



Water Resources Division  
Resource Management Directorate  
Nunavut Regional Office  
P.O. Box 100  
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Your file - Votre référence  
2AM-WTP1830  
Our file - Notre référence  
GCdocs #103669140

June 16, 2022

Mr. Richard Dwyer  
Manager of Licensing  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU, X0B 1J0  
sent via e-mail: [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)

**Re: Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC's)  
Review of Whale Tail Pit A47-N Sump Design Report for Type "A" Water  
Licence No. 2AM-WTP1830**

Dear Mr. Dwyer,

Thank you for your June 6, 2022 invitation to review the Whale Tail Pit A47-N South Sump Design Report, submitted by Agnico Eagle Mines (AEM) Limited, for Type "A" Water Licence No. 2AM-WTP1830.

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) examined the Report and its attachments 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 for the Nunavut Water Board's consideration.

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](mailto:john.onita@rcaanc-cirnac.gc.ca); or (867) 975-3876 or Andrew Keim at (867) 975-4550 or [andrew.keim@rcaanc-cirnac.gc.ca](mailto:andrew.keim@rcaanc-cirnac.gc.ca)

Sincerely,

John Onita  
Regional Water Coordinator, CIRNAC



## **Technical Review Memorandum**

**Date:** June 16, 2022

**To:** Richard Dwyer, Manager of Licensing, Nunavut Water Board

**From:** John Onita, Regional Water Coordinator, CIRNAC

**Subject: Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC's)  
Review of Whale Tail Pit A47-N Sump Design Report for Type "A" Water  
Licence No. 2AM-WTP1830**

**Region:** ☐ Kitikmeot ☒ Kivalliq ☐ Qikiqtani

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### **A. BACKGROUND**

Within the Meadowbank Complex, AEM, intends to construct a new sump A47-N as part of the Phase 2 Water Management plan for the IVR-Pit of the Whale Tail Project. The new sump is expected to capture the water from the pit's watersheds before it reaches the pit floor or before it overtops the pit ring road.

According to AEM, the location of the new sump A47-N was chosen to be the most efficient position for collecting the water from the watersheds. The new sump will be constructed in a low topographic area within the footprint of the former Lake A47 that was de-watered as part of the Phase 1 of the Whale Tail Project.

CIRNAC provides the following comments and recommendations pertaining to the new Whale Tail Pit A47-N Sump Design Report. 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**

<b>Recommendation Number</b>	<b>Subject</b>
R-01	Water Quality Monitoring
R-02	Sump Excavation Rubble Management



The referenced document in table 2 associated with AEM's new Whale Tail Pit A47-N Sump Design Report was reviewed.

**Table 2: Documents Reviewed**

Report Title	Author/Date
Whale Tail A47-N Sump Design Report	AEM, May 2022

## **B. RESULTS OF REVIEW**

### **1. Water quality monitoring**

#### **Comment**

As part of the surface water management strategy described in section 2.4 of the new A47-N sump design report, AEM states:

*“All water reporting to the sump area during and after the construction of the sump, shall be pumped through a system of piping and redirected in the IVR attenuation pond. The current report is limited to the sump design. Subsequently, water from the IVR attenuation Pond is to be treated by the site Water Treatment Plant (WTP) before any discharge to the environment as per the Water Licence requirement”*

Before water is subsequently sent for treatment at the site Water treatment Plant (WTP), CIRNAC requests that AEM provide information as to how it intends to monitor water quality in the sump during and after construction; as well as in the IVR-attenuation pond. The water quality monitoring information should include a description of the monitoring time-table.

#### **Recommendation**

(R-01) CIRNAC recommends that AEM provide a water quality monitoring description for; (a) water in sump during and after construction; (b) water in IVR-attenuation pond. CIRNAC also recommends that AEM report this information in future Annual Reports.

### **2. Sump Excavation Rubble Management**

#### **Comment**

In Section 2.3 of the Whale Tail A47-N Sump design report, AEM provided a “brief description” of how the new A47-N Sump will be constructed and how it intends to manage the expected “rubble” resulting from the sump excavation process. Contrary to the requirement for the provision of a “detailed” report by the NWB Water Licence 2AM-



WTP1830, AEM did not provide “detailed” information as to how it intends to certify the Geochemical status of the expected rubble from the sump excavation work which is thus classified as “waste rock” in the new A47-N Sump Report (see Section 2.3; Lines 2 and 3 respectively).

Part D, Item 3(c) of the Water Licence 2AM-WTP1830 states:

*“The detailed report referred to in Part D, Items 1 and 2 shall include:*

*Geochemical analysis of Waste Rock and fill, demonstrating the Acid Rock Drainage and Metal Leaching characteristics of these materials”*

### **Recommendation**

(R-02) CIRNAC recommends that AEM conduct a Geochemical analysis of the expected rubble from the sump excavation work to show the Acid Rock Drainage and Metal Leaching characteristics of the rubble and report this information in future Annual Report.

### **REFERENCES**

Agnico Eagle Mines (AEM); May 2022; Whale Tail A47-N Sump Design Report

NWB (Nunavut Water Board). March 2018. Type A Water License No. 2AM-WTP1830