



WATER LICENCE INSPECTION FORM

☒ Original
☐ Follow-Up Report

Licensee	Licensee Representative
Agnico-Eagle Mines Limited	Jennifer Brown
Licence No. / Expiry	Representative's Title
2AM-MEL1631 / March 31 st 2031	Environmental Coordinator
Land / Other Authorizations	Land / Other Authorizations
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Date of Inspection	Inspector
September 20 th to 21st 2018	WRO T.Morton
Activities Inspected	
<input checked="" type="checkbox"/> Camp <input type="checkbox"/> Drilling <input type="checkbox"/> Mining <input type="checkbox"/> Construction <input type="checkbox"/> Reclamation <input checked="" type="checkbox"/> Fuel Storage	
<input checked="" type="checkbox"/> Roads/Hauling <input checked="" type="checkbox"/> Other: Water Supply <input type="checkbox"/> Other:	

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.__)
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On September 20th and 21st, 2018 an inspection was conducted of the Agnico Eagle Mines’ (‘AEM’) Meliadine Mine site, authorized under water licence no. 2AM-MEL1631. The inspection was completed by Water Resource Officer Tim Morton and was conducted to ensure compliance with the above stated water licence and approved management plans.

This report was produced with the findings collected during the inspection.

Observations

1. The effluent diffuser ceased discharge on September 3rd 2018 and is not expected to resume until the spring/summer of 2019 (Photo #11). The diffuser is located in the middle of Meliadine Lake east of the exploration camp. The discharge line runs from EWTP MEL-14 along the all season access road past the exploration camp and out to Meliadine Lake.
2. The hazardous waste produced from the main camp is stored at the exploration camps hazardous waste storage area. The vast majority of the waste is stored within seacans which are labeled and shipped offsite for ultimate disposal.
3. The old fuel farm located between the exploration camp and main camp contained 15 fuel storage tanks that were no longer in use. Three of the tanks were labeled “STP Sludge” (Photo #1). Sewage from the STP was placed within these three tanks which appeared to be overfilled during the transfer (Photo #2). The sewage had spilt under the tanks which was not reported by AEM staff. The NWT/NU spills agreement states that all spills of sewage regardless of quantity must be reported. Part H Condition 8(a) states that all unauthorized deposits of waste must be immediately reported to the spill line and to the Inspector. The Inspector explained that this spill must be reported immediately. Ms. Brown reported the spill on September 20th 2018 under spill#18-396. The contaminated material will need to be removed and disposed of in accordance with the approved waste management plan.
4. The Itivia tank farm located in Rankin Inlet contained one 13.5 and one 20 million liter fuel storage tanks (Photo #4). The section of piping at runs from the tank farm, under the road then to the shoreline where it connects to the offloading vessels had one 90 degree elbow that was not double walled. AEM had excavated around the piping to ensure that the piping did not come into contact with the ground. The Inspector was notified on October 9th 2018 that the piping is now double walled and pictures were received to confirm the work.
5. The Portal 1 tank farm excavation of the contaminated material was not complete at the time of the inspection (Photo #6). The spill occurred on January 2018 when 6,000 liters of fuel was released outside of the secondary containment berm. Ms. Brown explained that the water entering the excavated area is monitored daily and sent to the oil water separator.
6. The D-CP1 trench is designed to collect all seepage from CP1 and includes a sump where any seepage is pumped back into CP1 (Photo #7). No seeps from CP1 were noted during the inspection and the sump appeared to have at least two meters of freeboard.
7. No samples from MEL-14 were taken during the inspection as the discharge ceased on September 3rd 2018. The sampling locations were appropriately labeled (Photo #8).
8. The sewage treatment plant treats ~80 to 100 cubic meters of sewage per day. The treated sewage is pumped to CP1 where it is mixed with other site contact water, sent through the EWTP and discharged to Meliadine Lake.
9. Channel 2 is located at the north end of Meliadine camp. This channel is designed to collect all contact water before it enters G2 Lake and ultimately reports to CP1.
10. There were no concerns noted with Mel Esker quarry at the time of the inspection. The quarry itself was set well back from G2 and Meliadine Lakes and contained no standing water (Photo #9).
11. Screening of contaminated material was taking place at landfarm processing pad. The material must be under 40 mg/L of hydrocarbons prior to use for construction. The first priority for remediation is the current soil within the landfarm, followed by the genset spill, then the portal one tank farm spill.
12. Any contact water from the site that is high in TSS is reported to P1 and any water that is contaminated with hydrocarbons is sent to the snowcell (Photo #10). The salt treatment plant will be completed in December 2018 and will discharge to CP1.
13. The saline pond discharges to P3 and is sent to P1 for evaporation. The evaporators were not in use at the time of the inspection.

SECTION 2	<input type="checkbox"/> Comments (s.__)	<input type="checkbox"/> Non-Compliance with Act or Licence (s.2)	<input type="checkbox"/> Action Required (s.__)
Click here to enter text.			
SECTION 3	<input type="checkbox"/> Comments (s.__)	<input type="checkbox"/> Non-Compliance with Act or Licence, (s.__)	<input type="checkbox"/> Action Required (s.3)

Licensee or Representative	Inspector's Name
	WRO T.Morton
Signature	Signature
	Original signed on file
Date	Date
	October 25 th 2018

Office Use Only:	Follow-up report to be issued by Inspector	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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cc.

Erik Allain, Director, Lands Administration, INAC
Manager, Licensing, Nunavut Water Board
Meliadine Environmental Staff, Environmental Coordinator, AEM



Attached:

Photo Log, September 20th to 21st 2018

PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
September 20 th to 21st 2018	2AM-MEL	Panasonic Lumix DMC-TS5	WRO Morton
Photo No.		Lat/Long (DD.MM.SS.SS, NAD83)	
Photo 1			



Description:
Overview of the old tank farm area. Note the tanks labeled “STP Sludge”



PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
September 20 th to 21st 2018	2AM-MEA1525	Panasonic Lumix DMC-TS5	WRO Morton
Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)		
Photo 2			



Description:
Tank locaed within the old tank farm that has been overfilled with sewage.



PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
September 20 th to 21st 2018	2AM-MEL1631	Panasonic Lumix DMC-TS5	WRO Morton
Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)		
Photo 3			



Description: Landfarm B liner appears to be torn and discontinous.
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PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
September 20 th to 21st 2018	2AM-MEL1631	Panasonic Lumix DMC-TS5	WRO Morton
Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)		
Photo 4			



Description:
Overview of Itivia tank farm.



PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
September 20 th to 21st 2018	2AM-MEL1631	Panasonic Lumix DMC-TS5	WRO Morton
Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)		
Photo 5			



Description:
Freshet discharge location located east of the Itivia tank farm.



PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
September 20 th to 21st 2018	2AM-MEL1631	Panasonic Lumix DMC-TS5	WRO Morton
Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)		
Photo 6			

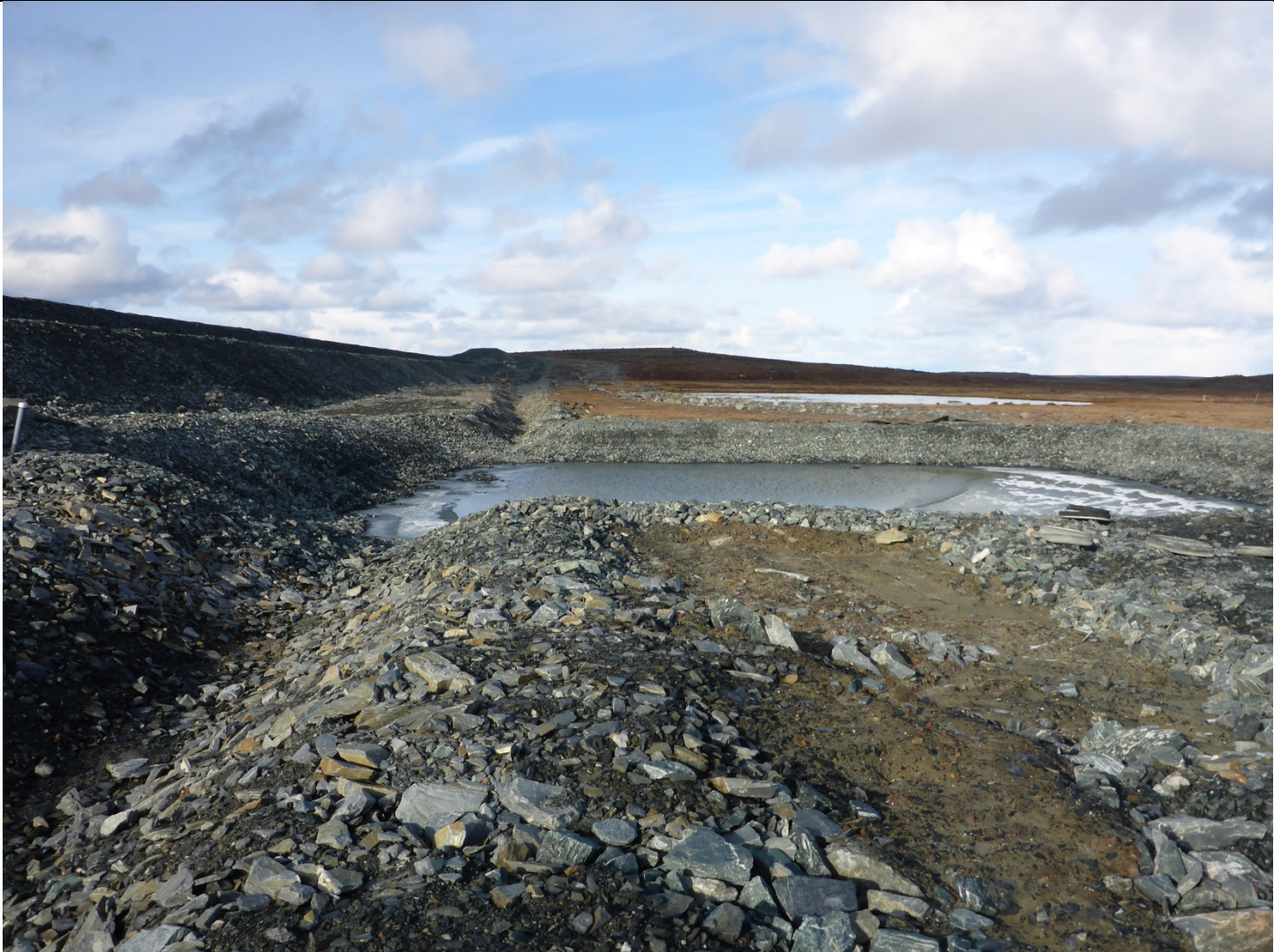


Description:
Location of the Portal 1 tank farm spill excavation.



PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
September 20 th to 21st 2018	2AM-MEL1631	Panasonic Lumix DMC-TS5	WRO Morton
Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)		
Photo 7			



Description:
Overview of the D-CP1 trench.



PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
September 20 th to 21st 2018	2AM-MEL1631	Panasonic Lumix DMC-TS5	WRO Morton
Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)		
Photo 8			



Description: MEL-12 discharge location signage.



PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
September 20 th to 21st 2018	2AM-MEL1631	Panasonic Lumix DMC-TS5	WRO Morton
Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)		
Photo 9			



Description:
MEL esker quarry overview.



PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
September 20 th to 21st 2018	2AM-MEL1631	Panasonic Lumix DMC-TS5	WRO Morton
Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)		
Photo 10			



Description:
Overview of the snowcell and P1 pond.

PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
September 20 th to 21st 2018	2AM-MEL1631	Panasonic Lumix DMC-TS5	WRO Morton
Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)		
Photo 11			



Description:
Overview of MEL-13 discharge line entering Meliadine Lake.