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# **FISHERIES AND OCEANS CANADA**

## **Technical Review Comments to the Nunavut Water Board (NWB)**

### **Agnico Eagle Mines Limited (AEM) Whale Tail Pit Expansion Project**

**Submitted to:** Nunavut Water Board

September 16, 2019

**DFO File No.: 16-HCAA-00370**

NWB File No. 2AM-WTP1826, 2AM-MEA1526, 2BB-MEA1828

NIRB File No.: 16MN056

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## Executive Summary

Agnico Eagle Mines Ltd. (AEM) submitted amendment applications and supporting documentation for Type “A” Water Licence 2AM-WTP1826, 2AM-MEA1526 and for Type “B” Water Licence 2BB-MEA1828 for the Whale Tail Pit Mine and Haul Road to the Nunavut Water Board (NWB) on May 16, 2019. The Whale Tail Pit Expansion Project is focused on expanding the mining operations of the Whale Tail Pit development would overlap the physical footprint of the approved Whale Tail Pit Project and extend further onto the Amaruq exploration area. The Expansion Project activities include expansion of the Whale Tail Pit footprint and extension of operations from a four (4) year development to an eight (8) year development period, development of the IVR open pit, underground mining of Whale Tail and IVR pits, on-site mine infrastructure, water management infrastructure, waste rock storage facilities, and haul road and site access.

On behalf of Fisheries and Oceans Canada (DFO), the Fish and Fish Habitat Protection Program (FFHPP) has reviewed the Water Licence amendment application and associated documents and management plans related to the Expansion Project, as they relate to the departmental mandate under the *Fisheries Act*, to maintain the sustainability and ongoing productivity of Canadian fisheries.

The fisheries protection provisions of the *Fisheries Act* (2019), subsection 35(1), state: “No person shall carry on any work, undertaking or activity that results in the harmful alteration, disruption or destruction of fish habitat” However, under paragraph 35(2)(b) of the *Fisheries Act*, the Minister of Fisheries and Oceans may issue an authorization with terms and conditions in relation to a proposed work, undertaking or activity that may result in serious harm to fish. Serious harm to fish is defined in Section 2 of the *Fisheries Act* as the death of fish, or permanent alteration to or destruction of fish habitat.

DFO-FFHPP is providing the following Technical Review comment submission in response to the Nunavut Water Board’s (NWB)’s correspondence dated August 14, 2019, regarding Notice of Applications and invitation to commence the technical review period for the Applications. The technical comments in the submission focus on additional clarification regarding AEM’s responses to DFO-FFHPP Information Requests, accounting of potential impacts of widening of the haul road, water use volumes and water sources, and potential downstream impacts as a result of changing water levels.

# 1 Introduction

This Technical Review submission summarizes Fisheries and Oceans Canada Fisheries and Fish Habitat Protection Program's (DFO-FFHPP) assessment and recommendations concerning Agnico Eagle Mines Ltd.'s (AEM's) Applications for the amendments to Type "A" Water Licences No. 2AM-WTP1826 and 2AM-MEA1526 and Type "B" Water Licence No. 2BBMEA1828. The purpose of the Technical Review comments are to provide expert advice to the Nunavut Water Board (NWB) regarding AEM's proposed works, undertakings and activities as they related to impacts to fish and fish habitat. This submission focuses on a technical assessment of the Water Licence amendment Applications, with the objective being to analyse the updated and/or revised information presented by AEM in support of the proposed amendments, and reflects DFO-FFHPP's mandate.

As directed by the NWB in their letter dated August 14, 2019, this Technical Review submission focuses on a detailed analysis of the information presented by AEM, including the Type "A" Water Licence amendment application and supporting documentation for the Whale Tail Pit Mine and Haul Road Licence No. 2AM-WTP1826, and approval of consequential amendments of Type "A" Licence 2AM-MEA1526 and Type "B" Licence 2BB-MEA1828. DFO-FFHPP's note the Nunavut Impact Review Board (NIRB)'s concurrent review process for AEM's Final Environmental Impact Statement Addendum (FEIS Addendum) for the "Whale Tail Pit Expansion Project" proposal. As such, DFO-FFHPP refers to materials submitted as part of both NIRB/NWB processes to inform this NWB technical submission.

## 2 Technical Review Comments

### 2.1 Fish Passage

<b>Review Comment Number</b>	2.1 Haul Road
<b>Subject/Topic</b>	Accounting of potential impacts to fish and fish habitat as a result of widening of haul road
<b>References</b>	<ul style="list-style-type: none"> <li>• DFO, 2AM-WTP1826 Information Request, Whale Tail Pit- Expansion Project; submitted to NWB July 18, 2019</li> <li>• AEM 2AM-WTP1826 Information Request Responses, Whale Tail Pit- Expansion Project; submitted to NWB August 1, 2019</li> <li>• DFO-FFHPP Final Written Submission Whale Tail Pit Expansion Project; submitted to NIRB July 26, 2019</li> <li>• AEM Final Written Statement Responses, Whale Tail Pit – Expansion Project; submitted to NIRB August 9, 2019</li> <li>• DFO-FFHPP Final Presentation Whale Tail Pit Expansion Project, Public Hearing, Baker Lake August 24-27, 2019; submitted to NIRB August 20, 2019</li> <li>• 2AM-WTP1826 Appendix E, List of Permits and Licences for the Project</li> <li>• DFO 11-HCAA-CA7-00006 Letter of Advice, Construction at Amaruq Exploration Access Road; issued March 14, 2016</li> </ul>
<b>Summary</b>	<p>In their Information Request to the Nunavut Water Board, DFO-FFHPP acknowledged that AEM provided additional information in response to Technical Comments submitted to the Nunavut Impact Review Board (NIRB) as part of NIRB's concurrent assessment of the Whale Tail Expansion Project proposal. Information AEM provided included: minimum/ maximum flows and fish size/swimming velocities that were used to inform the sizing of the proposed culvert upgrades.</p> <p>In DFO's Final Written Submission provided to the NIRB, DFO-FFHPP requested additional clarification respecting the ability of the watercourse crossings to successfully enable/allow for the passage of fishes including: site-specific detailed design plans, flow information based on field observations and calculations related to fish passage, rationale for use of 15cm sized fishes in their calculations to determine fish passage. In their responses to DFO's final written submission (NIRB) AEM stated: <i>"The requested information will be provided as part of the Final Design Report for the expansion of the Whale Tail Haul Road as per approved Water Licence conditions"</i> and that <i>"Agnico Eagle is committed to meet fish passage requirement and this item will be further discussed during the permitting stage of the Project."</i></p> <p>In the Main Application Document, Section 1.2.5.1 Water Management Infrastructure (p. 32) AEM States: <i>"The water management infrastructure</i></p>

	<p><i>required for the haul road (i.e., bridges and culverts) have already been assessed and constructed under existing authorization. If necessary, to support access road development, additional authorizations may be required for the proposed expansion."</i></p> <p>In the Whale Tail Pit – Expansion Project Haul Road Management Plan (Appendix G.9), Section 2.2 Permitting Regime, Table 2-1 Current Licences and Permits – Whale Tail Haul Road lists a Letter of Advice (LoA) issued by DFO, for the construction of watercourse crossings associated with the original Whale Tail Pit Haul Road, The List of Permits and Licences for the Project (Appendix E) also lists the LoA 11-HCAA-CA7-0006, for the construction of the Amaruq Exploration Road issued March 14, 2016.</p> <p>DFO notes that DFO's LoA (11-HCAA-CA7-0006) was issued for the construction of water crossings for a 6.5m road, whereas the current Water Licence Amendment application involves widening to a 15m road, which would correspond with changes to culverts resulting in an increased footprint below the High Water Mark; as such the existing LoA (11-HCAA-CA7-0006) does not cover the proposed modifications and changes to the watercourse crossings. DFO also notes that the referenced Authorization 16-HCAA-00370 issued July 23, 2018 is specific to the development of the Whale Tail Pit (e.g. construction of dikes and a jetty, as well as dewatering). Though the <i>Fisheries Act</i> Authorization mentions the requirement of measures and standards to avoid and mitigate serious harm to fish, the Authorization does not list the haul road as one of the works undertakings or activities likely to result in serious harm to fish.</p>
<b>Importance of issue to impact assessment</b>	Ensuring that all watercourse crossings over fish bearing watercourses are able to adequately enable fish passage is necessary to avoid and prevent negative impacts to fish and fish habitat.
<b>Detailed Review Comment</b>	<p>DFO acknowledged the information AEM has provided as part of the concurrent NIRB and NWB assessments of the Whale Tail Pit Expansion Project, including information provided during discussions at the NIRB Technical Meeting and Final Hearing. As stated during the NIRB Final Hearing DFO acknowledges AEM's commitment to ensuring fish passage requirements are met, and that discussions regarding fish passage will continue during the permitting stage.</p> <p>AEM notes that a Letter of Advice (11-HCAA-CA6-00006) for the Whale Tail Pit Haul Road, specific to watercourse crossings construction was issued by DFO on March 14, 2016. As a result of the changes proposed for the haul road (e.g. a 6.5m road expanded to 9.5m, with further expansion to the current proposed width of 15m), and changes to the <i>Fisheries Act</i>, DFO-FFHPP notes the existing LoA would not apply to the current proposed expansion activities. The existing LoA was issued based on the assessment of the works, undertakings and activities associated with 6.5m haul road, and was issued under the previous <i>Fisheries Act</i>.</p>
<b>Recommendation/Request</b>	DFO – FFHPP requests the Proponent provide clarification regarding how the existing Letter of Advice (11-HCAA-CA6-00006) specific to the Whale

	<p>Tail Haul Road:</p> <p>2.1.1 Accounts for changes to the amount of fish habitat impacted by works, activities and undertakings associated with widening the haul road from 6.5m to 15m</p> <p>2.1.2 Addresses potential negative impacts of works, activities and undertakings associated with water crossings on the proposed 15m haul road expansion</p>
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## 2.2 Water Use

<b>Review Comment Number</b>	2.2 Water Use
<b>Subject/Topic</b>	Water use volume requirements and source lakes
<b>References</b>	<ul style="list-style-type: none"> <li>• Main Application Document NWB Water Licence 2AM_WTP1826 Amendment , May 2019, Version 1; submitted to NWB June 4, 2019</li> <li>• AEM 2AM-WTP1826 Information Request Responses, Whale Tail Pit-Expansion Project; submitted to NWB August 1, 2019</li> <li>• AEM Technical Comments Responses, Whale Tail Pit – Expansion Project; submitted to NIRB May 29, 2019</li> <li>• AEM Final Written Submission Responses, Whale Tail Pit – Expansion Project; submitted to NIRB August 9, 2019</li> </ul>
<b>Summary</b>	<p>In their Information Request responses, AEM provided clarification on their water use requirements during the construction, operational and closure phases of the Whale Tail Pit Expansion Project. In response to DFO-IR2, AEM provided an updated Table 1: Summary of Freshwater Source Requirements For the Whale Tail Expansion Project (Table 1.2-2 Updated), which demonstrates the updated proposed water use requirements. and presents the differences between the volumes in the original application vs. the volumes in the Amendment application (e.g. original volumes in parenthesis in appropriate cells).</p> <p>1. The original range of volumes of 137,767-170,609m<sup>3</sup>/year from Nemo Lake total annual use during operations differs from the updated range of volumes of 151,892-209,544m<sup>3</sup>/year. The original requirement for dust suppression of 45,750m<sup>3</sup>/year from Nemo Lake differs from the updated volume of 72,240m<sup>3</sup>/year. However, in the Main Application document, AEM indicates: <i>“No increase in the freshwater use per year is required for the Expansion Project during the construction, operation and construction phases”</i> and that <i>“the existing authorized volumes from Nemo Lake should be adequate”</i> (Water Management Plan, Section 3.1.5.1 Freshwater Management).”</p> <p>2. In their response to DFO-IR3, AEM states: <i>“...the source lakes for withdrawing water for operational drilling during 2018 and 2019 included</i></p>

	<p><i>Lake A47, Lake A49, Lake A50, Lake A51, Lake A52, Lake A53, Whale Tail Lake, and Mammoth Lake.” AEM further states: “To minimize impacts to fish and fish habitat, the water withdrawal approach relied on a diversity of sources that included large bodied lakes such as Whale Tail Lake and Nemo Lake (for bathymetry statistics, see Appendix 6-M in FEIS Addendum)” and “...As all water is expected to freeze to the bottom in lakes A50, 51, and 52 during winter, water withdrawal from these lakes could only occur during the summer.”</i></p>
<b>Importance of issue to impact assessment</b>	<p>Accurate and consistent accounting of the water use requirements from source waterbodies, for activities during construction, operation and closure is necessary to adequately assess any potential negative impacts to fish and fish habitat .</p>
<b>Detailed Review Comment</b>	<p>1. In their response DFO-IR2, AEM provide clarification in the revised Table 1, indicating the differences in water volume use between the original application and the amendment application. Table 1 indicates that freshwater requirement from Nemo Lake for “Industrial/Miscellaneous – dust suppression” increases from 45,750m<sup>3</sup>/year to 72, 240m<sup>3</sup>/year The total annual use for Nemo Lake also changes from a range of 137,767-170,609m<sup>3</sup>/year to an update range of 151,892-209,544m<sup>3</sup>/year.</p> <p>In the Main Application Document, Table 1.1-1 Definition of Scope, under Freshwater “Expansion of the Whale Tail Pit Operations (May 2019)” it states: <i>“Freshwater and potable water use approved under Water Licence 2AM-WTP1826 will extend to 2025. <u>No increase in the freshwater use per year is required for the Expansion Project during the construction, operation and construction phases</u>” (emphasis added).</i> In the Water Management Plan, Section 3.1.5.1 Freshwater Management it states: <i>“Agnico Eagle suggests with a projected increase in on-site staff in 2022 to 544 people for the Expansion Project, <u>the existing authorized volumes from Nemo Lake should be adequate</u>” (emphasis added).</i> DFO-FFHPP submits that that updated water usage volumes suggests that volumes provided in the original Water Licence will, or could, be exceeded under some circumstances; i.e. 2AM-WTP1826 Part E.1 states: <i>“The use of Waters from Nemo Lake, for all purposes, shall not exceed a total of one hundred seventy five thousand (175,000) cubic metres per year from the Licence approval date for construction, forty five thousand seven hundred and fifty (45,750) cubic metres per year for dust suppression on the road, one hundred and ninety one thousand seven hundred and fifty (191,750) cubic metres per year for operation, notification of closure.”</i> . The potential exceedance and associated impacts have not been adequately discussed or accounted for.</p> <p>DFO notes in their response AEM state: <i>“...It is important to note that total annual withdrawals of water from Nemo Lake (209,554 m<sup>3</sup>/year) will remain well below i) the lake’s annual inflow volume of approximately 476,000 m<sup>3</sup> (based on the mean annual water balance of the lake under baseline conditions [Golder 2017]), and ii) DFO’s guideline of 10% of the under ice volume for the duration of operations (i.e., under-ice volume of 6,170,000 m<sup>3</sup> [derived from FEIS Addendum Appendix 6-M submitted with</i></p>



*the Whale Tail Pit - Expansion Project). Residual effects to fish and fish habitat are therefore expected to be negligible.”* However, in their response, AEM has not described how under ice volume(s) were calculated e.g. Table 6-M-1 in Appendix M provides a volume for Nemo Lake of 8,360,000m<sup>3</sup>, whereas the under ice volume of 6,170,000m<sup>3</sup> is not present in Appendix 6-M. Further, AEM does not provide commentary regarding how the updated values exceed withdrawal amounts in the existing Water Licence, and does not reconcile the contradicting statements that no increase in the freshwater use per year will be required.

2. DFO appreciates clarifications provided re: source lakes for withdrawing water, noting that source lakes for withdrawing water for operational drilling during 2018 and 2019 included Lake A47, Lake A49, Lake A50, Lake A51, Lake A52, Lake A53, as well as large bodied lakes such as Whale Tail and Nemo Lake. DFO notes that in AEM’s response to DFO-IR3, AEM states: *The total water withdrawal volume required for operational drilling in 2018 was calculated as 40,796 m3, of which 49% was withdrawn during the ice-covered season (31 October to 1 June). As all water is expected to freeze to the bottom in lakes A50, 51, and 52 during winter, water withdrawal from these lakes could only occur during the summer.”* As the smaller lakes could not be used during the ice covered season, the implication is that Nemo Lake and Whale Tail were the primary sources for freshwater during the ice-covered season.

In their response to DFO Technical Comment 3.3.1 (submitted to NIRB May 29, 2019), AEM provided a consolidated table (Table DFO-3.3-1) listing all waterbodies and watercourses impacted (directly and indirectly) by all Project Expansion activities. DFO notes that A47, Lake A49, Lake A50, Lake A51, Lake A52, and Lake A53 will be impacted by proposed activities, and that the waterbodies will no longer be available as water sources given placement of IVR attenuation pond, IVR water rock facility and groundwater storage ponds. DFO also notes that removal of smaller waterbodies used as part of a water withdrawal approach that *“relied on a diversity of sources that included large bodied lakes such as Whale Tail Lake and Nemo Lake”* leads to uncertainty regarding water sources that will be used once lakes are no longer viable sources. In AEM’s response to DFO-IR2, Table 1 also indicates that 109,135m<sup>3</sup>/year is the requirement for Operational Geological Drilling from small lakes and ponds proximal to drilling sites, again - some of which may not be available during operations given impacts of construction.

It remains unclear if “replacement”/ alternate water sources / waterbodies will be used given the potential losses of Lake A47, Lake A49, Lake A50, Lake A51, Lake A52, and Lake A53 for summer withdrawals, and/or if it is expected that larger bodied lakes will become water sources for all operational drilling needs year-round in the absence of previously existing water sources. It is also unclear how, and if, the updated volumes in Table 1 under “Drilling Water –Pits for Nemo Lake” account for the loss of water

	<p>sources Lake A47, Lake A49, Lake A50, Lake A51, Lake A52, and Lake A53.</p> <p>DFO FFHPP also notes that in their responses to DFO-FFHPP's Final Written submission to NIRB, AEM provided updated results from the 2019 field season and updated fish bearing/observation status for Lakes A-50, A-51 and A52 (see Table DFO-FWS 3.2-1). Prior to the 2019 field results, these lakes were viewed as not being fish bearing. With the changes to the <i>Fisheries Act</i> to include "all fish and fish habitat" DFO highlights the importance of accounting of waterbodies will be used for withdrawals, both for calculations with regards to water use volumes and implementation of mitigation measures to prevent impacts during water withdrawals.</p>
<b>Recommendation/Request</b>	<p>DFO – FFHPP requests the Proponent:</p> <p>2.2.1 Clarify how authorized volumes in water licence 2AM-WTP1826 are adequate given updated water withdrawal requirements suggest exceedances; provide specific reference to:</p> <p>a) the updated total annual water volume requirements for Nemo Lake during operations; b) the updated total annual water use for dust suppression for Nemo Lake during operations; and, c) the volume requirements associated with operational geological drilling for small lakes and ponds proximate to drilling sites (see also 3.3.3).</p> <p>2.2.2 Clarify how the under ice volume of 6,170,000m<sup>3</sup> was derived from information in FEIS Addendum 6-M; provide specific locations of values, and calculations</p> <p>2.2.3 Provide: a) a consolidated list of waterbodies that will be used as water sources for operational geological drilling, and the volumes that are expected from each waterbody; and, b) clarification regarding which waterbodies will replace Lakes A47, Lake A49, Lake A50, Lake A51, Lake A52, Lake A53 as summer water sources for operational drilling</p>

## 2.3 Downstream Environment

<b>Review Comment Number</b>	2.3 Downstream Environment
<b>Subject/Topic</b>	Quantification / accounting of all potential downstream impacts
<b>References</b>	<ul style="list-style-type: none"> <li>DFO-FFHPP Technical Review Comments, Whale Tail Pit – Expansion Project; submitted to NIRB May 14, 2019</li> </ul>

	<ul style="list-style-type: none"> <li>• AEM Technical Comments Responses, Whale Tail Pit – Expansion Project; submitted to NIRB May 29, 2019</li> <li>• AEM Technical Meeting Commitment List Status (NIRB PRI: 325763);</li> <li>• Meeting with Fisheries and Oceans Canada (DFO), Draft Meeting Record, July 3, 2019; includes Appendix 1: AEM presentation</li> <li>• AEM Final Written Submission Responses, Whale Tail Pit – Expansion Project; submitted to NIRB August 9, 2019</li> <li>• DFO-FFHPP comments re: Licence No. 2AM-WTP1826, South Whale Tail Diversion Channel and Road 24 design reports; submitted to NWB August 21, 2019</li> <li>• AEM Responses Whale Tail Diversion Channel and Road 24 design reports; submitted to NWB August 29, 2019</li> </ul>
<b>Summary</b>	<p>DFO-FFHPP NIRB Technical Comment 3.4 focussed on the identification potential changes to downstream waterbodies and watercourses that may occur as a result of the Expansion Project activities, specifically the potential for changes related to flows from Mammoth Lake (A16) to Nodes 1 and 2. In their response to Technical Comment 3.4.7, AEM clarified that a decrease in water level was expected in waterbodies downstream, with reference to the FEIS and Appendix 6-E.</p> <p>During the NIRB Technical Meeting in Baker Lake, DFO-FFHPP requested further clarification regarding the <u>quantification</u> of changes in water levels as a result of activities vs. the qualitative assessment used by AEM (see Technical Comment 3.4.7). DFO-FFHPP noted the importance of accurately quantifying all potential changes to water levels in watercourses and waterbodies resulting from the project and subsequently assessment of the impact of the Project on such watercourses and waterbodies including effects on downstream watercourses sand waterbodies ; specifically with respect to accounting of habitat losses/gains. The NIRB Technical Meeting Commitment List Status, Commitment 33 pertains to DFO 3.4.7: <i>“Agnico Eagle agrees to provide additional information on habitat changes to downstream lakes mentioned in the TC request during the Regulatory Phase”</i> with the commitment due date provided as “Post Project Certificate Amendment”. In their Final Written Statement Response to DFO 3.3.1, AEM stated they are <i>“committed to provide the requested information during the Water Licence Amendment process of the Project, for example, as part of the Fisheries Act Authorization application.”</i></p>
<b>Importance of issue to impact assessment</b>	It is important to quantify changes in water levels to downstream fish and fish habitat to assist with assessment of potential impacts.
<b>Detailed Review Comment</b>	DFO-FFHPP reiterates concerns with AEM’s qualitative assessment of the potential impacts of changes in water levels, and how differences in downstream bathymetry/ waterbody shape could influence the amount of littoral / shore habitat potentially impacted. In their response to Technical Comment DFO 3.4.7, specific to downstream impacts related to Nodes 1 and 2, AEM states: <i>“A decrease of up to 20 cm is expected throughout the Project duration, equivalent to an approximate decrease of less than 5% in surface area from baseline conditions using bathymetric information</i>

	<p><i>provided in Appendix 6-M</i>", however, the expectation of downstream water level decreases was not supported by details specific to individual waterbodies listed in 3.4.7. DFO-FFHPP again reiterates the importance of accounting for habitat losses and gains that could result from potential downstream changes (e.g. related to Lakes D1 and D5 as well as Nodes 1 and 2).</p> <p>DFO-FFHPP requested clarification regarding the South Whale Tail Diversion Channel and Road 24 design reports submitted to NWB. DFO noted contradictions with AEM's stated maximum water level in South Whale Tail Basin of 156masl. In their response, AEM clarified that the water level of the South Basin would reach a maximum elevation of 156.7 m during the design flood and would be over the maximum normal operational level for more than a month, and that the peak of the design flood event represents an increase Whale Tail South water volume of 3Mm<sup>3</sup> and an increase in area of 44 Ha. DFO acknowledges the clarification, but notes the assessment / discussion of any potential downstream impacts as a result of exceedances of 156masl was absent.</p> <p>In the AEM Technical Meeting Commitment List Status Table, under Commitment #33, in references to DFO 3.4.7 it states: <i>"Agnico Eagle agrees to provide additional information on habitat changes to downstream lakes mentioned in the TC request during the Regulatory Phase. The commitment due date is post certificate amendment."</i> In their response to Final Written Submission, DFO-FWS-3.3, AEM also stated: <i>"Agnico Eagle is committed to provide the requested information during the Water Licence Amendment process of the Project, for example, as part of the Fisheries Act Authorization application."</i> DFO-FFHPP acknowledges these commitments, and re-iterates that accounting of all potential downstream impacts to fish and fish habitat resulting from upstream changes are important in assessing the overall impacts of the Expansion Project. DFO FFHPP notes that in the absence of final quantitative assessment(s) of all downstream water level and surface area-related impacts, uncertainty regarding the degree of impacts (positive and/or negative) to fish and fish habitat remains (e.g. changes to access to habitat for juvenile fish, as well as changes to access for predators).</p>
<b>Recommendation/Request</b>	<p>DFO –FFHPP requests the Proponent clarify:</p> <p>2.3.1 If quantitative information specific to waterbodies requested in DFO-FFHPP Technical Comment 3.4.7 will be provided:</p> <ul style="list-style-type: none"> <li>a) as part of a <i>Fisheries Act</i> Authorization application post-certificate amendment, or</li> <li>b) if information will be provided prior to the completion of the NWB review of the Water Licence Amendment application.</li> </ul>

### 3 Summary of Requests

#### Technical Review: 2.1 Haul Road

DFO –FFHPP requests the Proponent provide clarification regarding how the existing Letter of Advice (11-HCAA-CA6-00006) specific to the Whale Tail Haul Road:

##### 2.1.1

Accounts for changes to the amount of fish habitat impacted by works, activities and undertakings associated with widening the haul road from 6.5m to 15m

##### 2.1.2

Addresses potential negative impacts of works, activities and undertakings associated with water crossings on the proposed 15m haul road expansion

#### Technical Review: 2.2 Water Use

DFO – FFHPP requests the Proponent:

##### 2.2.1

Clarify how authorized volumes in water licence 2AM-WTP1826 are adequate given updated water withdrawal requirements suggest exceedances; provide specific reference to:

- a) the updated total annual water volume requirements for Nemo Lake during operations;
- b) the updated total annual water use for dust suppression for Nemo Lake during operations; and,
- c) the volume requirements associated with operational geological drilling for small lakes and ponds proximate to drilling sites (see also 3.3.3).

##### 2.2.2

Clarify how the under ice volume of 6,170,000m<sup>3</sup> was derived from information in FEIS Addendum 6-M; provide specific locations of values, and calculations

##### 2.2.3

Provide:

- a) a consolidated list of waterbodies that will be used as water sources for operational geological drilling, and the volumes that are expected from each waterbody; and,
- b) clarification regarding which waterbodies will replace Lakes A47, Lake A49, Lake A50, Lake A51, Lake A52, Lake A53 as summer water sources for operational drilling

#### Technical Review: 2.3 Downstream Environment

DFO –FFHPP requests the Proponent clarify:

##### 2.3.1

If quantitative information specific to waterbodies requested in DFO-FFHPP Technical Comment 3.4.7 will be provided:

- a) as part of a *Fisheries Act* Authorization application post-certificate amendment, or
- b) if information will be provided prior to the completion of the NWB review of the Water Licence Amendment application.