



WATER LICENCE INSPECTION FORM

☒ Original
☐ Follow-Up Report

Licensee	Licensee Representative
Agnico Eagle Mines Limited (AEM)	Martin Archambault
Licence No. / Expiry	Representative's Title
2AM-MEA1526	Environmental Coordinator
Land / Other Authorizations	Land / Other Authorizations
Date of Inspection	Inspector
June 14 th -17 th 2019	Jeremy Fraser
Activities Inspected	
☒ Camp ☐ Roads/Hauling	☐ Drilling ☐ Other:
☒ Mining	☒ Construction ☐ Other:
☒ Reclamation	☒ Fuel Storage

SECTION 1	☒ Comments (s. __)	☐ Non-Compliance with Act or Licence (s. __)	☐ Action Required (s. __)
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On June 14th 2019 a Water Licence Inspection was conducted on the Agnico Eagle Mines Ltd. (AEM) Meadowbank project. This Inspection was to ensure compliance with the water licence 2AM-MEA1526 and the Acts; Nunavut Planning and Project Assessment Act (NUPPA), Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSTRTA), and Arctic Waters Pollution Prevention Act (AWPPA).

Observations

The following Water and Waste management facilities were inspected during the course of this inspection.

- Fresh Water Intake Barge
- Hazardous Waste Storage Area
- FGL Contractors Laydown
- Refueling Station
- Cyanide Storage Pad
- East Dyke
- Central Dyke
- Storm Water Dyke
- Tailings Storage Facility
- Landfarm
- Landfill
- Waste Rock Stockpile
- Goose Pit Deposition
- Baker Lake AEM Tank Farm

Fresh Water intake Barge

AEM actively uses water approved by the Nunavut Water Board (NWB) from Third Portage Lake and is currently below the authorized usage amount of 9,120,000m³. To date AEM has reported using 1,039,445m³ or fresh water for mine related activities from authorized sources and 296,337m³ of reclaimed water from the tailings facility. There were no concerns identified with this use of water.

Hazardous Waste Storage Area

AEM is currently segregating all Hazardous Waste into multiple sea cans separating items such as batteries, waste oils, used rags etc. and shipping generated waste off site as a requirement of the license *Part F Item 16 & 17. (see photo 1,2 &3)*. AEM has addressed concerns regarding this area identified in the previous inspection dated April 8th 2019.

FGL Contractors Laydown

It was noted that some minor concerns regarding the disposal of waste generated within the contractor’s laydown (*see photo 4*). The inspector identified used lubrication pales and used oil rags have been disposed of in a garbage bin not marked for hazardous material. When the inspector questioned the final destination of the garbage bin the inspector was informed it was to be put in the landfill. The inspector verbally ordered AEM staff to remove all hazardous material prior to landfill disposal.

Refueling Station/ Single Tank Farm

AEM has addressed concerns from the previous inspection in regards to this facility. Adequate secondary containment has been put in place to capture any residual liquids within this facility (*see photo 5*). The inspector noted some water within the single tank farm (*see photo 6*); AEM has sampled the water and results indicate the water meets discharge requirements set by the NWB regarding the Licence 2AM-MEA1526 *Part F Item 9* . No concerns regarding this facility.

Cyanide Storage Pad

During the inspection of this facility it was noted that some pooling of water in what appears to be a low spot beneath a sea can on the pad. The sea can was labelled “super Heavy” and locked at this time; the inspector was unable to determine what is stored in the sea can (*see photo 7*). After further review of information provided by AEM it was determined that the container is housing dry goods only and no chemical products. No concerns were identified



East Dyke

It was noted that the East Dyke appears to be operating as intended. AEM is continuing monitoring occurring with data collecting instrumentation including temperature sensors and piezometers installed within the dyke (see photo 8). There were no concerns identified regarding this structure.

Central Dyke

This Water Management Structure is actively seeping into a ditch and is projected to do so until the final closure of the South Cell of the TSF. AEM is actively monitoring the seepage and pumping water that has passed through the Dyke and directing it to the In-pit deposition location at Goose Pit.

Storm Water Dyke

This water management structure divides the Tailings Storage Facility into 2 cells, North and South cells. Agnico Eagle representative Martin Archambault informed the inspector of cracks that have formed in the Storm Water Dyke. Currently Agnico Eagle fills the cracks with bentonite which absorbs the water from the surrounding material causing it to expand and form an impermeable seal. No concerns identified.

Tailings Storage Facility (TSF)

The TSF is divided into two (2) parcels, the north and south cells divided by the Storm water dyke. AEM has started the reclamation process of the North Cell and has begun capping and installing and monitoring equipment as a requirement of the licence for closure and reclamation of this facility Part J Item 7. The South Cell is currently operational and AEM is actively depositing tailing into this facility. AEM has approval from the NWB for deposition of tailings into Goose pit however, AEM has not yet started.

Landfarm

During the inspection of this facility it was noted that it is not lined however AEM designed this facility such that the bedrock is impermeable to leaching. The bedrock is a part of the facility ensuring water that may enter the landfarm site and all runoff is directed to the TSF. This is authorized through the Water Licence held by AEM and also under Metal and Diamond Mining Effluent Regulations (MDMER). There were no concerns identified regarding this facility.

Landfill

AEM has been approved to deposit domestic waste on the Waste Rock Pile at the Meadowbank site. It was noted all concerns regarding the use of this facility in the previous inspection have been addressed by AEM by way removing all forms of hazardous waste such as batteries and used oil rags and lubricants. There were no other concerns related to this facility identified.

Waste Rock Stockpile

The Waste Rock Stockpile (WRSP) appears to be in good order. AEM has installed monitoring stations throughout the WRSP to ensure compliance is met and monitoring is occurring daily and recorded to ensure the provisions in the Licence 2AM-MEA1526 regarding this facility are met. There were no concerns identified with this facility.

Goose In-pit Deposition

During this inspection AEM was in the progress of using the in-pit disposal authorization to deposit water that was seeping through the Central Dyke into a ditch and pumping it to the Goose Pit (see photos 9). There were no concerns regarding the deposition of waste at this time.

Baker Lake Tank Farm

During the inspection the inspector noted approximately 300m³ of water within the berms. The tanks appeared to be mostly empty with one mostly full remaining tank of diesel (see photo 10 & 11), AEM has taken samples of the water and sent the collected samples to the laboratory in Winnipeg. Once Results return indicating the water meets the criteria of the licence and AEM is planning to discharge. There were no other concerns identified with this facility.

SECTION 2	☐ Comments	☐ Non-Compliance with Act or Licence	☒ Action Required
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Part F Item 14 The Licensee is authorized to dispose of and contain all-non-hazardous solid Wastes at the on-site Landfills in accordance with the approved Landfill Design and Management Plan, dated March 2013, or as otherwise approved by the Board in writing.

Part F Item 16 The Licensee shall remove from the Project site, all solid and liquid hazardous Wastes generated through the course of the Operation, for disposal at an approved hazardous waste disposal facility.

- The inspector is requesting that AEM remove all hazardous material from garbage bins prior to being deposited to the Landfill.

Licensee or Representative	Inspector's Name
	Jeremy FRASER
Signature	Signature
Date	Date
	Sept 11 2019



CC:

Licensing Department, NWB
Justin Hack, Manager of Field Operations, CIRNAC

PHOTO LOG

Date	Camera	Inspector	Authorization
June 14 2019	Sony Cyber-shot	Jeremy FRASER	2AM-MEA1526
Photo Log # 1		Location (NAD 83 DD MM SS.SS)	
Photo #1		N	W
			
Description: hazardous waste storage area			



Photo Log # 2

Location (NAD 83 DD MM SS.SS)

Photo #2

N

W



Description: battery bins within hazardous waste containers

Photo Log # 3

Location (NAD 83 DD MM SS.SS)

Photo #3

N

W



Description: hazardous waste material storage area



Photo Log # 4

Location (NAD 83 DD MM SS.SS)

Photo #4

N

W



Description: used oil rags and oily bucket found within garbage bins on FGL contractors site

Photo Log # 5

Location (NAD 83 DD MM SS.SS)

Photo #5

N

W



Description: adequate secondary containment installed at fuelling station



Photo Log #6

Location (NAD 83 DD MM SS.SS)

Photo #6

N

W



Description: single tank farm at Meadowbank site

Photo Log #7

Location (NAD 83 DD MM SS.SS)

Photo #7

N

W



Description: Sea cans in water AEM addressed concerns of contents



Photo Log #8

Location (NAD 83 DD MM SS.SS)

Photo #8

N

W



Description: Meadowbank East Dyke; instrument housing in the background

Photo Log #9

Location (NAD 83 DD MM SS.SS)

Photo #9

N

W



Description: In-Pit Deposition



Photo Log #10

Location (NAD 83 DD MM SS.SS)

Photo #10

N

W



Description: AEM Baker Lake Fuel Tank Farm

Photo Log # 11

Location (NAD 83 DD MM SS.SS)

Photo #11

N

W



Description: AEM Baker Lake Fuel Tank Farm