214140
<b>Incinerator</b>			
ash sampling; waste oil sampling	Incinerator	14W 0638189	7213412
<b>Meadowbank Bulk Fuel Storage Facilities</b>			
water quality monitoring of discharge from secondary containment area	MB-Fuel	14W 0638258	7213430
<b>Tailings Reclaim Pond</b>			
water quality monitoring in North Cell	ST-21	14W 0637608	7215745
water quality monitoring in South Cell	ST-21	14W 0638166	7215045
Vault Attenuation Pond	ST-25	15W 359030	7219607
<b>Vault Pit Sump</b>			
water quality monitoring from area of water accumulation	ST-23	14W 0640865	7220103
<b>North Portage Pit Sump</b>			
water quality monitoring from area of water accumulation	ST-17	14W 0638951	7214783
<b>South Portage Pit Sump</b>			
water quality monitoring from area of water accumulation	ST-19	14W 0638898	7213939
<b>Bay Goose Pit Sump</b>			
water quality monitoring from area of water accumulation	ST-20	14W 0638339	7212681
<b>East Dike Seepage</b>			
water quality monitoring of seepage from East Dike	ST-S-1	14W 0639316	7213937
<b>Attenuation Pond</b>			
water quality monitoring	ST-18	14W 0638335	7214719
<b>Waste Rock Storage Facility</b>			
water quality monitoring of seepage from Waste Rock Storage Facility	ST-16	14W 0638617	7216164
Vault	ST-24	14W 640919	7220711
<b>Saddle Dam 1 Seepage</b>			
water quality monitoring of seepage from Saddle Dam 1	ST-S-2	14W 0636977	7216000
Central Dike Seep	ST-S-5	14W 0638743.822	7214571.073
<b>Landfarm</b>			

N 65°04'12.2" W 95°59'53.2" 14 W 641145.5 7219616

Sample Location Description	Sample ID	GPS Coordinates Easting / Northing
discharge to the land from landfarm sump	ST-14	14W 0637537 7215195
<b><i>Diversion Ditch Non-Contact Water</i></b>		
Portage Area (West) diversion ditch (North Cell Diversion Ditch)	ST-6	14W 0636771 7216026
Portage area (East) diversion ditch around WSF	ST-5	14W 0638732 7216495
<b><i>Portage RSF Seepage</i></b>		
Monitoring in NP-2 Lake	NP-2 South	14W 638676 7216229
Monitoring in NP-2 Lake	NP-2 West	14W 638716 7216490
Monitoring in NP-2 Lake	NP-2 East	14W 638995 7216210
Monitoring in NP-2 Lake	NP-2 Winter	14W 638704 7216279
Monitoring in NP-1 Lake	NP-1 West	14W 639298 7216165
Monitoring in Dogleg	Dogleg-North	14W 639518 7215861
Monitoring in Second Portage Lake*	SPL-RSF Seep	14W 639618 7214713
<b><i>Assay Road Seepage</i></b>		
Monitoring in Third Portage Lake	TPL-Assay	14W 637751 7213743
Monitoring in containment structure	Assay road seep North	14W 637908 7213850
Monitoring in containment structure	Assay-road seep South	14W 637919 7213832
<b><i>Freshet Action Plan</i></b>		
waste rock pool	WRP	14W 0638630 7216552
waste extension pool	WEP	14W 0638335 7216860
North East diversion ditch	NED	14W 0638335 7216909
west diversion sump	WDS	14W 637235 7216172
Freshwater Intake Baker Lake		14w 0644194 7135607
<b><i>*Station not yet in place -&gt; approximately location</i></b>		
<b><i>Groundwater</i></b>		
MW-08-03	Well	14W 639282 7214483
MW-08-02	Well	14W 639185 7213901
ST-GW-2s (Pit B)	Drill hole	14W 638985 7214660
ST-GW-1s	Drill hole	14W 638759 7212359
MW-03-03	Well	14W 639085.8205 7214383.2539
MW-11-02	Well	14W 638125 7214802
MW-03-04	Well	14W 638204.9704 7214511.6504
MW-06-07	Well	14W 638239.1019 7214471.3737
MW-11-01	Well	14W 638893 7212488
MW-03-01	Well	14W 6387620.0390 7212207.0070
MW-03-02	Well	14W 638754.1989 7212162.16
MW-06-05	Well	14W 638808.6307 7212219.7991
MW-06-06	Well	14W 638797.0414 7212156.3928
ST-GW-14-01 / MW-14-01	Well	14W 638750 7214445.61
ST-GW-3	Drill hole	14W 638704 7212252
ST-GW-4	Drill hole	14W 638660 7212045
GW-BG-Wall-Seep	Wall	14W 638630 7212132

Sample Location Description	Sample ID	GPS Coordinates Easting / Northing
DW-RAW-KIA		14W 637709 7213977