

Water Licence Inspection Report

☒Original

☐Follow-Up Report

Authorization	Representative
Agnico Eagle Mines Ltd.	Kyle Conway
Authorization No. / Expiry	Representative's Title
2AM-MEL1631	Environment General Supervisor
Inspection Date	Inspector
May 31, 2023	RMO Kyle Amsel
Other Authorization/s	
KVCA07Q08, KVCA11Q01, KVPL11D01, Project Certificate No. 6	
Activities Inspected	
<div><input checked="" type="checkbox"/> Camp, Commercial <input type="checkbox"/> Drilling <input checked="" type="checkbox"/> Mining <input checked="" type="checkbox"/> Construction <input type="checkbox"/> Reclamation <input checked="" type="checkbox"/> Fuel Storage <input checked="" type="checkbox"/> Roads/Hauling <input type="checkbox"/> Winter Hauling</div> <div><input type="checkbox"/> Camp, Private <input type="checkbox"/> Other Click or tap here to enter text.</div>	

Section 1 Comments

On May 31, 2023 Resource Management Officer Kyle Amsel (Inspector) for Crown-Indigenous Relations and Northern Affairs Canada conducted an Inspection of Water Licence 2AM-MEL1631(Licence). The Licence is issued to Agnico Eagle Mines Limited (Licensee) for the use of waters and deposit of wastes in support of a mining undertaking (Undertaking).

Accompanying the Inspector was Kyle Conway, Environment General Supervisor and Anne-Laurence Paquet, Compliance Coordinator (herein referred to as representatives).

Preliminary Information

The primary focus of this inspection was water management during freshet.

Observations

In 2023 Spring came early to the area and so during Inspection very little snow was present and the majority of the site was already dry.

1. B12 Quarry

a. The B12 Quarry or borrow pit is generally located at km 15 on the All-Weather Access Road at N62° 55’ 13.8” W92° 3’ 46.8”.

b. A small un-engineered dyke was installed to keep melt water inside the facility from running into a nearby pond on the East side.(Photo 1) This is a concern to the Inspector, however Representatives intend to discharge water from the area soon.

c. The area has been extensively developed with large piles of sand piled in the area. (Photo 2)

2. Construction of Saline Water Pipeline

a. Construction currently taking place is installation of a gravel bench where the pipeline will ultimately be constructed. This consists of an approximately 4 inch tall gravel pad 4 feet wide extending from the base of the road. (Photo 3)

b. At the time of Inspection this construction was only being completed from km20 to the Meliadine Camp.

c. One road crossing for the pipeline is installed.

d. No work near the highwater mark is being undertaken at this time, so there are no water related concerns.

3. Water Management on site.

a. As per Part D Item 11 and Part F Item 1 and 2 Water from the Undertaking is to be directed to CP (Containment Pond) 1.

b. During Inspection there was minimal pumping occurring on site. Water discharge lines which go from various water management structures to CP1 were disconnected to allow the ends of the lines to be placed on a ramp requested by engineering over the Dyke of CP1.

c. At CP2 no pumping is occurring. Representatives stated water from this location reports to CP1. (Photo 4) At time of Inspection water was drawn down to winter levels.

d. At CP3 no pumping is occurring. Representatives state water from this location reports to CP1. (Photo 5)

e. At CP4 no pumping is occurring. Water from this area reports to CP1. (Photo 6)

f. At CP5, no pumping is occurring. Water from this area reports to CP1. (Photo 7)

g. CP6, no pumping is occurring. Water from this area reports to CP1. (Photo 8)

4. Dyke for CP1. (Photo 9)

a. The structure restrains water into CP1.

b. A trench and sump have been dug on the downstream toe of the structure. At the time of Inspection no pumping was occurring.

5. Dyke for CP5. (Photo 10)

a. This structure restrains water into CP5.

b. At the time of Inspection no water was near the dyke.

c. A collection sump or trench is not present on this structure as any potential seepage would report into the nearby open pit.

6. CP3 Channel and Fine Grain Material (Photo 11)

a. The area with fine grey material referenced in previous inspection report 2022-KIV05-CW was inspected. No new material was apparent.

b. Representatives stated that AEM is committing to begin construction on the CP3 Channel and covering of fine grain material on June 12, 2023.

- c. As per Part F Item 2 subpart I of the Licence the inspection report from the Tailings Storage Facility (TSF) were requested and provided to the Inspector by Representative.

d. The SE side of the TSF has large amounts of fine grey material apparent along the slopes, representative states that this material is windblown and not apparent on other sides of the facility.
7. Scrap steel near CP4 (Photo 12 & 13)

a. A large pile of steel appears to have been deposited near CP4 which was not present on last Inspection.

b. On June 5, 2023 Representative sent photos showing the steel has been removed from the area.
8. Representative presented a printed copy of the water licence to the Inspector satisfying Part B Item 3 of the Licence.
9. At the time of Inspection water usage as calculated at MEL-11 water totalizer from the proceeding midnight is 1,292,897m³
10. Reverse Osmosis Plant (RO) (Photo 14 & 15)

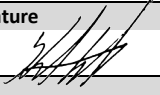
a. The RO processes water from Saline Pond 1 (SP1). Water is pumped directly from SP1 to the RO.

b. In the RO TSS is first separated from the water which may cause damage to the equipment. This is done through a fibre filter and then water goes to the filtrate tank.

c. From the filtrate tank the water goes to the reverse osmosis machine. The reverse osmosis machine pressurizes the water and then it flows past membranes that allow water to pass through, but not saline water. The result is water with an increased concentration of salt (brine), and water with a decreased concentration of salt.

d. The RO has a max capacity of 2000m³/day and from this produces approximately 20% total volume of brine and 80% total volume of fresh water. Brine water is returned to Tiri Pit II.

Section 2 Non-Compliance with Water Licence
There were no items of non-compliance noted.
Section 3 Action Required
No actions required.
Section 4 Other
NA

Licensee or Representative	Inspector's Name
Kyle Conway	RMO Kyle Amsel
Signature	Signature
	
Date	Date
	June 14, 2023

Office Use Only: Follow-up report to be issued by Inspector

☐ Yes ☐ No

PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
Wednesday, May 31, 2023	2AM-MEL1631	DSC-HX50V	RMO Kyle Amsel
Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)		
Photo 1	N62 55' 13.8" W92 3' 46.8"		



Description:
Small dyke constructed to keep freshet water from running into small lake from the B12 Quarry.

Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 2	N62 55' 20.5 W92 3' 54.8"



Description:
B12 Quarry. Photo taken from NE side of facility.

Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 3	N62 58' 58.4" W92 8' 23.8"



Description:
Bench constructed in preperation for the saline water pipeline.

Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 4	N63 1' 36.9" W92 10' 40.3"
	
Description: Containment Pond 2/CP2	

Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 5	N63 2' 4.1" W92 14' 30.4"
	
Description: Containment Pond 3/CP#	

Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 6	N63 1' 30.5" W92 13' 30.9"



31 05 2023

Description:
Containment Pond 4/CP4

Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 7	N63 1' 29.8" W92 12' 10"



31 05 2023

Description:
Containment Pond 5/CP5

Photo 8

N62 1' 48.3" W92 12' 0"



Description:
Containment Pond 6/CP6

Photo No.
Photo 9

Lat/Long (DD.MM.SS.SS, NAD83)
N63 1' 51.8" W92 12' 18.9"



Description:
Dyke for Containment Pond 1. Photo from toe of structure with sump in foreground.

Photo No.
Photo 10

Lat/Long (DD.MM.SS.SS, NAD83)
N63 1' 29.8" W92 12' 10"



Description:
Dyke for Containment Pond 5. Photo taken from top of structure with pond on right.

Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 11	N63 1' 56.6" W92 14' 3.1"



Description:
Fine grain material located opposite road from CP3 Channel.

Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 12	N63 1' 27.6" W 92 13' 33.9"



Description:
Pile of scrap steel identified during Inspection.

Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 13	NA



Description:
Area where scrap steel was cleaned up by Licensee.

Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 14	N63 1' 39.1" W92 12' 12.34"
<div></div>	
<div><div>Description:</div><div>Reverse Osmosis Plant</div></div>	