

Water Licence Amendment Application for Agnico Eagle Mines Ltd. (AEM), Meliadine Project, Water Licence No. 2AM-MEL1631 **Nunavut Water Board Technical Meeting**

November 30, 2020

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Outline

- Roles and Responsibilities
- Contributions to the Water Licence Review
- Topics discussed:
 - Ι. Total Dissolved Solids (TDS) **Thresholds**
 - II. Works Related to Additional Deposits
 - III. Water Balance and Quality Clarifications
 - IV. WRSF3 Expansion and Updated Waste Management Strategy
 - Validation of Proposed TDS ٧. Discharge Criteria
 - VI. Surface Contact Water Management and Waterline Discharge to Melvin Bay
 - VII. Reclamation Security Estimate **Update**

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 - IV. WRSF3 $4^{\text{\chick}}$ ር $^{\text{\chick}}$ ᢐᢅᡓᡥᠫᠬᠸᠦᡑ
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Roles and responsibilities

Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC) responsibilities, mandate, and obligations are in alignment with the following:

- Crown-Indigenous Relations and Northern Affairs Act
- Nunavut Agreement
- Nunavut Land Claims Agreement Act
- Nunavut Waters and Nunavut Surface Rights Tribunal Act and the associated regulations
- Nunavut Planning and Project Assessment Act
- Territorial Lands Act and the associated regulations



Arctic Waters Pollution Prevention Act

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Contributions to application review

CIRNAC made the following submissions to the Nunavut Water Board:

- Information Requests: September 22, 2020
- Response to Information Requests: October 2, 2020
- Meeting with AEM and KivIA on Security Estimate: October 30, 2020
- Technical Review Comments: November 8, 2020

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I. Total Dissolved Solids (TDS) Thresholds b∩゚。 J∩゚゚/L∀゚ /∩∀゚ (TDS) ∩P▷∩゚。゚

<u>Issue</u>

The proposed changes to the TDS threshold and Effluent Quality Criteria and Site-Specific Water Quality Objective are not supported in the application.

Recommendation

 Provide an evidence-based rationale for the proposed revisions to the TDS threshold.

Status

· Partially resolved.

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II. Works Related to Additional Deposits (Discovery, Pump, Fzone, and WES-NORMEG)

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<u>Issue</u>

Insufficient information for the mining of referenced additional deposits (Discovery, Pump, Fzone, WES-NORMEG deposits).

Recommendation

- Confirm intention to develop these deposits.
- Provide additional information on the deposits not currently included in 3AM-MEL1631 and plans for their development and mining.

<u>Status</u>

Resolved.

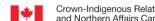
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III. Water Balance and Quality Clarifications $\Delta L \triangleright^{<} \Delta^{\iota} \rightharpoonup \dot{\Gamma}^{\circ} \sigma^{\circ} U \multimap^{c} \triangleleft^{\iota} L \multimap^{c} \partial^{\circ} \Delta^{\circ} \dot{\sigma}^{\circ} U \multimap^{c} \partial^{\circ} \Delta^{\circ} \dot{\tau}^{\circ}$

Issue

There is a lack of clarity on the 3,500 mg/L TDS threshold for RO treatment and on water diversion from CP1 to SP3.

Recommendation

- Provide clarification on the threshold applied in the management of CP5 water quality for RO treatment of TDS before discharge.
- Provide rationale for diverting water from CP1 to SP3.

Status

Partially Resolved.

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<u>Issue</u>

Rationale for placing the waste rock/overburden in WRSF3, instead of WRSF2 as was originally planned, is unclear.

There is also a lack of clarity on additional deposits and the nature and extent of waste rock from these deposits.

Recommendation

- Provide rationale for extension of WRSF3.
- Provide additional information on the lithological and geochemical nature and extent of waste rock from these additional deposits.

Status

Partially Resolved.

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V. Validation of Proposed Total Dissolved Solids (TDS) Discharge Criteria ح¬σ∇«Ϟο» ⊃،ኣፈ⊳⊂⊳ፋ» ρ∪。¬Ն, σ。ۥ٦∪«ኣΓፋ。 ኣ∪ፋ。 (LD2) ᢃᡧᢕᢗᠵᠲ᠙᠘ᢆᢐᡠ᠘ᠰᠴ

Issue

AEM committed to validate the proposed TDS criteria with additional monitoring results at the end of CP1 discharge period in October 2020.

Recommendation

Validate the proposed TDS discharge criteria with the results of all monitoring efforts and laboratory tests.

Status

Resolved.

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VI. Surface Contact Water Management and Waterline Discharge to Melvin Bay

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Issue

No clear descriptions related to changes to water management strategy and potential changes in physical infrastructure and operations at the site have been provided for the scenario where the waterline receives approval from by the Nunavut Impact Review Board (NIRB).

Recommendation

- Provide information on how site water management strategy would change if the NIRB approves AEM's waterline application.
- Provide additional details related to expected changes in site facilities and operations of these facilities that would result in association with the proposed waterline.

Status

Partially resolved.

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VII. Surface Contact Water Management and Waterline Discharge to Melvin Bay

Issue

CIRNAC's October 2020 overall assessment is for a total of \$68,136,616 as compared to a total of \$66,879,978 provided by AEM.

Recommendation

The quantum of security estimate for the Meliadine Gold Mine project be set at \$68,136,616.

Status

Ongoing.

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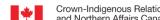
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Conclusion Λ \sim 18 1

CIRNAC will continue to work through the water licence application review process with the aim of protecting Nunavut's inland water resources while promoting sustainable development.

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