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ECCC Files: 6100 000 008/019 /015 /017
NWB Files: 2AM-MEA1526, 2AM-WTP1826
& 2BB-MEA1828

July 4, 2019

via email at: licensing@nwb-oen.ca

Richard Dwyer
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Richard Dwyer:

RE: 2AM-MEA1526, 2AM-WTP1826, 2BB-MEA1828 – Agnico Eagle Mines Limited – Whale Tail Pit Expansion Project – Type A and B Water Licence Amendments Application Information Requests

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Water Board (NWB) regarding the above-mentioned Type A and B Water Licence Amendments Application. This letter and the attached Information Requests submission provides ECCC's specialist advice based on our mandate, in the context of the *Canadian Environmental Protection Act*, and the pollution prevention provisions of the *Fisheries Act*.

Please contact Melissa Pinto at (780) 951-8731 or Melissa.Pinto@Canada.ca if you need more information.

Sincerely,

Andrea McLandress
Regional Director

Attachment: ECCC Information Requests Submission

cc: Georgina Williston, Head, EA North, EPOD, ECCC
Melissa Pinto, Senior EA Coordinator, EPOD, ECCC
ECCC Review Team





ENVIRONMENT AND CLIMATE CHANGE CANADA'S INFORMATION REQUESTS SUBMISSION TO THE NUNAVUT WATER BOARD

RESPECTING THE TYPE A AND B WATER LICENCE AMMENDMENTS APPLICATION FOR THE WHALE TAIL PIT EXPANSION PROJECT PROPOSED BY AGNICO EAGLE MINES LIMITED

July 4, 2019



AGNICO EAGLE MINES LIMITED'S WHALE TAIL PIT EXPANSION PROJECT
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Abbreviations

ARD/ML	Acid Rock Drainage/Metal Leaching
ECCC	Environment and Climate Change Canada
EQC	Effluent Quality Criteria
FEIS	Final Environmental Impact Statement
NIRB	Nunavut Impact Review Board
TSS	Total Suspended Solids
WRSF	Waste Rock Storage Facility
WTP	Water Treatment Plant

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1.0 ECCC-IR1: Control Strategies to Reduce Acid Rock Drainage/Metal Leaching

IR Source:	Environment and Climate Change Canada (ECCC)
IR Number:	ECCC-IR1
IR Directed To:	The Proponent – Agnico Eagle Mines Limited
Subject:	Control Strategies to Reduce Acid Rock Drainage/Metal Leaching (ARD/ML)
Reference(s):	<ul style="list-style-type: none"> Agnico Eagle Mines Limited. Main Application Document NWB Water Licence 2AM-WTP1826 Amendment, May 2019. Appendix G.1: Whale Tail Pit Waste Rock Management Plan, May 2019.
Issue/Concern:	<p>In the Executive Summary of the Waste Rock Management Plan, the Proponent states that, “consequently, the climate of the Expansion Project will act as a natural control to reduce the production of acid mine drainage and minimize the release of leachate. Climate control strategies are best applied to materials placed at a low moisture content to reduce the need for additional controls on seepage and infiltration. This strategy is considered to be effective for waste rock in arid climate such as the one of Whale Tail Pit Expansion” (Page ii).</p> <p>ECCC acknowledges that climate plays a role in the rate of ARD/ML activities; however, there are places in cold or colder regions where ARD/ML has been pervasive and problematic. Therefore, it is unreliable to depend on cold or climate conditions alone as a mitigation for ARD/ML. The Proponent has not provided information about other control strategies to mitigate potential ARD/ML.</p>
Information Request:	ECCC requests that the Proponent provide information on other planned control strategies to reduce ARD/ML besides climate.

2.0 ECCC-IR2: Active Layer Depth

IR Source:	Environment and Climate Change Canada (ECCC)
IR Number:	ECCC-IR2
IR Directed To:	The Proponent – Agnico Eagle Mines Limited
Subject:	Active Layer Depth
Reference(s):	<ul style="list-style-type: none"> Agnico Eagle Mines Limited. Main Application Document NWB Water Licence 2AM-WTP1826 Amendment, May 2019. Appendix G.1: Whale Tail Pit Waste Rock Management Plan, May 2019.
Issue/Concern:	Section 2.6 (Permafrost) of the Waste Rock Management Plan indicates that the typical depth of the active layer is 2 meters in this region of Canada, but does not specify the exact area represented by “this region of Canada” (Page 6). Active layers vary in different locations and have implications for Acid Rock Drainage/Metal Leaching (ARD/ML) activities, including the thickness of cover

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	material. The actual depth of the active layer above the permafrost in the Project area is required to be able to assess if the thickness of the cover material on Project components, such as the Waste Rock Storage Facility (WRSF), are adequate.
Information Request:	ECCC requests that the Proponent provide the actual depth of the active layer above the permafrost in the Project area.

3.0 ECCC-IR3: Permafrost

IR Source:	Environment and Climate Change Canada (ECCC)
IR Number:	ECCC-IR3
IR Directed To:	The Proponent – Agnico Eagle Mines Limited
Subject:	Permafrost
Reference(s):	<ul style="list-style-type: none"> Agnico Eagle Mines Limited. Main Application Document NWB Water Licence 2AM-WTP1826 Amendment, May 2019. Appendix G.1: Whale Tail Pit Waste Rock Management Plan, May 2019.
Issue/Concern:	<p>Section 2.6 (Permafrost) of the Waste Rock Management Plan states that, <i>“With the formation of a pit lake during closure, permafrost near and beneath Whale Tail Pit is predicted to start melting. After approximately 11 years of closure, the base of the Whale Tail Pit Lake is predicted to be hydraulically connected to the deeper groundwater flow system, and after 50 years, the permafrost below the full pit footprint is predicted to have completely melted; -The formation of the IVR Pit Lake during closure is also predicted to melt the underlying permafrost. Unlike Whale Tail Pit, IVR Pit is located within the regional permafrost and it is predicted that it will take approximately 1000 years to fully melt the permafrost below the pit footprint”</i> (Page 7).</p> <p>It is not clear why there is a substantial discrepancy between when the two pit lakes, Whale Tail Pit Lake and IVR Pit Lake, will completely melt the permafrost beneath them, given the relatively close proximity between the two pit lakes.</p>
Information Request:	ECCC requests that the Proponent clarify the large discrepancy between the length of time it takes for permafrost to melt completely underneath Whale Tail and IVR Pit Lakes.

4.0 ECCC-IR4: Climate Change Information – Consultant Reports

IR Source:	Environment and Climate Change Canada (ECCC)
IR Number:	ECCC-IR4
IR Directed To:	The Proponent – Agnico Eagle Mines Limited
Subject:	Climate Change Information - Consultant Reports
Reference(s):	<ul style="list-style-type: none"> Agnico Eagle Mines Limited. Main Application Document NWB Water Licence 2AM-WTP1826 Amendment, May 2019. Appendix G.1: Whale Tail Pit Waste Rock Management Plan, May 2019. Agnico Eagle Mines Limited. Whale Tail Pit Project (Approved Project) Final Environmental Impact Statement (FEIS), 2016. Agnico Eagle Mines Limited. Whale Tail Pit – Expansion Project Final Environmental Impact Statement Addendum, December 2018.
Issue/Concern:	<p>Section 2.5 (Climate Change) of the Waste Rock Management Plan indicates that the climate change information provided was taken from Volume 4 (Atmospheric Environment), Section 4.2 (Effects of Climate Change on the Project) of the Approved Project FEIS.</p> <p>ECCC notes that the FEIS Addendum-Main Document for the Expansion Project also references the Approved Project with respect to projected climate change. Section 5.3.2.3.1 (Baseline Climate Conditions and Projected Climate Change) of the Expansion document states that baseline climate conditions and projected climate change were fully assessed for the Approved Project, and refers the reader to Approved Project FEIS Volume 5 (Terrestrial Environment), Section 5.3.2.3.1 (Baseline Climate Conditions and Projected Climate Change).</p> <p>This section (Volume 5, Section 5.3.2.3.1 of the Approved Project FEIS) notes that projected climate change is discussed in the Meadowbank Gold Project Baseline Physical Ecosystem Report (Cumberland 2005c) and in O'Kane (2015). It also notes that O'Kane Consultants (2015) provided a climate change assessment for the Meadowbank Mine and used historical climate data from Baker Lake to model climate change scenarios over the next 150 years.</p> <p>The O'Kane Consultant reports contain climate change information that is relevant to this Project. However, ECCC is unable to locate these documents.</p>
Information Request:	<p>ECCC requests that the Proponent provide the following reports:</p> <ul style="list-style-type: none"> O'Kane Consultants Ltd. 2015. TSF North Cell Closure Design Report Construction Plan. Prepared for Agnico Eagle Mines Ltd – Meadowbank Mine. O'Kane Consultants Ltd. 2015. Climate Change Assessment for the Meadowbank Mine. Modelling details and results of the climate change modelling conducted by O'Kane Consultants which is described in Approved Project FEIS Volume 5 (Terrestrial Environment), Section 5.3.2.3.1 (Baseline Climate Conditions and Projected Climate Change).

5.0 ECCC-IR5: Modelling Information – Consultant Report

IR Source:	Environment and Climate Change Canada (ECCC)
IR Number:	ECCC-IR5
IR Directed To:	The Proponent – Agnico Eagle Mines Limited
Subject:	Modelling Information - Consultant Report
Reference(s):	<ul style="list-style-type: none"> Agnico Eagle Mines Limited. Main Application Document NWB Water Licence 2AM-WTP1826 Amendment, May 2019. Appendix H.1: Whale Tail Pit – Expansion Project 2019 Mean Annual Water Balance Update, May 2019, Appendix E – O’Kane Landform Water Balance Modelling of Whale Tail and IVR WRSF.
Issue/Concern:	<p>Per O’Kane Landform Water Balance Modelling of Whale Tail and IVR WRSF (Appendix E of Appendix H.1 2019 Mean Annual Water Balance Update),</p> <p><i>“O’Kane Consultants Inc. (Okane), is currently undertaking thermal modelling of the waste rock storage facilities (WRSFs) at the Proponent’s Amaruq Project. Thermal modelling will assist in developing the expected seasonal active layer thickness under climate change conditions, as well as determine if permafrost conditions within the WRSFs are sustainable under climate change conditions. The ultimate objective of the Project is to demonstrate the physical and chemical stability of the Whale Tail and IVR WRSFs while optimizing risk and cost for AEM.</i></p> <p><i>As part of this objective, a landform water balance was completed, including estimates of runoff, interflow, and basal seepage rates for different slopes and aspects of the WRSF (if applicable). The following memorandum summarizes the results of the landform water balance. A separate detailed modelling report summarizes specific modelling background and methodology (Okane, 2019¹)”</i> (Page 1).</p> <p>The document referenced (O’Kane Consultants Inc. 2019. Agnico Eagle - Detailed Thermal Modelling Report for the Whale Tail and IVR WRSFs – DRAFT) was not provided.</p>
Information Request:	<p>ECCC requests that the Proponent provide the following detailed modelling report, which summarizes specific modelling background and methodology:</p> <ul style="list-style-type: none"> O’Kane Consultants Inc. 2019. Agnico Eagle - Detailed Thermal Modelling Report for the Whale Tail and IVR WRSFs – DRAFT.

6.0 ECCC-IR6: Effluent Mixing Zone

IR Source:	Environment and Climate Change Canada (ECCC)
IR Number:	ECCC-IR6
IR Directed To:	The Proponent – Agnico Eagle Mines Limited
Subject:	Effluent Mixing Zone
Reference(s):	<ul style="list-style-type: none"> Agnico Eagle Mines Limited. Main Application Document NWB Water Licence 2AM-WTP1826 Amendment, May 2019. Appendix G.5: Whale Tail Pit Water Management Plan, May 2019.
Issue/Concern:	<p>Section 3.1.1 of the Water Management Plan indicates that excess treated water will be discharged into Lake A16 (Mammoth Lake) through a submerged diffuser or discharged through a diffuser in Whale Tail Lake (South Basin) or may involve other alternatives for discharge.</p> <p>Per information received during the Nunavut Impact Review Board (NIRB) process, the Proponent is planning to discharge treated effluent in the open water period and is considering the option to discharge under ice conditions. Three diffusers (two for open water discharge and one for winter discharge) are proposed to be placed in Mammoth Lake for dilution of treated effluent from Water Treatment Plants (WTPs). However, it is not clear how many diffusers are proposed for the entire Project, nor have details been provided regarding the associated mixing zones.</p>
Information Request:	<p>ECCC requests that the Proponent provide:</p> <ul style="list-style-type: none"> A map indicating the location and extent of the mixing zone for each diffuser, including all planned and potential open season and winter diffusers for the Project. A description to explain the map and outline the timing of discharge to each diffuser location.

7.0 ECCC-IR7: GoldSim Model and Underlying Models

IR Source:	Environment and Climate Change Canada (ECCC)
IR Number:	ECCC-IR7
IR Directed To:	The Proponent – Agnico Eagle Mines Limited
Subject:	GoldSim Model and Underlying Models
Reference(s):	<ul style="list-style-type: none"> Agnico Eagle Mines Limited. Main Application Document NWB Water Licence 2AM-WTP1826 Amendment, May 2019. Appendix H.2: Mine Site and Downstream Receiving Water Quality Predictions, Whale Tail Pit – Expansion Project, May 2019.
Issue/Concern:	<p>The GoldSim mass balance model was used as the basis to evaluate site and downstream water quality. Results of other models/modules that address specific components of water quality predictions in more detail fed inputs to the GoldSim model. Obtaining the applicable modelling reports listed on Page 4 in Section 1.0 of the document would assist reviewers in understanding the</p>

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	<p>underlying models. However, it is not clear where these reports are located within the water licence amendment submission.</p> <p>For clarity, the modelling reports are listed below:</p> <ul style="list-style-type: none"> • Overall site and downstream water balance (Golder 2019a) and water quality model in GoldSim to forecast effluent water quality in operations and water quality of Whale Tail Lake (North Basin) in post-closure. • Hydrogeological model (Golder 2019b) to project groundwater flows and water quality into the Whale Tail Attenuation Pond, Whale Tail Pit, and Underground Mine in operations, closure, and post closure. • Thermal modelling of the Whale Tail WRSF to project the extent of the active layer (Golder 2019c). • Hydrological modeling of the Whale Tail and IVR WRSFs to project runoff, basal seepage, and interflow volumes, flow interaction depths, and material with which the flows interact (Appendix E of Golder 2019a). • Hydrodynamic pit lake models for Whale Tail and IVR Pits to project development of stratification and frequency of turnover events during and after flooding (Golder 2019e). • Hydrodynamic model for Mammoth Lake (Golder 2019d) to project the extent of mixing within the lake in operations and post-closure. • Effluent Diffuser models for Mammoth Lake and Whale Tail Lake (South Basin) to project the extent of the effluent plume in the receiving environment during operations (Golder 2019f).
Information Request:	<p>ECCC requests that the Proponent:</p> <ul style="list-style-type: none"> • Specify where the modelling reports (listed above) are located within the water licence amendment application. • Provide any reports that are listed above but which are not included in the application.

8.0 ECCC-IR8: Waste Rock Storage Facility Interflow

IR Source:	Environment and Climate Change Canada (ECCC)
IR Number:	ECCC-IR8
IR Directed To:	The Proponent – Agnico Eagle Mines Limited
Subject:	Waste Rock Storage Facility (WRSF) Interflow
Reference(s):	<ul style="list-style-type: none"> • Agnico Eagle Mines Limited. Main Application Document NWB Water Licence 2AM-WTP1826 Amendment, May 2019. Appendix H.2: Mine Site and Downstream Receiving Water Quality Predictions, Whale Tail Pit – Expansion Project, May 2019.
Issue/Concern:	Per Table 1 (General Water Balance Assumptions Pertinent to the Water Quality Model, Page 9), the on-site assumption for the Whale Tail and IVR WRSFs indicates that interflow (i.e. infiltrated flow throughout the cover material) is predicted to occur after 80 years from pile initiation.

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	Per Table 4 (Changes in Surface Facility Inputs, Page 24), interflow in WRSFs was not included as a model input. Although interflow is predicted to occur in post-closure, timing of interflow is outside of the model's temporal boundaries.
Information Request:	<p>ECCC requests that the Proponent clarify:</p> <ul style="list-style-type: none"> • The temporal boundaries for the model described in Table 4 regarding interflow. • Whether and how the predicted post-closure interflow could potentially affect seepage quality from the Whale Tail and IVR WRSFs.

9.0 ECCC-IR9: Seepage from Whale Tail and IVR Waste Rock Storage Facilities

IR Source:	Environment and Climate Change Canada (ECCC)
IR Number:	ECCC-IR9
IR Directed To:	The Proponent – Agnico Eagle Mines Limited
Subject:	Seepage from Whale Tail and IVR Waste Rock Storage Facilities (WRSFs)
Reference(s):	<ul style="list-style-type: none"> • Agnico Eagle Mines Limited. Main Application Document NWB Water Licence 2AM-WTP1826 Amendment, May 2019. Appendix H.2: Mine Site and Downstream Receiving Water Quality Predictions, Whale Tail Pit – Expansion Project, May 2019.
Issue/Concern:	Table 6 (Page 31) indicates that seepage is not accounted for in the water quality and chemical loading rate inputs for the Whale Tail and IVR WRSFs for operations, closure and post-closure. The rationale provided is that modelled seepage during operations is considered negligible and is not predicted to occur in closure or post-closure.
Information Request:	ECCC requests that the Proponent provide clarification of the seepage quality (using total fractions) and quantity predicted to occur during operations, closure and post-closure at the Whale Tail and IVR WRSFs; and the level of uncertainty associated with each of these water quality predictions.

10.0 ECCC-IR10: Underground Mine Facilities – Water Quality

IR Source:	Environment and Climate Change Canada (ECCC)
IR Number:	ECCC-IR10
IR Directed To:	The Proponent – Agnico Eagle Mines Limited
Subject:	Underground Mine Facilities – Water Quality
Reference(s):	<ul style="list-style-type: none"> Agnico Eagle Mines Limited. Main Application Document NWB Water Licence 2AM-WTP1826 Amendment, May 2019. Appendix H.2: Mine Site and Downstream Receiving Water Quality Predictions, Whale Tail Pit – Expansion Project, May 2019.
Issue/Concern:	<p>Table 8 (Page 40) indicates that the water quality in the flooded underground mine facilities was not modelled. The rationale provided was that the underground development will not interact with surface water nor open pit waters.</p> <p>The potential for movement of the water in the underground workings should be discussed, in order to clarify any potential connectivity with surface water and groundwater.</p>
Information Request:	<p>ECCC requests that the Proponent provide:</p> <ul style="list-style-type: none"> Clarification regarding the potential for connectivity between the water in the underground mine facilities, and surface and groundwater, during closure and post-closure. A discussion of the potential for movement of the water in the underground workings with respect to (a) the active layer above the permafrost, (b) deep groundwater pathways, and (c) connectivity of the mine workings to any taliks; and describe any associated uncertainty with each type of movement.

11.0 ECCC-IR11: Mass Load Model and Total Suspended Solids

IR Source:	Environment and Climate Change Canada (ECCC)
IR Number:	ECCC-IR11
IR Directed To:	The Proponent – Agnico Eagle Mines Limited
Subject:	Mass Load Model and Total Suspended Solids (TSS)
Reference(s):	<ul style="list-style-type: none"> Agnico Eagle Mines Limited. Main Application Document NWB Water Licence 2AM-WTP1826 Amendment, May 2019. Appendix H.2: Mine Site and Downstream Receiving Water Quality Predictions, Whale Tail Pit – Expansion Project, May 2019.
Issue/Concern:	<p>As indicated in Section 4.0 (page 47), TSS were not considered in the mass load model.</p> <p>ECCC notes that excluding TSS from the mass load model may result in underestimating the concentrations of constituents in the water quality predictions.</p>

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Information Request:	<p>ECCC requests that the Proponent provide:</p> <ul style="list-style-type: none"> • the rationale for excluding TSS from the mass load model, • any assumptions underlying this rationale, and • the level(s) of uncertainty associated with the assumption(s).
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12.0 ECCC-IR12: Total Arsenic and Phosphorus Levels

IR Source:	Environment and Climate Change Canada (ECCC)
IR Number:	ECCC-IR12
IR Directed To:	The Proponent – Agnico Eagle Mines Limited
Subject:	Total Arsenic and Phosphorus Levels
Reference(s):	<ul style="list-style-type: none"> • Agnico Eagle Mines Limited. Main Application Document NWB Water Licence 2AM-WTP1826 Amendment, May 2019. Appendix H.2: Mine Site and Downstream Receiving Water Quality Predictions, Whale Tail Pit – Expansion Project, May 2019.
Issue/Concern:	<p>Figure 7a (Page 52) indicates that dissolved phosphorus levels in treated Water Treatment Plant (WTP) effluent discharge during operations will peak around 2020 to 2022, at 0.14 to 0.16 mg/L. The Effluent Quality Criteria (EQC) is 3.0 mg/L.</p> <p>Figure 7b (Page 52) indicates that dissolved arsenic levels in treated WTP effluent discharge during operations will repeatedly peak at or near 0.1 mg/L, which is the EQC, for seven consecutive years.</p> <p>However, it is not clear what the total constituent levels of phosphorus and arsenic would be in the effluent discharge during operations.</p>
Information Request:	ECCC requests that the Proponent provide a graph that is analogous to Figure 7 but that uses total phosphorus and total arsenic rather than dissolved constituents.

13.0 ECCC-IR13: Alternative Effluent Discharge Locations

IR Source:	Environment and Climate Change Canada (ECCC)
IR Number:	ECCC-IR13
IR Directed To:	The Proponent – Agnico Eagle Mines Limited
Subject:	Alternative Effluent Discharge Locations
Reference(s):	<ul style="list-style-type: none"> Agnico Eagle Mines Limited. Main Application Document NWB Water Licence 2AM-WTP1826 Amendment, May 2019. Appendix H.2: Mine Site and Downstream Receiving Water Quality Predictions, Whale Tail Pit – Expansion Project, May 2019.
Issue/Concern:	<p>As indicated in Section 4.1.3, the Proponent is currently investigating alternative discharge locations for effluent from the Operations Water Treatment Plant (WTP) and Total Dissolved Solids WTP, in order to improve predicted water quality in the receivers during operation. Per information provided during the Nunavut Impact Review Board (NIRB) process, the alternative discharge locations under consideration are located in a different watershed than the current receivers.</p> <p>ECCC discourages the use of a second watershed as a method to manage effluent quality or quantity. ECCC notes that other management options are being considered: Section 5.1 (Water Management Considerations) states “<i>Treated limits may be improved through optimization of the efficiency of the treatment plants. Should water treatment be more effective and treat to lower levels, then receiving water quality will be improved in the short and long-term</i>” (Page 66).</p>
Information Request:	ECCC requests that the Proponent describe what adaptive management mitigations (such as increased contaminant source control and/or effluent treatment optimization) would be used as a first and preferred response for managing effluent volume and quality, prior to considering the use of alternative discharge locations.

14.0 ECCC-IR14: Water Quality Predictions for Total Fractions

IR Source:	Environment and Climate Change Canada (ECCC)
IR Number:	ECCC-IR14
IR Directed To:	The Proponent – Agnico Eagle Mines Limited
Subject:	Water Quality Predictions for Total Fractions
Reference(s):	<ul style="list-style-type: none"> Agnico Eagle Mines Limited. Main Application Document NWB Water Licence 2AM-WTP1826 Amendment, May 2019. Appendix H.2: Mine Site and Downstream Receiving Water Quality Predictions, Whale Tail Pit – Expansion Project, May 2019.
Issue/Concern:	<p>The water quality predictions discussed in this document and illustrated in the various figures address model predictions for dissolved constituents only. Predictions of total concentrations of constituents are not discussed nor are figures (i.e. graphs) of total concentrations provided.</p> <p>Table 13 (Page 63) provides an overview of the effects of Total Suspended Solids (TSS) (using concentrations of 5, 10 and 15 mg/L) on levels of water quality constituents in relation to effluent quality criteria and environmental guidelines. However, Table 13 does not incorporate timing or location elements, so it is not clear what effect TSS would have on water quality predictions at various phases of the Project, nor with respect to various Project components.</p> <p>Additionally, it is not clear whether the tables provided in Appendix C (Site and Downstream Water Quality Model Results) represent water quality predictions of dissolved or total concentrations of constituents.</p>
Information Request:	<p>ECCC requests that the Proponent provide:</p> <ul style="list-style-type: none"> Clarification on whether the tables in Appendix C (Site and Downstream Water Quality Model Results) represent water quality predictions of dissolved or total concentrations of constituents. Water quality predictions for total concentrations of constituents for (a) contact water, wastewater, effluent, pit lake water, seepage and runoff that would or could potentially be discharged, released or deposited to the aquatic receiving environment during operations, closure and post-closure; and (b) receiving environment and downstream. Detailed discussion of the water quality predictions described in the second bullet above, accompanied by illustrative graphs. The water quality predictions for total concentrations of constituents, the discussion, and graphs should all clearly indicate what TSS concentration was used in the model.

15.0 ECCC-IR15: Water Quality Predictions for Mammoth Lake, Whale Tail Lake (South Basin) and the Flooded Pit Lake

IR Source:	Environment and Climate Change Canada (ECCC)
IR Number:	ECCC-IR15
IR Directed To:	The Proponent – Agnico Eagle Mines Limited
Subject:	Water Quality Predictions for Mammoth Lake, Whale Tail Lake (South Basin) and the Flooded Pit Lake
Reference(s):	<ul style="list-style-type: none"> Agnico Eagle Mines Limited. Main Application Document NWB Water Licence 2AM-WTP1826 Amendment, May 2019. Appendix H.2: Mine Site and Downstream Receiving Water Quality Predictions, Whale Tail Pit – Expansion Project, May 2019.
Issue/Concern:	ECCC requires additional modelling details, which will assist in interpreting the water quality predictions for the receiving lakes and the flooded pit lake.
Information Request:	<p>ECCC requests that the Proponent provide clarification regarding:</p> <ul style="list-style-type: none"> Whether the water quality predictions for Mammoth Lake and Whale Tail Lake (South Basin) are whole lake concentrations or maximum values expected in the receiving area of the lake. Whether the water quality predictions for Mammoth Lake, Whale Tail Lake (South Basin), and the flooded pit lake (before and after reconnection) are year-round values, or are seasonal highs.