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FISHERIES AND OCEANS CANADA
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PÊCHES ET OCÉANS CANADA

Technical Review Comments to the

Nunavut Impact Review Board (NIRB)

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Commentaires de l'examen technique soumis à la

Commission du Nunavut chargée de l'examen des répercussions (CNER)

Whale Tail Pit Project

Whale Tail Pit ᐱᓕᕆᐊᖅ

Projet de la fosse Whale Tail

March 2017/ᐃᒪᓕᒃ 2017/Mars 2017

DFO File No/ᑎᑎᕋᖅᓯᒪᔪᓂᑦ ᓴᓴᐅᑎᖅᑐ/ N° de référence du MPO:.: 16-HCAA-0370

Canada

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Fisheries and Oceans Canada (DFO) has reviewed Agnico-Eagle Mine's (AEM) Whale Tail Pit (Project) pursuant to the *Fisheries Act*. DFO's Fisheries Protection Program will determine what aspects of the Project could impact fish and fish habitat and work with the Proponent to avoid, mitigate and offset impacts.

DFO's comments are based on our departmental mandate under the *Fisheries Act,* specifically the management and protection of fish, marine mammals and their habitat. DFO's primary focus in reviewing proposed developments in and around fisheries waters is to ensure that works, undertakings and activities are conducted in such a way that the proponents are in compliance with the applicable provisions of the *Fisheries Act.*

The fisheries protection provisions of the *Fisheries Act (2013),* specifically subsection 35(1), state that "*No person shall carry on any work, undertaking or activity that results in serious harm to fish that are part of a commercial, recreational or Aboriginal fishery or to fish that support such a fishery*." 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*.

DFO is providing the following technical review comments in response to the Nunavut Impact Review Board (NIRB) and Nunavut Water Board (NWB) correspondence.

The Technical Review Comments from DFO cover areas for which DFO seeks clarification and further detail.

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ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑲᓇᑕᒥ (DFO) ᕿᒥᕐᕈᓯᒪᔪᑦ Agnico-Eagle Mine's (AEM) ᕿᓚᓗᒐᐅᑉ ᓴᖅᐱᖓᓄᑦ ᓇᖅᓴᖅ (ᐱᓕᕆᐊᖅ) ᒪᓕᑦᑐᒍ *ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᐱᖁᔭᖅ*. ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᓴᐳᒻᒥᑦᑎᓂᕐᒧᑦ ᐱᓕᕆᐊᖑᑦ ᓇᓗᓇᐃᖅᓯᓂᐊᖅᑐᖅ ᖃᓄᐃᑦᑐᑦ ᐱᓕᕆᐊᒦᑦᑐᑦ ᐊᑦᑐᐃᓂᖃᕈᓐᓇᖅᑐᓂᑦ ᐃᖃᓗᓐᓂᑦ ᐊᒻᒪ ᐃᖃᓗᐃᑦ ᓇᔪᖃᑦᑕᖅᑕᖕᒋᓐᓂᑦ ᐊᒻᒪ ᐃᖅᑲᓇᐃᔭᖃᑎᖃᕐᓗᑎ ᐅᐸᑦᑕᐅᑦᑕᐃᓕᓗᑎ, ᐱᐅᓯᑎᒋᐊᖅᑕᐅᓗᓂ ᐊᒻᒪ ᐊᑦᑐᓗᐊᖅᑕᐅᑦᑕᐃᓕᓗᓂ.

ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᐅᖃᐅᓯᔅᓴᖕᒋᑦ ᑐᓐᖓᓂᖃᖅᑐᑦ ᐱᓕᕆᕝᕕᑦᑕ ᑐᕌᒐᖕᒋᓐᓂᑦ ᐊᑖᓂ *ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᐱᖁᔭᖅ*. ᐱᓗᐊᖅᑐᒥᑦ, ᐊᐅᓚᑕᐅᓂᖕᒋᑦ ᐊᒻᒪ ᓴᐳᒻᒥᔭᐅᓂᖕᒋᑦ ᐃᖃᓗᐃᑦ, ᐃᒪᕐᒥᐅᑕᐃᑦ ᐆᒪᔪᐃᑦ ᐊᒻᒪ ᓇᔪᖃᑦᑕᖅᑕᖕᒋᑦ. ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᐱᓕᕆᐊᓪᓗᐊᑕᓇᔭᖓ ᕿᒥᕐᕈᓂᕐᒥᑦ ᐱᕙᓪᓕᐊᑎᑕᐅᔪᒪᔪᓂᑦ ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᐃᒪᖕᒋᓐᓂᑦ ᐱᔪᓇᑦᑎᐊᕋᓗᐊᕐᒪᖔᑦ, ᐱᓕᕆᐊᖑᔪᑦ ᐊᒻᒪ ᖃᓄᐃᓘᖅᑕᐅᕙᓪᓕᐊᔪᑦ ᐱᓕᕆᐊᖑᒐᓗᐊᕐᒪᖔᑕ ᐃᓚᒍᑕᖕᒋᓐᓂᑦ ᒪᓕᓐᓂᖃᓗᓂ ᐊᑐᖅᑕᐅᔪᓐᓇᖅᑐᓂᑦ ᐃᓚᒍᑕᖕᒋᓐᓂᑦ *ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᐱᖁᔭᖅ*.

ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᓴᐳᒻᒥᔾᔨᓂᕐᒧᑦ ᐃᓚᒍᑕᖕᒋᑦ *ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᐱᖁᔭᖅ. (2013),* ᐱᓗᐊᖅᑐᒥᑦ ᐃᓚᒍᑕᒃᑲᓂᖓ 35(1), ᐅᖃᖅᓯᒪᔪᖅ "*ᑭᓇᑐᐃᓐᓇᖅ ᖃᓄᐃᑦᑐᑐᐃᓐᓇᕐᒥᑦ ᐃᖅᑲᓇᐃᔭᕆᐊᖃᖏᓚᖅ, ᐱᓕᕆᐊᖃᕐᓗᓂᓘᓐᓃᑦ ᐊᑦᑕᓇᖅᑎᑦᑎᔪᓐᓇᕐᒪᑕ ᑐᓂᑦ ᐃᖃᓗᓐᓂᑦ ᐃᓚᒋᔭᐅᔪᑦ ᑮᓇᐅᔭᓕᐅᕐᕆᐊᓂᕐᒧᑦ, ᐃᖃᓗᒐᓱᑐᐃᓐᓇᓂᕐᒧᑦ ᐅᕙᓘᓐᓃᓐᒥᑦ ᓄᓇᖃᖅᑳᖅᓯᒪᔪᓄᑦ ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᐃᖃᓗᒐᓱᓐᓂᓗᓐᓘᓐᓃᑦ ᐃᑲᔪᖅᑐᐃᔨᒥᑦ ᐃᖃᓗᓕᕆᓂᕐᒥᑦ*." ᑭᓯᐊᓂᓕ, ᑭᓯᐊᓂ ᐊᑖᓂ ᑎᑎᕋᖅᓯᒪᔪᒥᑦ 35(2)(b) *ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᐱᖁᔭᕐᒥ*, ᒥᓂᔅᑕ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᓐᓄᑦ ᑐᓂᓯᔪᓐᓇᖅᑐᖅ ᐱᔪᓐᓇᐅᑎᐅᔪᓂᑦ ᐅᖃᖅᓯᒪᓂᖃᕐᓗᑎ ᐊᒻᒪ ᖃᓄᐃᓐᓂᖃᑎᒋᐊᖃᕐᓗᑎ ᐃᖅᑲᓇᐃᔮᖑᔪᒪᔪᒧᑦ, ᐱᓕᕆᐊᖑᔪᓂᑦ ᖃᓄᐃᓘᖅᑕᐅᔪᓂᓪᓘᓐᓃᑦ *ᐊᑦᑕᓇᖅᑐᕆᑎᑎᒍᓇᓚᑦᑐᓂᑦ ᐃᖃᓗᓐᓂᑦ*.

ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓂᓯᓂᐅᓴᔪᑦ ᐅᑯᓂᖓ ᕿᒥᕐᕈᓂᕐᒧᑦ ᐅᖃᐅᓯᐅᓴᓄᑦ ᑭᐅᔾᔪᑎᓄᑦ ᓄᓇᕗᒻᒥ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᔨᖏᑦ (NIRB) ᐊᒻᒪ ᓄᓇᕗᒻᒥ ᐃᒥᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᔨᖏᑦ (NWB) ᑎᑎᖅᑲᖑᓇᓄᑦ.

ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᓐᓄᑦ ᕿᒥᕐᕈᓂᕐᒧᑦ ᐅᖃᐅᓯᐅᓴᖏᑦ ᐱᖃᓯᐅᔾᔨᔪᑦ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᓇᓗᓇᐃᖅᑕᐅᖁᔭᖏᓐᓂᑦ ᐊᒻᒪ ᓇᓗᓇᐃᔭᖅᑕᐅᖁᔭᖏᓐᓂᑦ.

SOMMAIRE

Pêches et Océans Canada (MPO) a examiné le projet de la fosse Whale Tail de la société minière Agnico Eagle (le Projet) conformément à la *Loi sur les pêches*. Le programme de protection des pêches du MPO doit déterminer quels aspects du Projet pourraient affecter le poisson et son habitat; il a pour objectif de collaborer avec le promoteur dans le but d'en éviter, atténuer et neutraliser les impacts.

Les commentaires du MPO s'appuient sur notre mandat ministériel en vertu de la *Loi sur les pêches,* plus particulièrement en ce qui a trait à la gestion et à la protection du poisson, des mammifères marins et de leur habitat. Dans le cadre de l'examen des développements proposés à proximité des eaux de pêche, le MPO a pour objectif premier de s'assurer que les ouvrages, les entreprises et les activités se déroulent de manière à ce que les promoteurs respectent les dispositions applicables de la *Loi sur les pêches.*

Les dispositions relatives à la protection des pêches de la *Loi sur les pêches (2013),* en particulier le paragraphe 35(1), stipulent ce qui suit : « Il est interdit d'exploiter un ouvrage ou une entreprise ou d'exercer une activité entraînant des dommages sérieux à tout poisson visé par une pêche commerciale, récréative ou autochtone, ou à tout poisson dont dépend une telle pêche. » Toutefois, en vertu du paragraphe 35(2)(b) de *Loi sur les pêches*, le ministre de Pêches et Océans peut accorder une autorisation, sous certaines conditions, en ce qui a trait à un projet d'ouvrage, d'entreprise ou d'activité pouvant causer des dommages *sérieux aux poissons*.

Le MPO transmet les commentaires suivants de son examen technique en réponse à la correspondance échangée avec la Commission du Nunavut chargée de l'examen des répercussions (CNER) et l'Office des eaux du Nunavut (OEN).

Les commentaires de l'examen technique du MPO couvrent des aspects que le MPO aimerait clarifier et pour lesquels il aimerait obtenir de plus amples détails.

1.0 INTRODUCTION

This technical review submission summarizes Fisheries and Oceans Canada's (DFO) assessment and recommendations concerning the proposed Whale Tail Pit Project. The purpose of this submission is to provide expert advice to the Nunavut Impact Review Board (NIRB) to assist in their assessment of potential environmental impacts associated with this proposal.

As directed by the NIRB and NWB, this submission focuses on detailed analysis of the FEIS, Type A Licence Application, and supporting documents to assess the adequacy and quality of information presented by the Proponent Agnico Eagle Mines Ltd.

2.0 MANDATE, RELEVANT LEGISLATION AND POLICY

The *Constitution Act* (1982) provides the federal government with exclusive authority for coastal and inland fisheries within Canada's territorial boundaries. DFO's guiding legislation includes the *Oceans Act*, which charges the Minister with leading oceans management and providing coast guard and hydrographic services on behalf of the Government of Canada. DFO also exercises power through the administration of the *Fisheries Act* and some aspects of the *Species at Risk Act*.

Under the *Fisheries Act*, DFO is responsible for the management, protection and conservation of fish (which include marine mammals as defined by the *Fisheries Act*) and their habitats. The Minister of Fisheries and Oceans is one of the competent ministers under the *Species at Risk Act* (SARA).

In general, the Fisheries Protection Program of DFO undertakes the review of proposed developments in and around fisheries waters to ensure that works, undertakings and activities are conducted in such a way that the proponents are in compliance with the applicable provisions of the *Fisheries Act.*

The mandate of the Fisheries Protection Program is to maintain the sustainability and ongoing productivity of commercial, recreational and Aboriginal fisheries. Subsection 35 (1) of the fisheries protection provisions of the *Fisheries Act* states that "No person shall carry on any work, undertaking or activity that results in *serious harm to fish* that are part of a commercial, recreational, or Aboriginal fishery or to fish that support such a fishery.

Fisheries and Oceans Canada interprets *serious harm to fish* as:
-the **death of fish**;
-a **permanent alteration** to fish habitat of a spatial scale, duration or intensity that limits or diminishes the ability of fish to use such habitats as spawning grounds, or as nursery, rearing, or food supply areas, or as a migration corridor, or any other area in order to carry out one or more of their life processes;
-the **destruction of fish habitat** of a spatial scale, duration, or intensity that fish can no longer rely upon such habitats for use as spawning grounds, or as nursery, rearing, or food supply areas, or as a migration corridor, or any other area in order to carry out one or more of these life processes.

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*, subject to the consideration of the four factors in Section 6 of the *Fisheries Act*:
1. The contribution of the relevant fish to the ongoing productivity of commercial, recreational or Aboriginal fisheries;
2. Fisheries management objectives;
3. Whether there are measures and standards to avoid, mitigate or offset *serious harm to fish* that are part of a commercial, recreational or Aboriginal fishery, or that support such a fishery; and
4. The public interest.

The Fisheries Protection Program is guided by the "Fisheries Protection Policy Statement (2013)," the intent of which is to provide guidance to Canadians to ensure that they are complying with the *Fisheries Act*. It strengthens the Government's ability to address key threats to the productivity and sustainability of our fisheries, through standards and guidelines to avoid, mitigate and offset impacts to fisheries and to ensure compliance with these requirements.

The "Fisheries Productivity Investment Policy: A Proponent's Guide to Offsetting (2013)" provides guidance on undertaking effective measures to offset *serious harm to fish* that are part of or that support a commercial, recreational or Aboriginal fishery, consistent with the fisheries protection provisions of the *Fisheries Act*. The objective of offsetting is to counterbalance unavoidable *serious harm to fish* and the loss of fisheries productivity resulting from a project.

The *Species at Risk Act* is intended to prevent Canadian indigenous species, subspecies and distinct populations of wildlife from being extirpated or becoming extinct; to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity; and to manage species of special concern to prevent them from becoming endangered or threatened. The Minister of Fisheries and Oceans is the competent minister for listed aquatic species that are fish (as defined in section 2 of the *Fisheries Act*) or marine plants (as defined in section 47 of the *Fisheries Act*).

Environment Canada (EC) is responsible for the administration and enforcement of the pollution prevention provisions of the *Fisheries Act* on behalf of DFO (section 34 and sections (36-42)).

For more information, see: http://www.dfo-mpo.gc.ca/pnw-ppe/pol/index-eng.html

3.0 TECHNICAL REVIEW COMMENTS

Review Comment Number	1
Subject/Topic	**Freshwater Environment – Habitat Losses**
References	Volume 6, Section 6.5.3.2.2, p.6-80 Agnico Eagle Information Request Response #1 January 2017, p.44 and 45. Gammons, C.H., Harris, L.N., Castro J.M., Cott, P.A., and Hanna, B.W. 2009. Creating lakes from open pit mines: processes and considerations – with emphasis on northern environments. Can. Tech. Rep. Fish. Aquat. Sci. 2826: ix + 106p. Pieters, R., Coedy, W., Ashley K.I., and Lawrence, G.A. 2015. Artificial circulation of a mine pit lake. Can. J. Civ. Eng. 42:33-43 Pieters, R. and Lawrence, G.A. 2014. Physical processes and meromixis in pit lakes subject to ice cover. Can. J. Civ. Eng. 41: 569-578
Summary	1) There will be “permanent losses of lake-bottom substrate habitat for benthic feeding or bottom dwelling species such as round whitefish and forage species such as slimy sculpin.” P.44 2) “Any negative effects on littoral habitat and lake productivity at post-closure are expected to be minor, in part because the pit will extend the surface area of Whale Tail Lake by 13%, and the pit is expected to represent only a small proportion (i.e. approximately 23%) of the area of Whale Tail Lake at post-closure, such that most of the littoral habitat in the lake will remain intact.”p.44 3) “Agnico Eagle will continue to evaluate the actual interaction between the two water types (water within the pit versus the water above the pit in Whale Tail Lake) as well as possible chemical stratification of the flooded pit. . . Uncertainty in the water quality predictions and subsequent predictions of habitat conditions will also be evaluated using results from the CREMP and Water Quality and Flow Monitoring Plan.”

4) “If meromictic conditions prevail at post-closure, the top mixolimnion layer of the flooded pit is expected to provide water quality conditions similar to shallow waters of unaltered areas of Whale Tail Lake . . . consistent with other studies that have demonstrated that populations of fish can persist within end pit lakes.”

5) Habitat was classified by substrate (fine, mixed and coarse) and water depth (<2, 2-4, >4) under baseline, operation, and post-closure conditions. The values of 1 provided to habitat >4 m in depth for Lake Whitefish and Arctic Char does not correspond well to the description of habitat use in Chapter 6, which tends to give a lower value to habitat > 6 m deep.

6) The total footprint of the diked area in Mammoth and Whale Tail lakes is approximately 69.6 ha (22.1% of the area for the two lakes combined and 6.8% of total lake area in the assessment area). Habitat losses for Arctic Char, Lake Trout, and Round Whitefish will include reductions in coarse substrate habitat at both shallow depths (0 to 2 m) and moderate depths (2 to 6 m), resulting in a relative overall loss of 25.2% of the coarse substrate habitat in Mammoth and Whale Tail Lakes combined. These changes are expected to have a measurable effect on Arctic Char, Lake Trout, and Round Whitefish, species that rely on coarse substrate habitat for spawning, and rearing.
The fish-out will remove all of the fish in the North Basin of Whale Tail Lake. The rate at which the population recovers after the dike is breached is not known, but depends on the ability of fish to colonize a “new” environment. The EIS indicates that recovery may occur within one generation time for populations to approach densities in other regions of the assessment area. The predicted short recovery period assumes environmental conditions are favourable for high recruitment during post-closure, and that density-dependent compensatory mechanisms play a key role in recovery.
The main effects of reduced water depths and volumes of Mammoth Lake and downstream lakes during initial dewatering and rewatering include a reduction in available foraging and rearing habitat. A similar effect is expected for streams below Mammoth Lake where the timing window for fish use of affected streams may be limited to periods of high flow, such as the spring freshet period in June. Project activities resulting in downstream reductions in flows during construction and closure phases are expected to have a moderate impact on Arctic Char, Lake Trout, and Round Whitefish.
The construction and operation of the Northeast Dike and Whale Tail Dike and their associated diversions will result in the flooding of five streams from the Northeast Dike and Diversion, and 17

	streams as a result of the diversion into and flooding of Whale Tail Lake (South Basin) for a total of approximately 2,402 m of stream habitat altered. Species that use these streams include Arctic Char, Lake Trout, Round Whitefish, Burbot, Slimy Sculpin, and Ninespine Stickleback. With flooding, most of the stream habitat would be eliminated with the increase in elevation (and area) of Whale Tail Lake (South Basin). Species distributions also have the potential to shift (i.e., expand distributions) as piscivorous fish (e.g., Lake Trout) gain access to forage fish populations in small lakes and ponds. Construction and operation of the Mammoth, Whale Tail, and Northeast dikes and diversions will also result in effects to habitat connectivity. The presence of the dikes will impede fish passage between Whale Tail Lake and Mammoth Lakes, and between these lakes and affected tributary habitats. An increase in nutrient levels in Mammoth Lake and downstream lakes may also result in a moderate increase in algae or sediment on lake habitats, including spawning shoals, leading to possible reductions in oxygen levels. Reductions in oxygen levels are expected during closure after conservative estimates of multiple years of accumulation of organic debris and when lake water levels are reduced during back-flooding of Whale Tail Lake. Reductions in oxygen levels may affect egg survival and the availability of suitable habitat for spawning and rearing Arctic Char, Lake Trout, and Round Whitefish. Thus, an increase in nutrient levels is expected to result in negative residual effects to the fishery in response to any changes in trophic status during closure and operations.
Importance of issue to the impact assessment process	It is important to understand potential negative impacts that may persist with mine closure and reclamation and that permanent impacts are effectively offset.
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with EIS conclusion** **3. Reasons for disagreement with EIS conclusion**	1) DFO is uncertain as to whether AEM will account for the permanent loss to species such as Round Whitefish and Slimy Sculpin as AEM does not include these species in their VECs 2) DFO is uncertain as to whether the proposed increased surface area of Whale Tail Lake will be a viable offset of littoral habitat based on the images provided and whether this habitat will be shallow enough with a narrow slope for which to be considered potential littoral habitat as it is within the pit footprint. 3) DFO is uncertain how AEM will effectively monitor the mixing, or not, in the pit lake with only one monitoring station proposed, and monitoring to be conducted only every 3 years. DFO is concerned there is a risk that water quality from the pit could negatively affect the remainder of the lake and fish habitat. 4) DFO could not locate information within the EIS or conceptual offsetting plan for which to base an

agreement or disagreement with AEM's conclusions. AEM cites Gammons et al 2009 as supporting their confidence that the Whale Tail end pit will support fish in the post closure scenario. DFO disagrees that there is sufficient evidence to make that conclusion confidently. DFO notes that Gammons et al 2009 also states: "projects have had mixed success. A common consensus is that manipulation of pit lake chemistry is difficult, expensive, and takes many years to achieve remediation goals. For this reason, it is prudent to take steps throughout mine operation to reduce the likelihood of future water quality problems upon closure." p.viii "Many pit lakes from former gold mines contain elevated concentrations of heavy metals . . . [and] elevated turbidity [which] can block sunlight, resulting in reduced rates of photosynthesis." P.17 "In many cases, immediately after pit lake formation, these habitat conditions (e.g. light availability, metal concentrations, nutrient levels and pH) are quite stressful resulting in biological diversity that is low or event absent. Additionally, littoral zones and associated habitat are often scarce or absent due to the steep-sided contour of these pits." P.30 "Early monitoring showed . . . thiocyanate concentrations remained elevated. . . The main reason for the lower removal efficiency in the latter case was that the much deeper pit lake was meromictic during this time period so that thiocyanate was eliminate only in the upper 20m of the lake. To get around this problem, the operators constructed an aeration circuit . . . Although the combination of ENR and aeration have been successful for eliminating cyanide, ammonia and thiocyanate from the Colomac lakes, there are lingering concerns over elevated phosphate and nitrate concentrations. . . Projected to the future, it is possible that most of the nitrate in the lake will be gone in 3 to 5 winter seasons (2007). However, this assumes that the water column will continue to become anoxic during the winter months, a prerequisite for denitrification to occur. Seasonal anoxia may not occur now that the major sources of chemical oxygen demand (ammonia, cyanide, and thiocyanate) have been removed. The removal of P also presents a challenge." P.70. AEM concludes that there will be no mixing between the pit water and the overlying water, though no rationale for this key conclusion is provided (either based on other locations, wind impact analysis, or temperature induced mixing).

5) In Volume 8 different depth criteria were used (<2, 2-6, 6-10 and >10)

6) AEM did not provide information on the identification of key habitat types (e.g. spawning habitat), nor did AEM provide a discussion of methodology, number of transects, ground verification regarding

	bathymetry and substrate data collection. AEM has not fully addressed all the above listed negative impacts and losses to the fishery in the conceptual offsetting plan.
Recommendation/Request	1) DFO requests AEM include the bottom dwelling species in their calculations of losses. 2) DFO requests AEM provide better illustrations to demonstrate the proposed increased surface area of Whale Tail Lake and its viability as newly created littoral habitat. 3) DFO requests AEM provide additional details outlining how they intend to evaluate the potential mixing or non-mixing situation in the pit portion of Whale Tail Lake as the information adopted from Meadowbank's CREMP and Water Quality Monitoring Plan would seem insufficient to do so. If AEM is unable to demonstrate sustainable water quality and habitat suitable for fish in the post-closure scenario, AEM should provide DFO with contingency offsetting options located outside the Whale Tail Lake basin. 4) DFO requests AEM provide additional and updated information on the evaluation of end pit lake scenarios, with references, to address the above listed concerns regarding the end pit lake scenario. AEM has noted Gammons et al 2009 which does evaluate the Colomac Gold Mine in NWT. There have been several documents written since including monitoring reports that would provide a beneficial overview with lessons learned. This information would aid DFO in subsequent reviews of the conceptual offsetting plan and monitoring reports. In addition to the monitoring data available for the Colomac Gold Mine (e.g. Colomac Mine site surveillance network program and enhanced natural removal program annual reports), DFO is providing AEM with the following documents to aid in their evaluation: Pieters, R., Coedy, W., Ashley K.I., and Lawrence, G.A. 2015. Artificial circulation of a mine pit lake. Can. J. Civ. Eng. 42:33-43 and Pieters, R. and Lawrence, G.A. 2014. Physical processes and meromixis in pit lakes subject to ice cover. Can. J. Civ. Eng. 41: 569-578 5) DFO requests AEM clarify and correct any discrepancies regarding depth criteria. 6) Critical to the assumption that fish will recolonize areas dewatered by the dikes in the north basin of Whale Tail Lake is that appropriate habitat is available to support all life history stages in the south basin. No studies were conducted to determine where specifically fish were spawning; rather, it is assumed that fish spawn on any suitable combination of substrate and water depth. As noted for the water quality assessment, the potential for flooding to release organic material and nutrients to Whale Tail Lake and its tributaries should be more carefully considered. A reduction in spawning

	habitat quality could put the recovery of the fish population post closure at risk. The predicted rapid population recovery in the north basin of Whale Tail Lake assumes that population growth is density dependent. In the Arctic environment density independent factors may be more important and recovery may take longer. DFO requests AEM fully evaluate these losses in revisions to the conceptual offsetting plan.

Review Comment Number	2
Subject/Topic	**Freshwater Environment – Fish Out**
References	Conceptual Whale Tail Lake (North Basin) Fishout Work Plan DFO. 2010. *DFO Protocol for Winter Water Withdrawal from Ice-Covered Waterbodies in the Northwest Territories and Nunavut*. Tyson, J.D., W.M. Tonn, S. Boss, and B.W. Hanna. 2011. General fish-out protocol for lakes and impoundments in the Northwest Territories and Nunavut. Can. Tech. Rep. Fish. Aquat. Sci. 2935: v + 34 p.
Summary	In the conceptual plan, AEM indicates they will follow the *General Fish-out Protocol for Lakes and Impoundments in the Northwest Territories and Nunavut* and "will have 3 core components: fish recovery, and rescue from Whale Tail Lake (North Basin) and transfer [of] fish into Whale Tail Lake."p.1 "All healthy fish that appear unaffected by capture and handling (i.e. especially VEC's) such as lake trout) will be transferred primarily into Wally Lake." P.11
Importance of issue to the impact assessment process	It is important for DFO to understand what AEM intends to do with the fish, the anticipated rate or mortality, fish out methodology, and guidance documents they intend to follow.
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with EIS conclusion** **3. Reasons for disagreement with**	1) DFO observed a field data sheet proposed by AEM in Appendix A of the Conceptual Fish Out Plan, though it is not that required by DFO. 2) DFO observed error referencing transfer of the fish from Whale Tail Lake into Wally Lake. 3) DFO could not locate an estimate of fish to be removed from Whale Tail Lake's North basin. This

EIS conclusion	information will be required for the acceptance of a finalized fish out plan.
Recommendation/Request	1) DFO requests AEM utilize the form (excel sheet) provided to AEM for Phaser Lake and ensure that all the required metrics are provided. 2) DFO requests that AEM correct the error(s) referencing Wally Lake as this Fish Out Plan is for Whale Tail Project, not Meadowbank. 3) DFO requests AEM provide an estimate of fish to be removed from Whale Tail Lake's North basin.

Review Comment Number	3
Subject/Topic	**Freshwater Environment – Valued Components**
References	Volume 6, Section 6.12, Table 6.1-2, p.6-2 Whale Tail – FEIS and Type A Information Request Response 3, January 2017, p. 48
Summary	In DFO's IR's, DFO requested AEM re-evaluate assumptions of valued fishery components to include all the fish species listed as likely occurring in the area of the project. AEM responded stating that "consideration of alternate criteria to include all fish species as Valued Components would not change the outcome of the assessment" based on the assumption that "adverse effects on forage fish specifically used for food by the predatory species would be reflected in decreased growth and survival of the VCs."
Importance of issue to the impact assessment process	It is important that all fish species are weighted equally when DFO is evaluating potential fishery losses and gains in AEM's offsetting plans. All fish as listed in the Local Study Area are species of fishery and fishery support value in Nunavut.
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with EIS conclusion** **3. Reasons for disagreement with EIS conclusion**	1) DFO disagrees with AEM in using valued components as "a surrogate measure of all fish species in the Local Study Area" as stated in the AEM's IR response. DFO does not agree with the assumptions made by AEM regarding valued fish species. Only Arctic Char, Lake Trout and Round Whitefish are included as valued components throughout Volume 6 of the FEIS and in the calculations for impacts to fish. DFO disagrees with AEM's conclusion that effects to forage fish would be reflected in the growth and survival of predatory fish. While effects to forage fish will impact larger predatory fish, the impacts to these forage fish will not necessarily be completely encompassed as an endpoint measurement; for

	example, a decrease of species diversity may not be captured. In addition, predatory fish may prey on any smaller fish that appears in their habitat and forage fish will not necessarily make up their entire diet. It would be very difficult to determine impacts to these forage fish based solely on the growth survival of predatory fish.
Recommendation/Request	1) DFO reiterates our initial request, that AEM re-evaluate assumptions of valued fishery components to include all the fish species listed as likely occurring in the area of the project.

Review Comment Number	4
Subject/Topic	**Freshwater Environment – Habitat Alteration**
References	Volume 6, Section Habitat Alteration, p.6-82 & 6-83 & 6-87. Whale Tail – FEIS and Type A Information Request Response 4, January 2017, p. 49 Conceptual Offsetting Plan, Table 3.2, p.30
Summary	AEM indicates in the Whale Tail – FEIS and Type A Information Request Response, January 2017, p. 49 that they “will provide the requested information related to stream habitat losses in the final offsetting plan”.
Importance of issue to the impact assessment process	It is important to understand all impacts associated flooding extending over multiple waterbodies in order to properly create offsetting plans.
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with EIS conclusion** **3. Reasons for disagreement with EIS conclusion**	1) DFO disagrees that AEM provided sufficient rationale to support their assertion that a 3-4m water level rise in Whale Tail Lake’s South Basin, and flooding of adjacent lakes will not result in erosion, and mobilization of sediments. AEM does discuss the mobilization of mercury in the food chain, which suggests that sufficient organic material is present and thus it is also likely to mobilize with flooding. DFO originally requested AEM provide additional information, with references, regarding the disruptive impacts of flooding extending over multiple waterbodies, eliminating streams and the impacts to the fish, while simultaneously lowering the water level in an equally important lake (Mammoth) and reducing available habitat elsewhere. And, that those losses should also be evaluated in the Offsetting Plan. AEM did not provide the requested information, but rather, directed DFO back to the EIS sections of which DFO provided the information request. Based on the information provided, DFO disagrees that it is realistic to assume that the terrestrial habitat will be fully productive aquatic habitat during the short period it is proposed to be flooded.

	As described in the conceptual offsetting plan, AEM proposes a loss of approximately 24 hectares of waterbodies and 3390 linear metres of watercourses. Mercury, once mobilized, will continue to bioaccumulate even after the flooding has ceased. This long term impact is not addressed. The mobilization of sediments and release of organics and other nutrients will compound the eutrophication and will lead to further oxygen depletion affecting fish habitat.
Recommendation/Request	1) DFO requests AEM provide information outlining the losses described above as well as address the mobilization of sediments and potentially mercury, in the next version of the conceptual offsetting plan. AEM agreed in their IR response to provide "the requested information related to stream habitat losses in the final offsetting plan" however, AEM did not acknowledge the 24 hectares of loss associated with impacted waterbodies, nor mobilization and persistence of mercury impacting the fishery in the post-closure scenario.

Review Comment Number	5
Subject/Topic	**Freshwater Environment – Changes to Lake Ecosystem Productivity**
References	Volume 6, Section Changes to Lake Ecosystem Productivity, p.6-88 Whale Tail – FEIS and Type A Information Request Response 5, January 2017, p. 50
Summary	"the meso-eutrophic trigger value will be exceeded in Mammoth Lake, A15 and A12 during operations and closure with a subsequent return to oligotrophic conditions expected to occur by 2039." AEM anticipates the increase in nutrient concentrations and phytoplankton will lead to an increase in fisheries productivity. DFO requested further information discussing the changes from oligotrophic lake conditions to eutrophic lake conditions and back again and how such a hypothesis will be tested and verified by AEM. The FEIS refers to dissolved oxygen levels potentially being lower than optimal in shallow waters in summer and at depth during the winter. It would have been very useful for AEM to obtain field measurements to substantiate these conditions as the proposed eutrophication will adversely affect dissolved oxygen.
Importance of issue to the impact assessment process	It is important to understand the changes to lake ecosystem productivity when altering the lakes natural condition. A sudden change from an oligotrophic lake with the disruptions of habitat fragmentation and water quality changes will result in fishery losses. These losses need to be addressed in the Offsetting Plan.

Detailed Review Comment **1. Gap/Issue** **2. Disagreement with EIS conclusion** **3. Reasons for disagreement with EIS conclusion**	DFO disagrees with AEM conclusions on fisheries productivity in the Whale Tail Pit, which was based solely on the Saqvaqjuac project. DFO reminds AEM that the Saqvaqjuac project is a controlled eutrophication experiment; whereas the Whale Tail Pit project would have nutrient additions from mine operation activities and effluent discharge. AEM has deemed the change from an oligotrophic lake to a eutrophic lake and back again will be a positive impact. DFO does not agree that enough information has been provided that can support this conclusion. AEM continues to reference the Saqvaqjuac project in their Information Request Responses. The Saqvaqjuac project was an eutrophication experiment in which Phosphorus and Nitrogen were added in a controlled fashion. While the experiment shows that the addition of these nutrients can lead to an increase in fisheries production, the situation is not necessarily comparable to the proposed Whale Tail project. Nutrients will be added to the lake due to operational activities and discharge and AEM has yet to give information regarding specific nutrient increases. AEM "intends to treat, test and verify the phosphorus predictions through ongoing monitoring" and "will commit to the implementation of water treatment of other mitigation options if phosphorus concentrations are observed to increase to unacceptable levels that may affect the local fishery".
Recommendation/Request	1) DFO requests AEM include a detailed research study in its monitoring plan that allows AEM to evaluate fisheries productivity when altering lake condition from an oligotrophic lake to a eutrophic lake and back again. 2) DFO requests AEM provide further information discussing the trophic lake changes, what levels of nutrients are expected to increase and how this will result in an increase in fishery productivity based on modeling for the Whale Tail project specifically. 3) DFO requests AEM clarify the duration of flooding as it is not clear whether it starts at dike construction (2019) and continues to closure (2022) or will be limited to 2 years; and what number of years a stable eutrophic condition is expected, when dewatering is to commence thus transitioning back to oligotrophic condition. 4) DFO requests AEM re-evaluate the conceptual offsetting plan to remove potential gains associated with flooding activities.

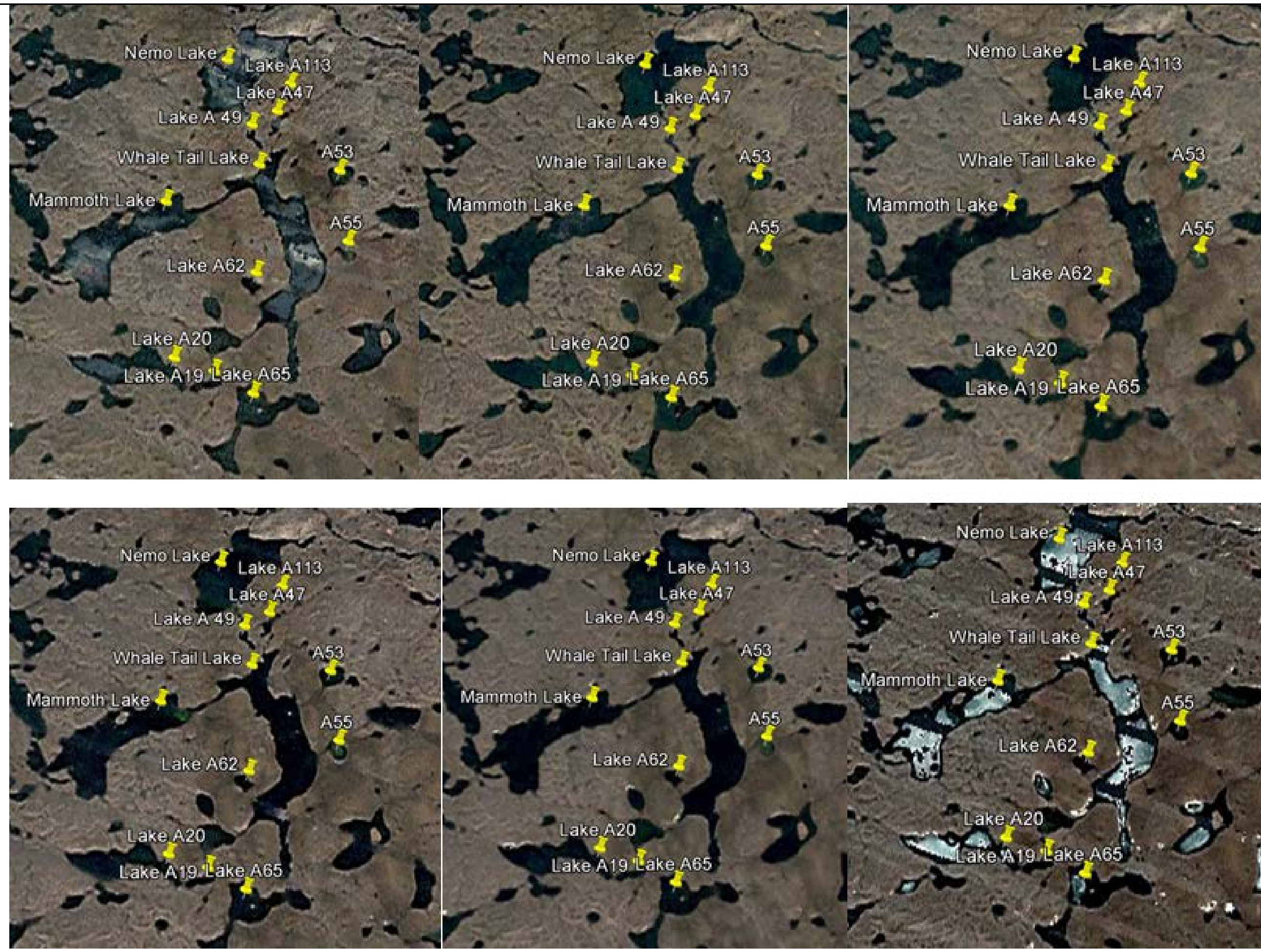
	5) DFO requests AEM review and reference DFO. 2016. Review of Habitat Evaluation Procedure (HEP) input parametres and model results for the Meadowbank Gold Mine Project. DFO Can. Sci. Advis. Sec. Sci. Resp. 2016/038 when re-evaluating the conceptual offsetting plan to ensure it is consistent with the most recent DFO advice.

Review Comment Number	6
Subject/Topic	**Freshwater Environment – Monitoring and Follow-up**
References	Volume 6, Section 6.5.8, p.6-98, AEM Response to Whale Tail Pit Project Completeness Review Whale Tail – FEIS and Type A Information Request Response, January 2017, p. 54 Habitat Compensation Monitoring Plan Version 4 February 2017 Volume 8, Appendix 8-E.2: Core Receiving Environment Monitoring Program Cott, P.A., and Hanna, B.W. 2005. Monitoring Explosive-Based Winter Seismic Exploration in Waterbodies, NWT 2000-2002
Summary	AEM presents monitoring plans that are directly transferred and referenced from the Meadowbank Project such as the Habitat Compensation Monitoring Plan and Blast Monitoring Plan. "This plan will be updated to reflect conditions of future project authorizations and related offsetting plans."p.ii HCMP "CREMP sampling at Whale Tail Pit Study Area will follow the same level of effort and frequency by area type (as Meadowbank)"p.6 CREMP. AEM proposes to follow the same level of effort and frequency as Meadowbank. As AEM did not create a standalone CREMP for Whale Tail, but rather, an addendum to the 2012 Meadowbank CREMP, DFO is concerned the sampling frequency is insufficient for Whale Tail. In the 2012 Meadowbank CREMP, AEM proposed to reduce the sampling frequency which is particularly concerning in the post-closure scenario (e.g. if sampling is every 3 years, and only results in 1 or 2 sampling events post-closure).

Importance of issue to the impact assessment process	It is important that monitoring plans are specifically tailored to the Whale Tale Pit project and that the information contained within is appropriate and applicable to this new project location.
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with EIS conclusion** **3. Reasons for disagreement with EIS conclusion**	DFO disagrees with AEM using Meadowbank's monitoring plans for the Whale Tail Project. The Whale Tail project is a separate project from the Meadowbank project, which involves different watersheds and specifics that are not outlined in existing monitoring plans. Blasting activities will differ with the Whale Tail project and the separate monitoring plan should reflect such differences. DFO notes the AEM recently provided some updates to the Meadowbank HCMP for Phaser Lake and note their intent to continue to use and update this plan for Whale Tail despite DFO's request that a separate standalone Monitoring Plan be provided for Whale Tail Project.
Recommendation/Request	1) DFO requests that AEM provide a separate Fisheries Offsetting Monitoring Plan for the Whale Tail Pit project. The Meadowbank HCMP will not be accepted for the Whale Tail Project. 2) DFO requests AEM ensure they are adhering to the most recent advice regarding blasting in further revisions to the Blast Management Plans (e.g. Cott and Hanna 2005).

Review Comment Number	7
Subject/Topic	**Monitoring, Mitigation and Management Plans – Conceptual Offsetting Plan**
References	Volume 8, Appendix 8-E, p.7, AEM Whale Tail EA Whale Tail – FEIS and Type A Information Request, January 2017, p. 55
Summary	AEM proposes to use shorelines from 2011 PhotoSat imagery the Whale Tail Pit project. "Discharges of watercourses in the LSA typically peak in late-May to mid-June from snowmelt, rapidly decline in July, and low discharges prevail until frozen conditions in October to November." Satellite images were taken in July (2011) and August (2015) when water levels are much lower seasonally. AEM provided DFO an overview of precipitation levels annually from 2006 to 2015 – it would appear that 2011 (the year that is proposed to use as the reference) was the third lowest in the last decade.
Importance of issue to the impact assessment process	For DFO to accurately understand the shoreline delineation and potential impacts to fish habitat due to mining activities, DFO requires an accurate understanding of the impacted wetted area based on the most

	appropriate satellite imagery.
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with EIS conclusion** **3. Reasons for disagreement with EIS conclusion**	DFO does not agree with AEM's conclusion in using the 2011 imagery. While 2011 is not the lowest, it is in the bottom three for total precipitation out of the last ten years. 2007 is a more appropriate reference year since it is the average year for total precipitation in the last ten years. DFO disagrees with using August as the reference month as it is a very dry time of year, resulting in low water levels. Imagery for Mammoth Lake has still not been included and is an important factor that was not addressed in AEM's response to DFO. DFO notes that other available imagery (such as the below examples from Google Earth) demonstrate a connection between Whale Tail Lake and Mammoth Lake. As this is one of the items for which AEM is proposing fish habitat gains in their conceptual offsetting plan, an accurate understanding of existing conditions is required.

	
Recommendation/Request	1) DFO requests AEM provide imagery from June to understand the high water levels and connections between waterbodies 2) DFO requests AEM provide imagery from 2007 as an average year in the last decade. 3) DFO reiterates our requests for imagery from Mammoth Lake from the same month and year.

Review Comment Number	8
Subject/Topic	**Monitoring, Mitigation and Management Plans – Shipping Management Plan**
References	Volume 8, Appendix 8-D.5, Section 4.2 Mitigation Measures p.12 Volume 3, Appendix 3-A – Marine Resources Environmental Summary, Section 3.A-13 Mitigation Measures, p.3-A-19 International Maritime Organization. 2014. *Guidelines for the Reduction of Underwater Noise from Commercial Shipping to Address Adverse Impacts on Marine Life*. Lawson, J.W. and V. Lesage. 2013. A draft framework to quantify and cumulate risks of impacts from large development projects for marine mammal populations: A case study using shipping associated with the Mary River Iron Mine project. DFO Can. Sci. Advis. Sec. Res. Doc. 2012/154 iv + 22 p.
Summary	AEM provides a list of mitigation measures related to marine mammals including, but not limited to: -marine mammals will be given right of way as safe navigation allows; under no circumstances, other than in the case of an emergency, will ships approach within 300m of a walrus or polar bear observed on sea ice -ships will maintain a minimum distance of 300m from marine mammals engaged in feeding activities -for all other marine mammal encounters, ships will not approach within 100m of a marine mammal -if marine mammals approach within 100m of a ship, the vessel will reduce its speed and, if possible, cautiously move away from the animal -if it is not possible for the ship to move away from or detour around a stationary marine mammal or group of marine mammals, the ship will reduce its speed and wait until the animal(s) move to the side and remain at least 100m from the ship prior to resuming speed. (Vol 8) "The Shipping Management Plan will include mitigation measures to eliminate or reduce potential adverse effects of Project shipping on marine wildlife including, but not limited to, provision of full-time marine mammal. . . onboard Project vessels, speed restrictions (<14 knots), safe approach distances from marine mammals, wildlife sightings record-keeping, ship lighting modifications, adherence to ballast water

	regulations." (Vol3)
Importance of issue to the impact assessment process	It is important for DFO to ensure that Agnico is adhering to the most up to data scientific advice regarding marine mammal mitigation measures to ensure the safety of any marine mammals that they may encounter
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with EIS conclusion** **3. Reasons for disagreement with EIS conclusion**	Section 7 of the *Marine Mammal Regulations* (*Fisheries Act*) prohibits the disturbance of marine mammals. Generally, disturbance is interpreted as disruption to an animal's normal life processes, resulting from intentional human activities (e.g., to pursue, accompany, overtake, encircle, approach, hunt, disperse, drive or herd individuals or groups of marine mammals). This applies equally to divers, kayaks, motor boats and aircraft. Disturbance response thresholds vary among individual species, and locations. DFO disagrees that the proposed mitigation measures are consistent with the most recent scientific advice. Therefore, DFO recommends the following mitigation measures as per Lawson and Lesage 2013: • creating a 500m (rather than 300m) buffer zone and reducing vessel speed to 10-14 knots. • aircraft should maintain a minimum altitude of 500m over marine mammals. • watercraft should keep a lookout for marine mammals, and avoid them. If marine mammals are encountered, and remain in the area, effort should be made to avoid them and slowly navigate around their location at a reduced speed and maintain a distance. Do not accelerate within 400m (rather than 100m) of them. • consider reducing shipping rates during periods when interactions with marine mammals may be the most problematic • submit clearly-defined monitoring and mitigation plans to collect baseline information necessary to later determine if there have been project-related changes in marine mammal behaviour or residence • ensure that data produced by surveillance monitoring programmes are analysed rigorously by experienced analysts to maximize their effectiveness in providing baseline information and for detecting potential effects of shipping activities on marine mammals; and, • impact assessment methodology must be more comprehensive by being extended to cumulative effects as there is a critical need to address those in a more formal and systematic way. • Other guidance is available regarding reducing vessel noise International Maritime Organization. 2014. *Guidelines for the Reduction of Underwater Noise from Commercial Shipping to Address Adverse Impacts on Marine Life*.
Recommendation/Request	DFO requests AEM incorporate the above listed mitigation measures into their plans regarding marine

	mammals and shipping activities.

Review Comment Number	9
Subject/Topic	**Monitoring, Mitigation and Management Plans – Water Quality and Flow Monitoring Plan**
References	Whale Tail Pit Water Quality and Flow Monitoring Plan Version 1 January 2017 Volume 8 P.23 and Table 3-1. P.9 Fisheries and Oceans Canada. 2013. *Fisheries Protection Policy Statement*. http://dfo-mpo.gc.ca/pnw-ppe/pol/PolicyStatement-EnoncePolitique-eng.pdf
Summary	AEM proposes monitoring stations ST-WT-9, and ST-WT-10 in Whale Tail Lake basin during year 4, though only ST-WT-9 (1 Station) remains in year 11 to monitor water quality in Whale Tail Lake. This station is not located within the end pit portion of the lake basin. DFO does not see any stations proposed to monitor water quality in Nemo, Mammoth or any of the other surrounding water bodies. Table 3-1 p.9 "An annual report is to be submitted to the NWB, KIA, DFO, INAC. . . the report is to summarize. . . any exceedances at stations, the action plan applied to the exceedance, and the results of the action plan.. . .spills and any accidental releases, any exceedance of EM results. . ."p.23
Importance of issue to the impact assessment process	It is important for AEM to have an appropriate number of monitoring stations to assess impacts to water quality during operations and post-closure in order to validate their assumptions in the environmental assessment
Detailed Review Comment **4. Gap/Issue** **5. Disagreement with EIS conclusion** **6. Reasons for disagreement with EIS conclusion**	1) DFO disagrees with AEM's annual reporting requirements, number and location of monitoring stations. DFO reminds AEM that as per Section 38 of the *Fisheries Act*, AEM has a Duty to Notify DFO of exceedances, spills, or occurrences. "The *Fisheries Act* imposes a series of obligations upon persons responsible for projects that lead to occurrences that result in serious harm to fish that are part of or support a commercial, recreational or Aboriginal fishery. There is a duty to notify an inspector when this serious harm to fish is not authorized under the Act, or when there is a serious an imminent danger of such an occurrence . . . failure to notify, take corrective measures or report in such situations may result in penalties." Fisheries Protection Policy Statement 2013. DFO has informed AEM previously that submitting notice of occurrences via an annual report directed to the NIRB is

	unacceptable. DFO must be notified immediately and directly in addition to any annual reporting requirements. 2) Considering the impacts proposed to Whale Tail Lake, Mammoth Lake and surrounding waterbodies, DFO disagrees that 2 monitoring stations in year 4 and 1 in year 11 is sufficient to accurately determine impacts to water quality. The conclusion that downstream water effects are not detectable beyond the large lake labelled DS1 is critical to the conclusions of downstream water quality impacts in this assessment.
Recommendation/Request	1) DFO requests AEM re-evaluate their annual reporting requirements with DFO to ensure that all AEM staff are aware that occurrences affecting fish and fish habitat are to be reported immediately and directly to DFO. 2) DFO requests AEM place a monitoring station in Mammoth Lake, add a station in the pit portion of Whale Tail's North Basin as well as the South Basin, and have a least 2 control lake monitoring stations identified.

4.0 SUMMARY OF REQUESTS

Freshwater Environment – Habitat Losses	
	1) DFO requests AEM include the bottom dwelling species in their calculations of losses. 2) DFO requests AEM provide better illustrations to demonstrate the proposed increased surface area of Whale Tail Lake and its viability as newly created littoral habitat. 3) DFO requests AEM provide additional details outlining how they intend to evaluate the potential mixing or non-mixing situation in the pit portion of Whale Tail Lake as the information adopted from Meadowbank's CREMP and Water Quality Monitoring Plan would seem insufficient to do so. If AEM is unable to demonstrate sustainable water quality and habitat suitable for fish in the post-closure scenario, AEM should provide DFO with contingency offsetting options located outside the Whale Tail Lake basin. 4) DFO requests AEM provide additional and updated information on the evaluation of end pit lake scenarios, with references, to address the above listed concerns regarding the end pit lake scenario. AEM has noted Gammons et al 2009 which does evaluate the Colomac Gold Mine in NWT. There have been several documents written since including monitoring reports that would provide a beneficial overview with lessons learned. This information would aid DFO in subsequent reviews of the conceptual offsetting plan and monitoring reports. In addition to the monitoring data available for the Colomac Gold Mine (e.g. Colomac Mine site surveillance network program and enhanced natural removal program annual reports), DFO is providing AEM with the following documents to aid in their evaluation: Pieters, R., Coedy, W., Ashley K.I., and Lawrence, G.A. 2015. Artificial circulation of a mine pit lake. Can. J. Civ. Eng. 42:33-43 and Pieters, R. and Lawrence, G.A. 2014. Physical processes and meromixis in pit lakes subject to ice cover. Can. J. Civ. Eng. 41: 569-578 5) DFO requests AEM clarify and correct any discrepancies regarding depth criteria. 6) Critical to the assumption that fish will recolonize areas dewatered by the dikes in the north basin of Whale Tail Lake is that appropriate habitat is available to support all life history stages in the south basin. No studies were conducted to determine where specifically fish were spawning; rather, it is assumed that fish spawn on any suitable combination of substrate and water depth. As noted for the water quality assessment, the potential for flooding to release organic material and nutrients to Whale Tail Lake and its tributaries should be more carefully considered. A reduction in spawning habitat quality could put the recovery of the fish population post closure at risk. The predicted rapid population recovery in the north basin of Whale Tail Lake assumes that population growth is density dependent. In the Arctic environment density independent factors may be more important and recovery may take longer. DFO requests AEM fully evaluate these losses in revisions to the conceptual offsetting plan.

Freshwater Environment – Fish Out

1) DFO requests AEM utilize the form (excel sheet) provided to AEM for Phaser Lake and ensure that all the required metrics are provided.

2) DFO requests that AEM correct the error(s) referencing Wally Lake as this Fish Out Plan is for Whale Tail Project, not Meadowbank.

3) DFO requests AEM provide an estimate of fish to be removed from Whale Tail Lake's North basin.

Freshwater Environment – Valued Components

1) DFO reiterates our initial request, that AEM re-evaluate assumptions of valued fishery components to include all the fish species listed as likely occurring in the area of the project.

Freshwater Environment – Habitat Alteration

1) DFO requests AEM provide information outlining the losses described above as well as address the mobilization of sediments and potentially mercury, in the next version of the conceptual offsetting plan. AEM agreed in their IR response to provide "the requested information related to stream habitat losses in the final offsetting plan" however, AEM did not acknowledge the 24 hectares of loss associated with impacted waterbodies, nor mobilization and persistence of mercury impacting the fishery in the post-closure scenario.

Freshwater Environment – Changes to Lake Ecosystem Productivity

1) DFO requests AEM include a detailed research study in its monitoring plan that allows AEM to evaluate fisheries productivity when altering lake condition from an oligotrophic lake to a eutrophic lake and back again.

2) DFO requests AEM provide further information discussing the trophic lake changes, what levels of nutrients are expected to increase and how this will result in an increase in fishery productivity based on modeling for the Whale Tail project specifically.

3) DFO requests AEM clarify the duration of flooding as it is not clear whether it starts at dike construction (2019) and continues to closure (2022) or will be limited to 2 years; and what number of years a stable eutrophic condition is expected, when dewatering is to commence thus transitioning back to oligotrophic condition.

	4) DFO requests AEM re-evaluate the conceptual offsetting plan to remove potential gains associated with flooding activities. 5) DFO requests AEM review and reference DFO. 2016. Review of Habitat Evaluation Procedure (HEP) input parametres and model results for the Meadowbank Gold Mine Project. DFO Can. Sci. Advis. Sec. Sci. Resp. 2016/038 when re-evaluating the conceptual offsetting plan to ensure it is consistent with the most recent DFO advice.
Freshwater Environment – Monitoring and Follow-up	
	1) DFO requests that AEM provide a separate Fisheries Offsetting Monitoring Plan for the Whale Tail Pit project. The Meadowbank HCMP will not be accepted for the Whale Tail Project. 2) DFO requests AEM ensure they are adhering to the most recent advice regarding blasting in further revisions to the Blast Management Plans (e.g. Cott and Hanna 2005).
Monitoring, Mitigation and Management Plans – Conceptual Offsetting Plan	
	1) DFO requests AEM provide imagery from June to understand the high water levels and connections between waterbodies 2) DFO requests AEM provide imagery from 2007 as an average year in the last decade. 3) DFO reiterates our requests for imagery from Mammoth Lake from the same month and year.
Monitoring, Mitigation and Management Plans – Shipping Management Plan	
	1) DFO requests AEM incorporate the above listed mitigation measures into their plans regarding marine mammals and shipping activities.
Monitoring, Mitigation and Management Plans – Water Quality and Flow Monitoring Plan	
	1) DFO requests AEM re-evaluate their annual reporting requirements with DFO to ensure that all AEM staff are aware that occurrences affecting fish and fish habitat are to be reported immediately and directly to DFO. 2) DFO requests AEM place a monitoring station in Mammoth Lake, add a station in the pit portion of Whale Tail's North Basin as well as the South Basin, and have a least 2 control lake monitoring stations identified.

5.0 ᓇᓗᓇᐃᔭᖅᓯᒪᓂᖏᑦ ᑐᓯᕌᖑᔪᑦ

ᐃᒥᑦᑎᐊᕙᐃᑦ ᐊᕙᑎᖓ – ᓇᕗᖅᑕᐅᕙᑦᑐᑦ ᓴᒪᑕᐅᔪᑦ

1) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᐱᖃᓯᐅᔾᔨᓗᑎ ᐃᖅᑲᒥᐅᑕᓄᑦ ᐆᒪᔪᓄᑦ ᓴᒪᑕᐅᔪᓄᑦ ᐋᖅᑭᑦᑕᐅᓂᖏᓐᓄᑦ.
2) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᑕᑯᔅᓴᐅᑎᑦᑎᑎᐊᓂᖅᓴᐅᓗᑎ ᐊᖏᓪᓕᕆᐊᖅᑕᔪᒪᔪᒥᑦ Whale Tail Lake ᐊᒻᒪ ᓈᒻᒪᓐᓂᕆᔭᖓ ᓭᖅᑭᖅᑎᑕᐅᕋᑖᖅᑐᖅ ᓯᕗᔾᔭᖓᓂ ᓇᕗᖅᑕᐅᔪᖅ.
3) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᑐᑭᓯᕆᐊᕈᑎᔅᓭᒃᑲᓂᖅᑎᑦᑎᓗᑎ ᓇᓗᓇᐃᔭᐃᔪᓂᑦ ᖃᓄᖅ ᖃᐅᔨᓴᕐᓂᐊᕐᓂᖏᓐᓄᑦ ᑲᑎᖅᓯᓂᐊᕐᓂᖏᑦ ᐊᒻᒪ ᑲᑎᖅᓱᖏᓐᓂᖏᑦ ᐃᓚᖓᓂ Whale Tail Lake ᑐᑭᓯᕆᐊᕈᑏᑦ ᐱᔭᐅᓯᒪᒪᑕ Meadowbank–ᑯᑦ CREMP ᐊᒻᒪ ᐃᒪᐅᑉ ᐱᐅᓂᖓᓂᑦ ᖃᐅᔨᓴᓂᕐᒧᑦ ᐸᕐᓇᐅᒻᒥᑦ ᓈᒻᒪᒃᑲᔭᖅᑑᔾᔨᖏᑦᑐᖅ ᑕᐃᒪᐃᓐᓂᐊᕐᓗᒍ. AEM–ᑯᑦ ᑕᑯᔅᓴᐅᑎᑦᑎᔪᓐᓇᖏᑉᐸᑕ ᒪᑭᒪᑎᑦᑎᓂᕐᒥᑦ ᐃᒥᐅᑉ ᐱᐅᓂᖓᓂᑦ ᐊᒻᒪ ᓇᕗᖅᑕᐅᔪᓐᓇᕐᓂᖓ ᐃᖃᓗᓐᓄᑦ ᒪᑐᔭᐅᓂᐊᓕᖅᑎᓪᓗᒍ ᖃᓄᐃᓐᓂᓇᔪᓐᓇᖅᑕᖓᓄᑦ, AEM–ᑯᑦ ᑐᓂᓯᔭᓇᐊᓪᓚᑦ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᓐᓄᑦ ᑐᐊᕕᕐᓇᖅᑐᓄᑦ ᓇᓪᓛᕋᔅᓴᓂᑦ ᓯᓚᑖᓐᑐᑦᑐᓂᑦ Whale Tail Lake ᐃᒪᓂ.
4) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᑐᑭᓯᕆᐊᕈᑎᔅᓭᒃᑲᓂᖅᑎᑦᑎᓗᑎ ᐊᒻᒪ ᐅᓪᓗᒥᒨᖑᔪᓂᑦ ᑐᑭᓯᕆᐊᕈᑎᓂᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᖓᓄᑦ ᐃᓱᓚᓐᓂᖅᑲᖅᑎᓪᓗᒍ ᖃᓄᐃᓐᓂᓇᔪᓐᓇᖅᑕᖏᓐᓂᑦ, ᖃᐅᔨᕆᐊᕐᕕᒃᓴᓗᑎ, ᐱᓪᓗᐊᖑᓗᑎ ᕿᓚᓂᑦᑐᑦ ᑎᑎᕋᖅᓯᒪᔪᑦ ᐃᓱᒫᓗᑕᐅᔪᑦᐱᔾᔪᑎᒃᑲᖅᑐᑦ ᐃᓱᓚᓐᓂᖅᑲᖅᑎᓪᓗᒍ ᑕᓯᐅᔪᖅ ᖃᓄᐃᓐᓂᓇᔪᓐᓇᖅᑕᖓᓂᑦ. AEM ᓇᓗᓇᐃᖅᓯᓯᒪᔪᑦ Gammons et al 2009 ᖃᐅᔨᓴᖅᑲᑦᑕᖅᑐᑦ Colomac Gold Mine ᐅᔭᕋᓐᓂᐊᕕᒻᒥ ᓄᓇᕐᔪᐊᒥ. ᐊᒥᓱᓪᓚᐅᓯᒪᔪᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᑦ ᐱᖃᓯᐅᑎᓪᓗᓯᒪᓪᓚᑕᓂᑦ ᖃᐅᔨᓴᖃᑦᑕᓂᕐᒧᑦ ᐅᓂᒃᑳᑦ ᐃᑲᔫᑎᐅᕙᔭᖅᑐᑦ ᐃᓗᒍᑕᐅᔪᓂᑦ. ᑖᒃᑯᐊ ᑐᑭᓯᕆᐊᕈᑏᑦ ᐃᑲᔪᐃᓂᖃᕋᔭᖅᑐᑦ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᓐᓂᑦ ᕿᒥᕐᕈᓂᖏᓐᓄᑦ ᓇᓗᓇᐃᔭᖅᓯᒪᔪᓂᑦ ᐊᓯᐊᑑᕈᑎᓂᑦ ᐸᕐᓇᐅᒻᒥᑦ ᐊᒻᒪ ᖃᐅᔨᓴᖃᑦᑕᓂᕐᒧᑦ ᐅᓂᒃᑳᓂᑦ. ᐃᓚᒋᐊᕐᓗᒍ ᖃᐅᔨᓴᖃᑦᑕᓂᕐᒧᑦ ᑐᑭᓯᕆᐊᕈᑎᓂᑦ ᐊᑐᐃᓐᓇᐅᔪᓄᑦ Colomac Gold Mine (ᓲᕐᓗ. Colomac Mine ᐅᔭᕋᓐᓂᐊᕐᕕᒃ ᖃᐅᔨᓴᖅᑕᐅᓂᖓᓄᑦ ᐱᓪᓚᐊᖅ ᐊᒻᒪ ᐲᔭᐃᓂᕐᒧᑦ ᐱᓪᓚᐊᒥᑦ ᐊᕐᕌᒍᑕᒫᑦ ᐅᓂᒃᑳᑦ), ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ AEM–ᑯᓐᓄᑦ ᑐᑭᓯᕆᐊᕈᑎᒃᑲᓐᑎᑦᑎᔪᑦ ᑎᑎᕋᖅᓯᒪᔪᓂᑦ ᐃᑲᔫᑕᐅᓂᐊᖅᑐᓂᑦ ᖃᐅᔨᓴᐃᓂᖏᓐᓄᑦ ᐅᑯᓂᖓ: Pieters, R., Coedy, W., Ashley K.I., and Lawrence, G.A. 2015. Artificial circulation of a mine pit lake. Can. J. Civ. Eng. 42:33-43 and Pieters, R. and Lawrence, G.A. 2014. Physical processes and meromixis in pit lakes subject to ice cover. Can. J. Civ. Eng. 41: 569-578
5) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᓇᓗᓇᐃᖅᓯᕐᑯᔨᔪᑦ ᐊᒻᒪ ᐋᖅᑭᑦᑕᐅᓗᑎ ᖃᓄᐃᑦᑐᑐᐃᓐᓇᐃᑦ ᐊᔾᔨᒌᖏᓐᓂᖏᑦ ᐃᑎᓂᖕᓂᖏᓐᓂᑦ.

6) ᐱᒻᒪᕆᐅᔪᖅ ᐃᓱᒪᒋᔭᐅᓂᖓᓄᑦ ᐃᖃᓗᐃᑦ ᑲᑎᖕᖓᓚᒃᑲᓂᕐᓂᐊᕐᓂᖏᓐᓄᑦ ᐃᒪᐃᔭᖅᑕᐅᓯᒪᔪᒥᑦ ᓯᒥᔅᓯᒪᔾᔪᑎᖏᓐᓄᑦ ᐅᐊᓐᓇᖓᐊᓂ Whale Tail Lake ᓇᕗᖅᑕᐅᔪᓐᓇᖅᑐᒥᑦ ᓈᒻᒪᑦᑐᑦᑲᕐᒪᑦ ᐃᑲᔪᖅᑐᐃᔪᓂᑦ ᐆᒪᔪᓂᑦ ᓂᕆᖓᓂ. ᖃᐅᔨᓴᕐᓂᖅᑕᕐᑲᓚᐅᖏᑦᑐᖅ ᓇᒥᓪᓚᓇᒃ ᓯᕙᐃᔭᖅᐸᓪᓕᖔᑕ; ᑭᓯᐊᓂᓪᓚ, ᐃᓱᒪᒋᔭᐅᔪᖅ ᐃᖃᓗᐃᑦ ᓯᕙᐃᔭᖃᑦᑕᖅᑐᑎᑦ ᓈᒻᒪᑐᐃᓇᖅᑐᓂᑦ ᐃᒪᐅᔪᓂᑦ ᑕᒪᒃᑭᓐᓂ ᖄᖓᓂ ᐊᒻᒪ ᐃᑎᓂᖓᓂ. ᓇᓗᓇᐃᖅᑕᐅᓯᒪᔪᖅ ᐃᒪᐅᑉ ᐱᐅᓂᖓᓂᑦ ᖃᐅᔨᓴᕐᓂᐅᔪᖅ, ᐃᓚᒍᓐᓇᕐᓂᖓ ᑭᓱᐃᓐᓇᐃᑦ ᐱᕈᖅᑐᑦ ᐆᒪᔪᑦ Whale Tail Lake–ᒨᕈᓐᓇᕐᓂᖏᑦ ᐊᒻᒪ ᑰᖑᔪᑦ ᐃᓱᒪᒋᔭᐅᑦᑎᐊᓇᐊᓖᑦ. ᒥᑭᔾᓕᕆᐊᖅᑕᐅᓂᖓ ᓯᕙᐃᔭᕝᕕᐅᕙᑦᑐᖅ ᐱᐅᓂᖓ ᐅᑎᖅᐸᒡᓕᐊᓂᖏᓐᓄᑦ ᐃᖃᓗᓐᓄᑦ ᐊᑦᑕᓇᖅᑐᒦᑎᑎᒍᓐᓇᖅᑐᖅ ᒪᑐᔭᐅᓂᐊᓕᖅᑎᓪᓗᒍ. ᒥᔅᓴᐅᓴᑦᑕᐅᓯᒪᔪᖅ ᐅᑎᖅᐸᓕᐊᑦᑕᐅᑎᕆᓂᐊᕐᓂᖏᓐᓄᑦ ᐅᐊᓐᓇᖓᓂ Whale Tail Lake ᐃᓱᒪᒋᔭᐅᔪᖅ ᐊᒥᓱᕈᖅᐸᓪᓕᐊᓂᖏᓐᓄᑦ ᑐᓐᖓᓂᖅᑐᖅ ᐱᑕᖅᑭᓐᓂᖏᓐᓄᑦ. ᐅᑭᐅᑕᖅᑐᒥ ᐱᑕᖅᑭᓐᓂᖏᑦ ᐃᒻᒥᒍᖅᑐᓂᑦ ᑐᓐᖓᓂᖅᑐᑦ ᐱᔾᔪᑕᐅᔪᓂᑦ ᐱᒻᒪᕆᐅᓂᖅᓴᐅᔪᓇᖅᑐᑦ ᐊᒻᒪ ᐅᑎᖅᐸᓕᐊᓂᖏᑦ ᐊᑯᓂᐅᓂᖅᓴᐅᔪᓇᖅᑐᑦ. ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᐊᑕᖐᔪᒥᑦ ᖃᐅᔨᓴᕐᓗᑎ ᑖᒃᑯᐊ ᓴᒪᑕᐅᔪᓂᑦ ᐋᖅᑭᑦᑎᐊᖅᑕᐅᓂᖓᓄᑦ ᐸᕐᓇᐅᑎᐅᔪᖅ.

ᐃᒥᑦᑎᐊᕙᐃᑦ ᐊᕙᑎᖓ – ᐃᖃᓗᑦᑕᐅᔪᑦ

<table>
<tr><td></td><td>1) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᔅᓯᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᐊᑐᕐᓗᑎ ᑕᑕᑎᕆᐊᓕᒻᒥᑦ (excel sheet) ᑐᓂᔭᐅᔪᑦ AEM–ᑯᓐᓄᑦ Phaser Lake ᐊᒻᒪ ᖃᐅᔨᓴᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᔪᑦ ᐱᑕᖃᕆᐊᖃᖅᑐᑦ ᐱᑕᖃᖅᑎᑕᐅᒐᓗᐊᕐᒪᖔᑕ.
2) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᔅᓯᕋᖅᑐᑦ ᑖᒃᑯᐊ AEM–ᑯᑦ ᐋᖅᑭᓪᓗᒋᑦ ᑕᒻᒪᖅᓯᒪᔪᖅ(ᔪᑦ) ᐱᔾᔪᑎᖃᖅᑐᓂᑦ Wally Lake ᑖᓐᓇ ᐃᖅᑲᓗᑦᑕᐅᓂᐊᖅᑐᓄᑦ ᐸᕐᓇᐅᑦ Whale Tail ᐱᓕᕆᐊᒧᑦ, Meadowbank–ᒨᖕᒋᑦᑐᖅ.
3) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᔅᓯᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᑐᓂᓯᓗᑎ ᒥᔅᓴᐅᓴᑦᑕᐅᓯᒪᔪᓂᑦ ᐃᖅᑲᓗᑦᑕᐅᓂᐊᖅᑐᓂᑦ Whale Tail ᑕᓯᖓᓂ ᐅᐊᓐᓇᖓᓂ.</td></tr>
<tr><td colspan="2">ᐃᒥᑦᑎᐊᕙᐃᑦ ᐊᕙᑎᖓ – ᐱᒻᒪᕆᒋᔭᐅᔪᑦ ᐃᓚᒍᑕᖏᑦ</td></tr>
<tr><td></td><td>1) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ DFO ᐅᖃᒃᑲᓂᖅᑐᑦ ᑐᔅᓯᕋᐅᑎᒋᒋᐊᓐᖓᖅᓯᒪᔭᖕᒋᓐᓂᑦ, ᑖᒃᑯᐊ AEM ᖃᐅᔨᓴᒃᑲᓂᕐᓗᑎ ᐃᓱᒪᒋᔭᐅᔪᓂᑦ ᐱᒻᒪᕆᒋᔭᐅᔪᓂᑦ ᐃᖅᑲᓗᓕᕆᓂᕐᒧᑦ ᐃᓚᒍᑕᖏᓐᓂᑦ ᐱᖃᓯᐅᔾᔨᓗᑎ ᐃᖅᑲᓗᓕᒫᑦ ᐆᒪᔪᑦ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᑦ ᓴᖅᑭᓂᐊᖅᑐᒋᔭᐅᓪᓗᑎ ᐱᓕᕆᐊᒥ ᖃᓂᒋᔭᖓᓂ.</td></tr>
<tr><td colspan="2">ᐃᒥᑦᑎᐊᕙᐃᑦ ᐊᕙᑎᖓ – ᓇᔪᖅᑕᐅᔪᑦ ᐊᓯᔾᔨᖅᑕᐅᓂᖏᑦ</td></tr>
<tr><td></td><td>1) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᔅᓯᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᑐᓂᓯᓗᑎ ᑐᑭᓯᒋᐊᕈᑎᓂᑦ ᓇᓗᓇᐃᔭᐃᔪᓂᑦ ᓴᒐᑕᐅᔪᓂᑦ ᓇᓗᓇᐃᔭᖅᓯᒪᔪᑦ ᖁᓖᓂ ᐊᒻᒪᓗᑦᑕᐅᖅ ᐱᓕᕆᐊᕆᓗᒍ ᐃᖏᕋᓂᖏᑦ ᐃᖅᑲᖓᓃᑦᑐᑦ ᐊᒻᒪ ᑐᖅᑯᓐᓇᖅᑑᔪᓐᓇᖅᑐᑦ ᒨᑯᕆ, ᑭᖑᓪᓕᕐᒥᑦ ᐃᓱᒪᒋᔭᐅᔪᓂᑦ ᐊᓯᐊᒎᕈᑎᓄᑦ ᐸᕐᓇᐅᒻᒥᑦ. AEM ᐊᖏᖅᑐᑦ IR ᑭᐅᔾᔪᑎᖏᓐᓂᑦ ᑐᓂᓯᓗᑎ “ᑐᔅᓯᕌᖑᔪᑦ ᑐᑭᓯᒋᐊᕈᑏᑦ ᐊᑦᑐᐊᓂᖃᖅᑐᑦ ᓇᔪᖅᑕᐅᕙᑦᑐᓄᑦ ᓴᒐᑕᐅᔪᑦ ᑭᖑᓪᓕᖅᐹᒥ ᐸᕐᓇᐅᒻᒥᑦ” ᑭᓯᐊᓂᓕ, AEM ᓇᓗᓇᐃᖅᓯᓚᐅᖏᑦᑐᑦ 24 ᓴᒐᑕᐅᔪᓂᑦ ᐊᑦᑐᐊᓂᓖᑦ ᐊᑦᑐᖅᑕᐅᓂᖏᓐᓄᑦ ᐃᒪᐃᑦ, ᐃᖏᕋᓂᖏᓐᓄᑦ ᐊᒻᒪ ᑐᖅᑯᓐᓇᖅᑐᑕᖃᕈᓐᓇᖅᓂᖓ ᐊᑦᑐᐃᓂᖃᖅᑐᑦ ᐃᖅᑲᓗᓐᓂᑦ ᒪᑐᔭᐅᕙᓪᓕᐊᓂᖓᓄᑦ ᖃᓄᐃᓐᓂᕆᔪᓐᓇᖅᑕᖓᓄᑦ.</td></tr>
<tr><td colspan="2">ᐃᒥᑦᑎᐊᕙᐃᑦ ᐊᕙᑎᖓ – ᐊᓯᔾᔨᖅᑐᑦ ᑕᓯᐅᑉ ᐊᕙᑎᖓ ᐆᒪᔪᖃᕈᓐᓇᕐᓂᖓ</td></tr>
<tr><td></td><td>1) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᔅᓯᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᐱᖃᓯᐅᔾᔨᓗᑎ ᓇᓗᓇᐃᔭᖅᓯᒪᑦᑎᐊᖅᑐᓂᑦ ᖃᐅᔨᓴᓂᕐᒧᑦ ᖃᐅᔨᓴᖅᑕᓂᕐᒧᑦ ᐸᕐᓇᐅᑎᖓᓂᑦ AEMᕝᑯᓐᓂᑦ ᖃᐅᔨᓴᕈᓐᓇᖅᑎᑦᑎᔪᒥᑦ ᐃᖅᑲᓗᐃᑦ ᐃᖅᑲᓗᓕᐅᖅᑲᑦᑕᖅᓂᖏᓐᓄᑦ ᐊᓯᔾᔨᓂᐊᖅᑎᓪᓗᒋᑦ ᑕᓯᕐᒥᑦ oligotrophic ᑕᓯᕐᒥᑦ ᑎᑭᓪᓗᒍ eutrophic ᑕᓯᕐᒧᑦ ᐊᒻᒪ ᐅᑎᒧᒃᑲᓐᓂᖅ.
2) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᔅᓯᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᑐᑭᓯᒋᐊᕈᑎᖃᖅᑎᑎᒃᑲᓂᕐᓗᑎ ᐅᖃᐅᒥᖃᖅᑐᓂᑦ ᓂᕆᕝᕕᐅᕙᑦᑐᓂᑦ ᑕᓯᕐᓂᑦ ᐊᓯᔾᔨᖅᑐᓂᑦ, ᖃᓄᐃᑦᑐᑦ ᓂᕆᔭᔅᓴᐅᔪᑦ ᖁᕝᕙᓯᒃᑲᓂᐊᖅᑐᒋᔭᐅᕙᑦ ᐊᒻᒪ ᖃᓄᖅ ᑕᒪᓐᓇ ᖁᕝᕙᓇᐊᖅᑎᑦᑎᓂᐊᕐᒪᖔᑦ ᐃᖅᑲᓗᓕᐅᖅᑲᑦᑕᐅᕙᑦᑐᑦ ᑐᓐᖓᓂᖅᑐᑎ ᐊᑐᖅᑕᐅᔪᒥ Whale Tail ᐱᓕᕆᐊᒧᑦ ᐱᓗᐊᖅᑐᒥᑦ.
3) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᔅᓯᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᓇᓗᓇᐃᖅᓯᓗᑎ ᐊᑯᓂᐅᓂᖓᓂᑦ ᐃᒪᕈᖅᑎᑕᐅᓂᖓ ᓇᓗᓇᐃᖅᓯᒪᖏᒻᒪᑦ ᐱᒋᐊᖅᓯᒪᒻᒪᖔᖅ ᓯᒥᑦᑕᐅᓯᒪᔪᒥᑦ ᓴᓇᔭᐅᓂᖓᓄᑦ (2019) ᐊᒻᒪ ᑲᔪᓯᓪᓗᓂ ᒪᑐᓂᖓᓄᑦ (2022) ᑭᓪᓕᖅᑲᖅᑎᑕᐅᓗᓂᓘᓐᓃᑦ ᐊᕐᕌᒎᓐᓄᒃ ᒪᕐᕉᓐᓄᒃ; ᐊᒻᒪ ᖃᑦᑎᑦ ᐊᕐᕌᒍᓂᐊᖅᑐᑦ ᓂᕆᔭᔅᓴᖃᕈᓐᓇᖅᓯᓗᓂ ᓂᕆᐅᒋᔭᐅᓂᖓ, ᐃᒪᐃᔭᖅᑕᐅᓂᖓ ᐱᒋᐊᓕᖅᑎᓪᓗᒍ ᑕᐃᒪᐃᓐᓂᖓᓄᑦ ᐅᑎᖅᑐᑦ oligotrophic ᖃᓄᐃᓐᓂᕆᔭᖓᓄᑦ.</td></tr>
</table>

<table>
<tr><td></td><td>4) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᖃᐅᔨᓴᒃᑲᓂᕐᓗᑎ ᐃᒧᒪᒋᔭᐅᕙᓂᑦ ᐱᖕᒋᑎᑦᑎᕚᒥᕙᓐᓇᖅᑐᒥ ᐸᕐᓇᐅᒪᒥᑦ ᐲᖅᑕᐅᓗᑎ ᖁᕝᕙᕆᐊᕈᓐᓇᖅᑐᑦ ᐊᑦᑐᐊᓂᓖᑦ ᐃᒻᒪᑦᑕᐅᓂᖓᓄᑦ.
5) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᕿᒥᕐᕈᑎ ᐊᒻᒪ ᖃᐅᔨᒋᐊᖅᕕᖃᕐᓗᑎ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᓐᓂᑦ. 2016. ᕿᒥᕐᕈᓂᖅ ᓇᕙᖅᑕᐅᕙᑦᑐᓂᑦ ᖃᐅᔨᓴᓂᕐᒧᑦ ᒪᓕᑦᑕᐅᔭᕆᐊᖨᑦ (HEP) ᑐᓴᕈᑎᖕᒋᑦ ᐊᒻᒪ ᖃᓄᐃᓐᓂᕆᔭᖕᒋᑦ Meadowbank Gold Mine ᐱᓕᕆᐊᒧᑦ. DFO Can. Sci. Advis. Sec. Sci. Resp. 2016/038 ᖃᐅᔨᓴᐃᓂᖃᒃᑲᓂᖅᑎᓪᓗᒋᑦ ᐃᓱᒪᒋᔭᐅᕙᑦ ᐸᕐᓇᐅᑎᒥᑦ ᒪᓕᓐᓂᖃᕋᓗᐊᕐᒪᖔᑦ ᓄᑖᖑᓛᖑᕙᓂᑦ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᓐᓂᑦ ᐅᖃᐅᔾᔨᒋᐊᕈᑏᑦ.</td></tr>
<tr><td colspan="2">ᐃᒥᑦᑎᐊᕙᐃᑦ ᐊᕙᑎᖓ – ᖃᐅᔨᓴᕐᓂᖅ ᐊᒻᒪ ᖃᐅᔨᒋᐊᒃᑲᓐᓂᖅᑕᕐᓂᖅ</td></tr>
<tr><td></td><td>1) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᕋᖅᑐᑦ ᑖᒃᑯᐊ AEM–ᑯᑦ ᐱᑕᖅᑎᑦᑎᓗᑎ ᐃᓛᒃᑰᖅᑐᒥ ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᖃᐅᔨᓴᓂᕐᒧᑦ ᐸᕐᓇᐅᒪᒥᑦ Whale Tail Pit ᐱᓕᕆᐊᒧᑦ. Meadowbank HCMP ᐊᖏᖅᑕᐅᕝᔪᖏᑦᑐᖅ Whale Tail ᐱᓕᕆᐊᒧᑦ.
2) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᐅᔾᔨᕈᓯᑎᐊᕐᓗᑎ ᒪᓕᓐᓂᖃᕐᓗᑎ ᒫᓇᕋᑖᕿᕙᓂᑦ ᐅᖃᔾᔨᒋᐊᕈᑎᓂᑦ ᐱᔾᕙᑎᖃᖅᑐᓂᑦ ᖄᖅᑎᑦᑎᓂᕐᒧᑦ ᐋᖅᑭᒋᐊᖅᑕᐅᑲᓐᓂᕐᓂᖓᓄᑦ ᖄᖅᑎᑦᑎᖃᑦᑕᓂᕐᒧᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐸᕐᓇᐅᑎᓂᑦ (ᓲᕐᓗ. Cott and Hanna 2005).</td></tr>
<tr><td colspan="2">ᖃᐅᔨᓴᕐᓂᒧᑦ, ᐱᐅᓯᑎᑦᑎᒋᐊᓂᕐᒧᑦ ᐊᒻᒪ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐸᕐᓇᐅᑏᑦ – ᐃᓱᒪᒋᔭᐅᕙᑦ ᐊᓯᐊᔫᖅᑎᑦᑎᓂᒃᑯᑦ ᐸᕐᓇᐅᑦ</td></tr>
<tr><td></td><td>1) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᐊᔾᔨᓐᖑᐊᖅᑲᖅᑎᑦᑎᓗᑎ ᕗᓂᒥᑦ ᑐᑭᓯᔭᐅᓂᐊᕐᓗᑎ ᐃᒪᖓ ᖁᕝᕙᓯᓂᖕᒋᑦ ᐊᒻᒪ ᑲᑎᙵᓂᖕᒋᑦ ᐃᒪᐅᕙᓂᑦ
2) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᐊᔾᔨᓐᖑᐊᖅᑲᖅᑎᑦᑎᓗᑎ 2007–ᒥᑦ ᐊᕐᕌᒍᒋᒐᕙᖅᑕᑦᑕᖅᑕᖏᓐᓂᑦ ᖁᓕᐊᓕᖅᑐᓂᑦ ᐊᕐᕌᒍᓂᑦ.
3) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᓇᓗᓇᐃᖅᓯᑲᓐᓂᖅᑐᑦ ᑐᓴᕋᐅᑎᑦᑎᓐᓂᑦ ᐊᔾᔨᓐᖑᐊᓂᑦ Mammoth Lake–ᒥᑦ ᑕᕝᕙᓂᒃᓴᐃᓐᓇᖅ ᑕᖅᑭᖓᓂ ᐊᒻᒪ ᐊᕐᕌᒍᖓᓂᑦ.</td></tr>
<tr><td colspan="2">ᖃᐅᔨᓴᕐᓂᒧᑦ, ᐱᐅᓯᑎᑦᑎᒋᐊᓂᕐᒧᑦ ᐊᒻᒪ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐸᕐᓇᐅᑏᑦ – ᐅᒥᐊᕐᕙᐊᓕᕆᓂᕐᒧᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐸᕐᓇᐅᑦ</td></tr>
<tr><td></td><td>1) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᐱᖃᓯᐅᔾᔨᓗᑎ ᖁᓛᓃᑦᑐᑦ ᑎᑎᕋᖅᓯᒪᕙᑦ ᐱᐅᓯᑎᑦᑎᒋᐊᓂᕐᒧᑦ ᐸᕐᓇᐅᑎᖕᒋᓐᓅᖅᑕᐅᓗᑎ ᐱᔾᕙᑎᖃᖅᑐᓂᑦ ᐃᒪᕐᒥᐅᑕᓂᑦ ᐆᒪᕙᓂᑦ ᐊᒻᒪ ᐅᒥᐊᕐᕙᐊᓕᕆᓂᕐᒧᑦ.</td></tr>
<tr><td colspan="2">ᖃᐅᔨᓴᕐᓂᒧᑦ, ᐱᐅᓯᑎᑦᑎᒋᐊᓂᕐᒧᑦ ᐊᒻᒪ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐸᕐᓇᐅᑏᑦ – ᐃᒥᐅᑉ ᐱᐅᓂᖓᓂᑦ ᐊᒻᒪ ᑰᓐᓂᖓᓂᑦ ᖃᐅᔨᓴᕐᓂᖅ</td></tr>
<tr><td></td><td>1) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᖃᐅᔨᓴᐃᒃᑲᓂᕐᓗᑎ ᐊᕐᕌᒍᑕᒫᑦ ᑐᓴᖅᑎᑦᑎᖃᑦᑕᕐᓂᖕᒋᓐᓄᑦ ᐱᑕᖃᓐᖏᒃᑲᓄᑦ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᓐᓄᑦ ᑖᒃᑯᐊ AEM ᐃᖅᑲᓇᐃᔭᖅᑎᓕᒫᖏᑦ ᖃᐅᔨᒪᓗᑎ ᓴᖅᑭᑦᑕᖅᑐᑦ ᐊᑦᑐᐃᓂᓖᑦ ᐃᖃᓗᓐᓂᑦ ᐊᒻᒪ ᓇᕙᖅᑕᖅᑕᖏᓐᓂᑦ ᑐᓴᖅᑎᑦᑎᒍᑕᐅᑦᑕᐅᑎᒋᒋᐊᓖᑦ ᐊᒻᒪ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᓄᑦᑕᐅᑎᒋ.
2) ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᕋᖅᑐᑦ AEM–ᑯᓐᓂᑦ ᐋᖅᑭᓯᓗᑎ ᖃᐅᔨᓴᕝᕕᒥᑦ Mammoth Lake–ᒥ, ᐃᓚᓯᓗᑎ ᖃᐅᔨᓴᐅᒥᑦ ᐃᓚᖓᓄᑦ Whale Tail ᐅᐊᓐᓇᖓᓂ ᐃᒪᖓᓂ ᐊᒻᒪᓗᑦᑕᐅᖅ ᓂᒋᖓᓂ, ᐊᒻᒪ ᒪᕐᕉᓐᓂᒃ ᑕᓲᓐᓂᒃ ᖃᐅᔨᓴᕐᓂᖃᕐᓗᑎ ᓇᓗᓇᐃᖅᑕᐅᓯᒪᕙᓂᑦ.</td></tr>
</table>

6.0 RÉSUMÉ DES DEMANDES

Environnement d'eau douce - Pertes d'habitat	
	7) Le MPO demande à Agnico Eagle d'inclure les espèces des grandes profondeurs dans leurs calculs de pertes. 8) Le MPO demande à Agnico Eagle de mieux illustrer la surface accrue envisagée du lac Whale Tail et sa viabilité en tant qu'habitat littoral nouvellement créé. 9) Le MPO demande à Agnico Eagle de lui fournir de plus amples détails sur la façon dont elle entend évaluer la possibilité de brassage ou d'absence de brassage dans la partie de la fosse Whale Tail, puisque les données adoptées du programme de surveillance CREMP et du Plan de surveillance de la qualité de l'eau de Meadowbank ne semblent pas suffire pour permettre une telle évaluation. Si Agnico Eagle n'est pas en mesure de faire la démonstration d'une qualité adéquate de l'eau et d'un habitat convenable pour le poisson en phase post-fermeture, elle devrait alors prévoir des options de compensation éventuelles à mettre en œuvre en dehors du bassin du lac Whale Tail et les communiquer au MPO . 10) Le MPO demande à Agnico Eagle de lui fournir de plus amples renseignements à jour concernant l'évaluation de scénarios portant sur la création d'un lac dit de « kettle », accompagné de références pour répondre aux préoccupations précitées concernant le scénario de la création d'un lac dans l'excavation. Agnico Eagle a fait mention du document de Gammons et coll. 2009 qui évalue la mine d'or de Colomac (T.N.-O.) Plusieurs autres documents ont vu le jour depuis, dont des rapports de surveillance qui pourraient nous permettre de profiter des leçons du passé. Ces renseignements aideraient le MPO à effectuer ses examens ultérieurs en vue de l'établissement de rapports de surveillance et de plans de compensation conceptuels. En plus des données de surveillance disponibles pour la mine d'or de Colomac (comme les rapports annuels faisant état du programme du réseau de surveillance de la mine de Colomac et du programme d'élimination naturelle amélioré) le MPO fournit également les documents suivants à Agnico Eagle pour faciliter le processus d'évaluation : Pieters, R., Coedy, W., Ashley K.I., et Lawrence, G.A. 2015. Circulation artificielle de l'eau d'un lac à fosse minière. Revue canadienne de génie civil 42:33-43 et Pieters, R. & Lawrence, G.A. 2014. Procédés physiques et conditions méromictiques des lacs de kettle sujets à une couverture de glace. Revue canadienne de génie civil 41: 569-578. 11) Le MPO demande à Agnico Eagle de clarifier et de corriger toute anomalie concernant les critères de profondeur. 12) Un habitat approprié doit exister pour soutenir toutes les étapes du cycle biologique dans le bassin sud, car il s'agit là d'un facteur essentiel pour présumer que le poisson puisse recoloniser les zones asséchées par les digues à l'intérieur du bassin nord du lac Whale Tail. Aucune étude n'a été effectuée pour déterminer à quel endroit précis les poissons frayaient; on suppose qu'ils frayent sur toute combinaison propice de substrat et de profondeur de l'eau. Comme ce fut le cas pour l'évaluation de la qualité de l'eau, il faudrait étudier plus attentivement la possibilité d'inonder la zone pour libérer les matières organiques et les nutriments dans l'eau du lac Whale Tail et ses tributaires. Si la qualité de l'habitat de frai était réduite, le rétablissement de la population piscicole à la suite de la fermeture pourrait être compromis. Le rétablissement rapide prévu de la population piscicole dans le bassin nord du lac Whale Tail présuppose que la croissance de ladite population est tributaire de la densité. Dans un environnement arctique, les facteurs non reliés à la densité peuvent s'avérer plus importants , ce qui suppose que le temps de rétablissement puisse être plus long. Le MPO demande à Agnico Eagle d'effectuer une évaluation approfondie de ces pertes en actualisant le plan de compensation conceptuel.

Environnement d'eau douce – Pêche-sur-place	
	4) Le MPO demande à Agnico Eagle d’utiliser le formulaire (Excel) qui lui a été fourni pour le lac Phaser et de veiller à ce que tous les paramètres exigés y figurent. 5) Le MPO demande à Agnico Eagle de corriger la ou les erreurs donnant le lac Wally comme référence puisque ce programme de pêche-sur-place est pour le projet Whale Tail et non pas pour Meadowbank. 6) Le MPO demande à Agnico Eagle de produire une évaluation du poisson devant être retiré du bassin nord du lac Whale Tail.
Environnement d'eau douce - Composantes valorisées	
	2) Le MPO réitère sa demande initiale voulant que Agnico Eagle réévalue ses hypothèses de composantes de pêcherie valorisées de façon à ce qu’elles comprennent <u>toutes les espèces de poissons</u> pouvant être présentes dans la zone du projet.
Environnement d'eau douce - Altération de l'habitat	
	2) Le MPO demande à Agnico Eagle de produire des données décrivant les pertes précitées et de traiter de la mobilisation des sédiments et possiblement du mercure dans la prochaine version du plan de compensation conceptuel. Dans leur réponse à une demande de renseignements, Agnico Eagle a accepté de fournir les renseignements demandés quant aux pertes d'habitat dans la version finale du plan de compensation. Toutefois, Agnico Eagle n'a pas confirmé la perte de 24 hectares attribuable aux plans d’eau touchés, ni la mobilisation et la persistance du mercure ayant une incidence sur la pêche en phase post-fermeture.
Environnement d'eau douce - Changements de la productivité des écosystèmes du lac	
	6) Le MPO demande à Agnico Eagle d’inclure une étude technique détaillée dans son plan de surveillance pour qu’elle puisse évaluer la productivité des poissons lorsqu’un lac passe d’un état oligotrophe à un état eutrophe puis, de nouveau, à un état oligotrophe. 7) Le MPO demande à Agnico Eagle de lui fournir d'autres renseignements sur les changements trophiques du lac, sur les niveaux de nutriments susceptibles d’augmenter et sur ce qui en découlera comme augmentation de la productivité des poissons à partir d’une modélisation plus précisément pour le projet Whale Tail. 8) Le MPO demande des clarifications à Agnico Eagle sur la durée de la phase d'inondation puisqu’on ne sait pas précisément si elle commence au moment de la construction de la digue (en 2019) pour se poursuivre jusqu’à la fermeture (en 2022) ou si elle sera limitée à 2 ans; par ailleurs, quel est le nombre d'années prévu pour un état eutrophique stable à partir du début de la phase d'assèchement représentant un retour à l'état oligotrophique.

	9) Le MPO demande à Agnico Eagle de réévaluer le plan de compensation conceptuel de manière à en exclure les gains potentiels reliés aux activités d'inondation. 10) Le MPO demande à Agnico Eagle d'effectuer l'examen et le référencement des documents du MPO. 2016. Examen des paramètres et des résultats du modèle de la procédure d'évaluation de l'habitat (PEH) pour le projet de la mine d'or de Meadowbank SCCS du MPO Rép. sci. 2016/038 lors de la réévaluation du plan de compensation conceptuel pour s'assurer qu'il est conforme à la formulation d'avis la plus récente du MPO.
Environnement d'eau douce - Surveillance et suivi	
	3) Le MPO demande à Agnico Eagle de lui fournir séparément un plan de compensation et de surveillance pour le projet de la fosse Whale Tail. Le programme HCMP utilisé pour Meadowbank ne sera pas accepté pour le projet Whale Tail. 4) Le MPO demande à Agnico Eagle de veiller à suivre la formulation d'avis la plus récente concernant l'utilisation d'explosifs pour la révision ultérieure des plans de gestion des explosifs (par exemple, Cott et Hanna 2005).
Plans pour la surveillance, l'atténuation et la gestion - Plan de compensation conceptuel	
	4) Le MPO demande à Agnico Eagle de lui fournir les résultats des travaux d'imagerie de juin pour permettre de mieux comprendre les niveaux d'eau élevés et les liens entre les plans d'eau. 5) Le MPO demande à Agnico Eagle de lui fournir les résultats des travaux d'imagerie de 2007, cette année devant servir de moyenne pour la dernière décennie. 6) Le MPO réitère ses demandes de travaux d'imagerie effectués au lac Mammoth pour le même mois et la même année.
Plans pour la surveillance, l'atténuation et la gestion - Plan de gestion des activités d'expédition	
	2) Le MPO demande à Agnico Eagle d'incorporer les mesures d'atténuation énumérées ci-dessus à leurs plans portant sur les mammifères marins et les activités d'expédition.
Plans pour la surveillance, l'atténuation et la gestion - Plan de surveillance de la qualité et du débit d'eau	
	3) Le MPO demande à Agnico Eagle de réévaluer ses critères d'établissement de rapport annuel avec la participation du MPO pour s'assurer que tout le personnel d'Agnico Eagle est sensibilisé à la nécessité de signaler sans tarder les cas ayant une incidence sur le poisson et son habitat, et ce, immédiatement et directement auprès du MPO. 4) Le MPO demande à Agnico Eagle de placer une station de surveillance au lac Mammoth, d'ajoute une station dans la partie de la fosse du bassin nord de Whale Tail ainsi que dans le bassin sud, et d'identifier au moins 2 stations de surveillance pour la régulation.