

Water Resources Division Resource Management Directorate Nunavut Regional Office P.O. Box 100 Igaluit, NU, X0A 0H0

> Your file - Votre référence 2AM-MEA1530 Our file - Notre référence GCDocs#104178221

July 11, 2022

Richard Dwyer Manager of Licensing **Nunavut Water Board** P.O. Box 119 Gjoa Haven, NU, X0B 1J0 E-mail: licensing@nwb-oen.ca

Re: Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC's) Review of the Meadowbank Mine Modification Addition of Fuel Tank for Type "A" Water Licence No. 2AM-MEA1530

Dear Mr. Dwyer,

Thank you for the July 5, 2022 invitation to review the construction notification submitted by Agnico Eagle Mines (AEM) Limited for Meadowbank Mine Modification of Fuel Tank, for Type "A" Water Licence No. 2AM-MEA1530.

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) examined the notification pursuant to its mandated responsibilities under the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Department of Crown-Indigenous Relations and Northern Affairs Act. Please find CIRNAC comments and recommendations in the attached Technical Memorandum.

CIRNAC appreciates the opportunity to participate in this review. If there are any questions, please contact John Onita at john.onita@rcaanc-cirnac.gc.ca; or (867) 975-3876 or Andrew Keim at (867) 975-4550 or andrew.keim@rcaanc-cirnac.gc.ca

Sincerely,

John Onita

Regional Water Coordinator, CIRNAC

Technical Review Memorandum

Date: July 11, 2022

To: Name - Richard Dwyer, Manager of Licensing, Nunavut Water Board

From: John Onita - Regional Water Resources Coordinator, CIRNAC

Subject: Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC's)
Review of the Meadowbank Mine Modification Addition of Fuel Tank for
Type "A" Water Licence No. 2AM-MEA1530

| Region: | ☐ Kitikmeot | ⊠ Kivalliq | ☐ Qikiqtani |
|---------|-------------|------------|-------------|
| | | | |

A. BACKGROUND

On May 26, 2022 Agnico Eagle submitted an application to the Nunavut Planning Commission (NPC) to complete a screening of the proposed project changes, whereby Agnico Eagle is requesting to add a 3.3 ML fuel tank to the site adjacent to the existing tank and the tank farm will be modified to enclose both tanks.

The NPC concluded on June 22, 2022 that the proposed changes were exempt from screening by the Nunavut Impact Review Board (NIRB) as the additional fuel tank does not change the general scope of the original or previously amended activities (AEM letter to NWB dated June 23, 2022).

There is currently a tank farm enclosing a 5.6 ML fuel tank on-site at the Meadowbank Mine, which has been in service since 2009 (Figure 1). Agnico Eagle is proposing to install a new 3.3 ML tank next to the existing tank and modifying the secondary containment area so that the two tanks will share the new containment space (AEM letter to NWB dated June 23, 2022).

The proposed modifications to the secondary containment area consist of:

- Building a new tank foundation for the 3.3 ML fuel tank.
- Building containment dikes around the new tank.
- Building a lower channel connection in the berm that separates the two tanks so that the liquid can flow over through the channel in case of a spill and be contained in the proposed tank farm.
- Installing a liner system in the new containment area to ensure imperviousness of the tank farm.
- Grading the tank farm floor to ensure run-off drainage to a sump pit.

The existing pumping station will be used to fill both the actual and the new 3.3 ML tanks. Both tanks will be connected to the existing pumping stations. Those pumping stations will be used to fill both tanks from tanker trucks travelling between the Baker Lake fuel farm and the Meadowbank site. Existing distributing pumping stations will also be used for equipment refuelling as well as supply the power generator transfer tanks located near the power plant (AEM letter to NWB dated June 23, 2022).

CIRNAC provides the following comments and recommendations pertaining to the construction notification for the Meadowbank Mine Addition of Fuel Tank modification work. A summary of the subjects of recommendations can be found in Table 1. Documents reviewed as part of this submission can be found in Table 2 of Section B. Detailed technical review comments can be found in Section C.

Table 1: Summary of Recommendations

| Recommendation Number | Subject |
|-----------------------|-----------------------------|
| R-01 | Design Report |
| R-02 | Minor Spill Mitigation Plan |

B. DOCUMENTS REVIEWED AND REFERENCED

The following table (Table 2) provides a list of the documents reviewed under the submission and reference during the review.

Table 2: Documents Reviewed and Referenced

| Document Title | Author, File No., Rev., Date |
|--|-----------------------------------|
| 2AM-MEA1530 Agnico Eagle Notice of | Agnico Eagle Mines (AEM) Limited, |
| Modification for MBK Fuel Tank | June 23, 2022 |
| 2AM-MEA1530 Attachment B_Meadowbank | Agnico Eagle Mines (AEM) Limited, |
| Fuel Farm_Design Report_Issue for use | May 24, 2022 |
| 2AM-MEA1530 Attachment C_Bulk Fuel | Agnico Eagle Mines (AEM) Limited, |
| Storage Facility Management Plan V7 | June 2022 |
| 2AM-MEA1530 Attachment D_Spill Contingency | Agnico Eagle Mines (AEM) Limited, |
| Plan Version 17 | June 2022 |

C. RESULTS OF REVIEW

1. Design Report

Comment:

CIRNAC has reviewed the Design Report for Meadowbank Mine New 3.3 ML Fuel Tank provided by AEM and has no comments at the moment.

Recommendation:

(R-01) CIRNAC is satisfied with the information provided by AEM in the Design Report.

2. Minor Spill Mitigation Plan

Comment:

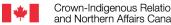
In Section 3.1 of the Spill Contingency Plan, AEM defines Minor Spill as:

"Any spill that does not involve a toxic, reactive, or explosive material in a situation that does not pose a significant risk to the environment, human health or Agnico Eagle property"

Similarly, in Section 5.0 of the Contingency Plan, AEM provided a list of spill events that have the potential to occur at the Meadowbank Complex which includes among others the following:

- Vessel overfilling and release, or over pressurizing and venting through relief valve or rupture disk; Overfilling;
- Release occurring during the loading/unloading from transportation vessels
- Spills during transfer of fuel, chemicals or waste products;
- Process Vessel/pump releases due to equipment failure (i.e., cracks, seal failure, etc.)
- Transfer hose releases:
- Release of inhalation toxicants of short duration:

CIRNAC recognizes that these spill events listed above can be classified as "Minor Spill" events largely due to the assumption that they might not pose a significant risk to the environment, human health or Agnico Eagle property, according to AEM's definition. However, CIRNAC is concerned that the majority, if not all of the operational processes listed above are incidences with the potentials of contaminating water bodies within the Meadowbank Complex if proper measures are not put in place to check the frequency of occurrence for each of these events while operations continue in the Meadowbank Complex.



CIRNAC notes that AEM only provided the procedure of reporting spill incidences in Appendix J of the Spill Contingency Plan. The spill reporting procedures detailed in Appendix J only address how to record and report a spill incidence. It does not provide any steps on how to prevent the minor spill event from occurring in the first place before an incident of the spill can be reported.

Recommendation:

(R-02) CIRNAC recommends that AEM provide a comprehensive Spill Mitigation Plan that details operational procedures put in place to prevent or reduce the incidences of major and minor spill events in the Meadowbank Complex.

D. REFERNCES

Agnico Eagle Mines (AEM) Limited, Agnico Eagle Notice of Modification for MBK Fuel Tank, June 23, 2022

Agnico Eagle Mines (AEM) Limited, Attachment B_Meadowbank Fuel Farm_Design Report_Issue for use, May 24, 2022

Agnico Eagle Mines (AEM) Limited, Attachment C_Bulk Fuel Storage Facility Management Plan V7, June 2022

Agnico Eagle Mines (AEM) Limited, Attachment D Spill Contingency Plan Version 17, June 2022