



Technical Memorandum

Date: February 19, 2026

To: Amoudla Kootoo (QIA)

From: Richard Nesbitt (HESL)

Re: J260035 – Baffinland Aquatic Effects Monitoring Plan Revision 3 Review

Introduction

Amoudla Kootoo Qikiqtani Inuit Association (QIA) retained Hutchinson Environmental Sciences Ltd. (HESL) requesting a review of the Baffinland Aquatic Effects Monitoring Plan Revision 3 (AEMP). Our comments follow from our previous review of and familiarity with Revision 2.

HESL has therefore reviewed the AEMP provided by Baffinland, focusing our efforts on changes highlighted in the Document Revision Record. In addition, HESL has considered the email of February 10, 2026 from Jessica Kassar (Environment and Climate Change Canada) that expresses concern over a change in the threshold in the action response framework. Our technical comments on Version 3 of the AEMP are provided below.

Technical Review

Review Comment Number	1
Subject/Topic	Trigger, Action and Response Plan
References	Baffinland Iron Mines Corporation BIM-5200-PLA-0023 Aquatic Effects Monitoring Plan Table 5-1
Summary	For Moderate Risk threshold, Revision 3 of AEMP states that for the Performance Indicator of Fish Tissue, a response is triggered if a confirmed effect for any of the BIC endpoints is identified. This criterion was not used in the previous version. No rationale is provided for why this less conservative criterion was added.



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Qikiqtani Inuit Association

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Detailed Review Comment	<p>In Table 5-1, Row 3, Column 5 (Medium Threshold), Baffinland identifies the following as a criterion for a medium threshold response for the Fish Tissue Study as it relates to the mean mercury concentrations in muscle tissue: <i>“there is a confirmed effect (i.e., exceedance of the moderate risk response threshold) for any one of the BIC endpoints 1 through 3.”</i></p> <p>In Version 2 of the AEMP, the medium response level threshold exceedance was based on mercury concentrations in fish muscle in an exposed area combined with mean concentration in the exposure area being statistically significantly higher ($p < 0.1$) and a confirmed effect for any one of the fish health endpoints 1 through 5. These criteria appeared to capture the necessary levels required for action at the medium threshold. The Version 3 document has added a new criterion as noted in italics above. It is unclear why the additional confirmed effect for a BIC endpoint has been added to the threshold. This change increases the potential for an impact to aquatic life or even human health prior to triggering an adaptive management response.</p>
Recommendation/Request	Clarify the purpose of including this additional indicator for the medium risk response threshold for mercury concentration in fish tissue.

Review Comment Number	2
Subject/Topic	Trigger, Action and Response Plan
References	Baffinland Iron Mines Corporation BIM-5200-PLA-0023 Aquatic Effects Monitoring Plan Table 5-1
Summary	For the Low Risk threshold, Revision 3 of AEMP states that a response is triggered if the MDMER mercury threshold of 0.5 $\mu\text{g/g}$ wet weight is exceeded. The previous version of the AEMP used a value of 0.2 $\mu\text{g/g}$ wet weight. No rationale is provided for the change to a less conservative threshold.
Detailed Review Comment	<p>In Table 5-1, Row 3, Column 4 (Low Threshold) of the Version 3 AEMP, Baffinland identifies the following as a low threshold <i>“Mean total Hg concentration in fish muscle from the effluent-exposed area exceeds the MDMER threshold for an effect on fish tissue from Hg (i.e., 0.5 $\mu\text{g/g}$ wet weight).”</i></p> <p>The March 2024 AEMP has the same statement but uses a value of 0.2 $\mu\text{g/g}$ wet weight. It is unclear why the value has changed since no updates to MDMER have been implemented. The change to a less conservative trigger increases the threshold of an acceptable impact to aquatic life and potentially human health.</p>
Recommendation/Request	Clarify the purpose of revising the mercury threshold value from 0.2 $\mu\text{g/g}$ to 0.5 $\mu\text{g/g}$.