

The logo features a stylized green maple leaf in the background. Overlaid on the leaf is a red Canadian maple leaf. Above the leaves, the Inuktitut phrase "ᓃᐅᑦ ᐱᕋᑎᑦᐸᐅᑦ ᐆᑎᐭᐸᑦ" is written in black. Below the leaves, the acronym "NIRB" is displayed in large, bold, black letters. Underneath "NIRB", the words "NUNAVUT IMPACT REVIEW DART" are written in smaller black capital letters. At the bottom, the full name "NUNAVUMI AVATILIKIYIN KATIMAYIN" is written in black capital letters.

In carrying out its functions, the primary objectives of NIRB shall be at all times to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area, and to protect the ecosystemic integrity of the Nunavut Settlement Area. NIRB shall take into account the well-being of residents of Canada outside the Nunavut Settlement Area.

Nunavut Impact Review Board
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29 Mitik Street
Cambridge Bay, NU X0B 0C0
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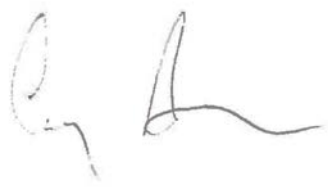

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SIGNATURE PAGE



Photo 1: Board Members: (from left) Marjorie Kaviq Kaluraq, Elizabeth Copland, Guy Alikut

THIS REPORT IS SUBMITTED TO THE HONOURABLE CAROLYN BENNETT, MINISTER OF INDIGENOUS AND NORTHERN AFFAIRS
BY THE NUNAVUT IMPACT REVIEW BOARD ON THIS 18TH DAY OF APRIL 2016.

	
Elizabeth Copland, Chairperson	Guy Alikut, Board Member
	
Kaviq Kaluraq, Board Member	

COVER LETTER



NIRB File No.: 03MN107

April 18, 2016

The Honourable Carolyn Bennett
Minister of Indigenous and Northern Affairs
10 Wellington, 21st Floor
Gatineau, QC K1A 0H4

Sent via email and courier: carolyn.bennet@canada.ca; minister@aadnc-aandc.gc.ca;
infopubs@aadnc-aandc.gc.ca

Re: Public Hearing Report for Agnico Eagle Mines Ltd.'s Addendum to the Final Environmental Impact Statement (FEIS) submission of the Vault Pit Expansion Project Proposal

Dear Ms. Carolyn Bennett;

As required under Section 12.8.3 of the *Nunavut Land Claims Agreement* (NLCA) please find enclosed the Public Hearing Report from the Nunavut Impact Review Board (NIRB or Board) with respect to Agnico Eagle Mines Ltd.'s (AEM or Proponent) Vault Pit Expansion Project proposal, NIRB File No.: 03MN107. The enclosed Public Hearing Report contains the NIRB's assessment of the potential ecosystemic and socio-economic effects for the Vault Pit Expansion Project proposal and concludes that the Project should proceed. Having concluded that the Project should be allowed to proceed, the NIRB has also provided recommended revised and additional terms and conditions of Project Certificate No. 004 consistent with the objectives set out in Section 12.2.5 of the NLCA and as outlined in the attached Report.

Translated versions of the Public Hearing Report are being prepared in Inuktitut and French and will be made publically available as soon as possible. Please contact the undersigned in writing if you have any questions regarding this matter.

Sincerely,



Elizabeth Copland
Chairperson
Nunavut Impact Review Board

cc: The Honourable Hunter Tootoo, Minister of Fisheries and Oceans, GOC and MP for Nunavut
 The Honourable Jim Carr, Minister of Natural Resources, GOC
 The Honourable Marc Garneau, Minister of Transport, GOC
 The Honourable Peter Taptuna, Premier, Nunavut
 Cathy Towtongie, President, Nunavut Tunngavik Incorporated
 David Ningeonnan, President, Kivalliq Inuit Association
 Thomas Kabloona, Chairperson, Nunavut Water Board
 Stéphane Robert, Agnico Eagle Mines Ltd.
 Ryan Vanengen, Agnico Eagle Mines Ltd.
 Meadowbank Distribution List

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Ekland

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Elizabeth Copland

Présidente

Commission du Nunavut chargée de l'examen des répercussions

C. c. : L'honorable Hunter Tootoo, ministre des Pêches, des Océans et de la Garde côtière canadienne, GC et député du Nunavut
L'honorable Jim Carr, ministre des Ressources naturelles, GC
L'honorable Marc Garneau, ministre des Transports, GC
L'honorable Peter Taptuna, premier ministre, Nunavut
Mme Cathy Towtongie, présidente, Nunavut Tunngavik Incorporated
David Ningeonan, Président, Association inuite régionale
Thomas Kabloona, Président, Office des eaux du Nunavut
Stéphane Robert, Mines Agnico Eagle Limitée
Ryan Vanengen, Mines Agnico Eagle Limitée
Liste de distribution de Meadowbank

CHAIRPERSON'S FOREWARD

This report has been prepared by the Nunavut Impact Review Board (NIRB or Board) for the review and consideration of the Minister of Indigenous and Northern Affairs (the Minister) as set out under Article 12, Sections 12.8.2 and 12.8.3 of the Nunavut Land Claims Agreement (NLCA). The report summarizes the results of the Board's assessment of the Vault Pit Expansion Project proposal submitted by Agnico Eagle Mines Ltd. (AEM or the Proponent) in July 2014. After soliciting comments, the Board determined that the Vault Pit Expansion Project was an amendment to the Meadowbank Gold Mine Project as originally assessed by the Board in 2005 to 2006 which was authorized to proceed by the Board and the Minister pursuant to the terms and conditions established under Project Certificate No. 004. The proposed activities for the Vault Pit Expansion Project would involve changes to the original Meadowbank Gold Mine Project with respect to the projected mine life, potential changes to the scale and scope of impacts to Phaser Lake and associated changes to the overall site reclamation plans.

The Board conducted an assessment of the Vault Pit Expansion Project and reconsideration of the relevant terms and conditions of Project Certificate No. 004 under the Board's authority in Article 12, Part 8, Sections 12.8.2(b) and 12.8.3 of the Nunavut Land Claims Agreement (NLCA). This report summarizes the outcome of the Board's assessment of the Vault Pit Expansion Project proposal and the Board's reconsideration of whether, reflecting the changes to the original Meadowbank Gold Mine Project and the assessment of effects, it was necessary for the Board to reconsider specific terms and conditions of Project Certificate No. 004.

In determining whether the Vault Pit Expansion Project should be allowed to proceed, and if so, whether changes to the terms and conditions of NIRB Project Certificate No. 004 for the Meadowbank Gold Mine Project, NIRB File No.: 03MN107 are required, the Board provided, over an approximately sixteen month period, several opportunities for interested parties, including regulatory agencies and other intervenors, Designated Inuit Organizations and members of the public to provide technical review comments, general comments, ask questions and express concerns about the amendment proposed by AEM. The Board's assessment and reconsideration process concluded with a Public Hearing in Baker Lake on March 2 and 3, 2016. During the Public Hearing, the NIRB received information from more than 20 people, including Elders, parties, intervenors, representatives from the communities of Chesterfield Inlet and Baker Lake (the affected communities) and members of the public who all shared their knowledge, experiences and concerns.

Throughout this process, the NIRB heard from Intervenors that there were no outstanding technical issues or concerns with the proposed Addendum as long as AEM followed the mitigation measures described within the FEIS and within the Addendum. At the Public Hearing, members of the potentially affected communities had questions about topics such as the fishout program, dewatering techniques, dust and dust mitigation measures along the all-weather access road and concerns with respect to the potential for the Vault Pit Expansion to further impact traditional use, access to hunting areas and traditional hunting trail(s).

While the NIRB understands and shares the caution expressed by participants about the potential effects of the Vault Pit Expansion Project proposal, the Board has concluded that if undertaken in accordance with the Board's recommended limits and mitigation measures (as expressed in revised terms and conditions to the existing Project Certificate), the Vault Pit Expansion proposal can proceed in a manner that will protect and promote the existing and future well-being of the residents and

communities of the Nunavut Settlement Area, and protect the ecosystemic integrity of the Nunavut Settlement Area. In coming to this conclusion, the Board has considered the written material filed by the parties and members of the public on the record, oral and written technical review comments received by the Board in advance of the Public Hearing and the information and views expressed by the people participating at the Public Hearing.

As always, the NIRB is very grateful to all who participated in this reconsideration, including Agnico Eagle Mines Ltd., various federal, territorial and local government representatives, the Kivalliq Inuit Association, Elders, community representatives and members of the public; your contributions provided the foundation for the Board's decision-making and the Board quite simply could not do our work without this involvement.

Sincerely,

A handwritten signature in dark ink, appearing to read 'E. Copland', is positioned above a solid horizontal line.

Elizabeth Copland
Chairperson
Nunavut Impact Review Board

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AVANT-PROPOS DE LA PRÉSIDENTE

Ce rapport a été préparé par la Commission du Nunavut chargée de l'examen des répercussions (CNER ou la Commission) aux fins d'examen et de considération par la ministre des Affaires autochtones et du Nord (la ministre), conformément au chapitre 12, articles 12.8.2 et 12.8.3 de l'Accord sur les revendications territoriales du Nunavut (ARTN). Le rapport résume les résultats de l'évaluation de la Commission en ce qui a trait à la proposition de projet d'expansion du gisement Vault soumise par Mines Agnico Eagle Limitée (AEM ou le promoteur du projet) en juillet 2014. Après avoir sollicité des commentaires, la Commission a déterminé que le projet d'expansion du gisement Vault était une modification au projet de mine d'or de Meadowbank initialement évalué par la Commission en 2005 et 2006, et dont la réalisation avait été autorisée par la Commission et la ministre conformément aux conditions établies en vertu du certificat de projet n° 004. Les activités proposées dans le cadre du projet d'expansion du gisement Vault entraîneraient des modifications au projet de la mine d'or de Meadowbank initial en ce qui concerne la durée de vie de la mine projetée, des changements éventuels à l'ampleur et à la portée des répercussions sur Phaser Lake et des changements associés aux plans d'ensemble de remise en état du site.

La Commission a procédé à une évaluation du projet d'expansion du gisement Vault et à un réexamen des conditions du certificat de projet n° 004 pertinentes sous l'autorité accordée à la Commission en vertu du chapitre 12, partie 8, paragraphe 12.8.2 (b) et article 12.8.3 de l'Accord sur les revendications territoriales du Nunavut (ARTN). Ce rapport résume les résultats de l'évaluation faite par la Commission de la proposition de projet d'expansion du gisement Vault et du réexamen effectué par la Commission en vue de déterminer, compte tenu des changements apportés au projet de la mine d'or de Meadowbank initial et de l'évaluation des répercussions, s'il était nécessaire que la Commission réexamine les conditions particulières du certificat de projet n° 004.

Pour déterminer si la réalisation du projet d'expansion du gisement Vault devrait être autorisée, et si oui, si des modifications aux conditions du certificat de projet n° 004 de la CNER relatif au projet de la mine d'or de Meadowbank, n° de dossier CNER : 03MN107, sont nécessaires, la Commission a fourni, sur une période d'environ seize mois, plusieurs occasions aux parties intéressées, y compris les organismes de réglementation et autres intervenants, les organisations inuites désignées (OID) et les membres du public, de faire part de leurs avis techniques et observations générales, de poser des questions et d'exprimer leurs préoccupations au sujet de la modification proposée par AEM. Le processus d'évaluation et de réexamen de la Commission a conclu avec une audience publique tenue à Baker Lake, les 2 et 3 mars 2016. Au cours de l'audience publique, la CNER a reçu des informations de plus de 20 personnes, y compris des aînés, des parties, des intervenants, des représentants des collectivités de Chesterfield Inlet et de Baker Lake (les collectivités affectées) et des membres du public qui ont tous partagé leurs connaissances, expériences et préoccupations.

Tout au long de ce processus, des intervenants ont indiqué à la CNER qu'il n'y avait pas de problèmes techniques en suspens ou de préoccupations concernant l'addenda proposé pour autant qu'AEM ait suivi les mesures d'atténuation décrites dans l'EIEF et dans l'addenda. À l'audience publique, les membres des collectivités potentiellement affectées avaient des questions sur des sujets tels que le programme de pêche-sur-place, les techniques d'exhaure, la poussière et les mesures d'atténuation de la poussière le long de la route d'accès praticable en tout temps, ainsi que des préoccupations quant à la possibilité que l'expansion du gisement Vault entraîne d'autres répercussions sur l'utilisation traditionnelle des zones et des sentiers de chasse et leur accès.

Bien que la CNER comprenne et partage les réticences exprimées par les participants au sujet des possibles répercussions de la proposition d'expansion du gisement Vault, la Commission arrive à la conclusion que, si ce projet est réalisé conformément aux limites et mesures d'atténuation recommandées par la Commission telles que stipulées dans les conditions révisées du Certificat de projet actuel, la proposition d'expansion du gisement Vault peut se faire de manière à protéger et promouvoir le bien-être actuel et futur des résidents et des collectivités de la région du Nunavut et protéger l'intégrité écosystémique de la région du Nunavut. Pour en arriver à cette conclusion, la Commission a étudié les documents écrits soumis officiellement au dossier par les parties et les membres du public, les commentaires oraux et écrits sur les évaluations techniques reçus par la Commission avant les audiences publiques ainsi que les renseignements et les opinions exprimés par les participants dans le cadre de l'audience publique.

Comme toujours, la CNER est très reconnaissante envers tous ceux et celles qui ont participé à ce réexamen, notamment Mines Agnico Eagle Limitée, divers représentants des gouvernements fédéral, territoriaux et locaux, l'association inuite régionale, les aînés, les représentants de la collectivité et les membres du public; vos contributions ont servi de base pour la prise de décision de la Commission, et sans cette participation, nous ne pourrions tout simplement pas faire notre travail.

Veillez agréer, Madame la Ministre, l'expression de ma considération distinguée.



Elizabeth Copland
Présidente
Commission du Nunavut chargée de l'examen des répercussions

EXECUTIVE SUMMARY

This report and recommendations are the culmination of the Nunavut Impact Review Board's (NIRB or Board) review of the potential ecosystemic and socio-economic effects of the proposed Addendum to the Meadowbank Gold Mine Project Final Environmental Impact Statement submission for the Vault Pit Expansion Project, proposed by Agnico Eagle Mines Ltd. (AEM or the Proponent). The scope of the original Meadowbank Gold Mine Project included the construction, operation and eventual reclamation of an open pit gold mine located 70 kilometres (km) north of the Hamlet of Baker Lake on Inuit-owned surface lands; associated infrastructure for the extraction, transportation and shipment of gold from three (3) deposits [Portage Pit, Goose Pit and Vault Pit]; the construction of ancillary Project infrastructure located approximately 2 km east of the Hamlet of Baker Lake that consisted of a barge unloading facility, a laydown storage and marshalling area, a 60 million litre (ML) fuel tank farm; and the construction of a 110 km all-weather private access road linking the ancillary Project infrastructure with the Meadowbank mine site. In the NIRB's 2006 report, the Board concluded that if the original Meadowbank Gold Mine Project proposal was developed in accordance with the Board's recommended 86 terms and conditions, the project could proceed to the regulatory phase. Subsequently in November 2006 the then-Minister of Indian and Northern Affairs Canada (now Indigenous and Northern Affairs Canada) accepted the Board's report and recommendations and directed the Board to issue a project certificate for the Meadowbank Gold Mine Project proposal. On December 30, 2006, the Board issued Project Certificate No. 004 for the Meadowbank Gold Mine Project.

On July 28, 2014 AEM wrote to the Board to advise that due to economic reasons AEM was proposing changes to the Meadowbank Gold Mine Project to expand the Vault Pit operations into Phaser Lake and noting that this could result in changes to specific terms and conditions within Project Certificate No. 004.

After soliciting comments from parties regarding whether it was appropriate for the Board to conduct an assessment of the proposed changes to activities and undertakings under Article 12, Section 12.8.2 of the Nunavut Land Claims Agreement (NLCA) and to reconsider the terms and conditions of the existing Project Certificate [No. 004] in light of the proposed changes, the NIRB announced that the Vault Pit Expansion Project proposal warranted further assessment and reconsideration by the NIRB, and requested that AEM prepare a comprehensive addendum to the Final Environmental Impact Statement submitted in support of the NIRB's Review of the Meadowbank Gold Project in 2005 to 2006 (FEIS Addendum).

Under AEM's changed plans as described in the FEIS Addendum received by the Board on July 24, 2015, AEM proposed to include the following *additional* activities and undertakings to expand the current Vault Pit operations into Phaser Lake:

- Expansion of Vault Pit into Phaser Lake to develop Phaser Pit and BB Phaser Pit. Small open pits would extend from the perimeter of Vault Pit to the southwest into Phaser Lake;
- Dewatering and fishout of Phaser Lake;
- Offsetting of loss of fish habitat in Phaser Lake;
- Construction and operation of additional haul roads connecting the new pits to Vault Pit infrastructure;
- Use of existing Meadowbank mill and water supply for ore processing;
- Use of existing Vault Waste Rock Facility for waste rock storage;

- Use of existing tailings storage facility, infrastructure at Meadowbank Mine site and the Vault haul road;
- Development of Phaser and BB Phaser pits to increase mine activities by 30 days. AEM considers this to be within the scope of the original project as permitted and assessed in the FEIS (within the 8-10 years of operation life);
- The additional water diversion and water management in the Vault area would extend the operation of the mine by an additional 30 days; and
- Re-flooding of Phaser Pit once mining has been completed.

AEM noted that no changes to the closure plans have been anticipated, including the re-flooding of the Vault Pit as originally proposed within the FEIS for the Meadowbank Project and the closure involved for the Vault waste rock storage area.

Although there are no mandatory process requirements for the Board's assessment and reconsideration set out under the Section 12.8.2 of the NLCA, the NIRB determined that a full and thorough technical review of the FEIS Addendum would be required and that the Board would also require a Public Hearing in the community most likely to be directly affected by the revised activities and undertakings, namely Baker Lake, Nunavut.

Throughout the NIRB's assessment and reconsideration of the Vault Pit Expansion Project proposal, the NIRB heard from AEM, the Government of Nunavut, Nunavut Tunngavik Incorporated, the Kivalliq Inuit Association, Environment and Climate Change Canada (previously Environment Canada), Fisheries and Oceans Canada, Indigenous and Northern Affairs Canada (previously Aboriginal Affairs and Northern Development Canada), Natural Resources Canada, Transport Canada, the Baker Lake Hunters & Trappers Organization, representatives from the communities of Chesterfield Inlet and Baker Lake, and members of the general public including elders, youth, women, hunters and trappers, and municipal representatives.

At the Public Hearing, the NIRB heard from intervenors that noted no significant concerns with the proposed Addendum as long as AEM follow the mitigation measures as described within the FEIS and within the Addendum. Community members requested clarification from the Proponent and regulators on the scope of the proposed Addendum, and in particular whether the proposed development of the Amaruq area and the exploration access road was included in the Addendum (*which it was not*). Community members also had questions regarding the techniques used to dewater the lake and the removal of the fish from the Phaser Lake to Wally Lake. Community representatives also expressed concern regarding dust that is being produced by the Meadowbank Mine site and along the all-weather access road. Finally, community representatives noted concern with the area with respect to traditional use, access to hunting areas and traditional hunting trails.

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RÉSUMÉ

Ce rapport et les recommandations qu'il contient sont l'aboutissement du réexamen de la Commission du Nunavut chargée de l'examen des répercussions (CNER ou la Commission) relativement aux répercussions écosystémiques et socio-économiques de l'addenda à l'énoncé final des incidences environnementales du projet de mine d'or de Meadowbank soumis dans le cadre du projet d'expansion du gisement Vault, et proposé par Mines Agnico Eagle Limitée (AEM ou le promoteur du projet). La portée du projet de mine d'or de Meadowbank initial comprenait la construction, l'exploitation et la remise en état éventuelle d'une mine d'or à ciel ouvert d'or située à 70 kilomètres (km) au nord du hameau de Baker Lake sur les terres de surface appartenant aux Inuits; l'infrastructure associée à l'extraction, le transport et l'expédition de l'or à partir de trois gisements [les fosses Portage, Goose et Vault]; la construction de l'infrastructure du projet auxiliaire située à environ 2 km à l'est du hameau de Baker Lake, qui consistait en une installation de déchargement de barge, un site d'entreposage et de triage, un réservoir d'entreposage de carburant de 60 millions de litres (ML) et la construction d'une route d'accès privée praticable en tout temps de 110 km reliant l'infrastructure du projet auxiliaire avec le site minier de Meadowbank. Dans le rapport de la CNER de 2006, la Commission a conclu que si la proposition de projet de mine d'or de Meadowbank était élaborée conformément aux 86 conditions recommandées par la Commission, le projet pourrait passer à la phase réglementaire. Par la suite, en novembre 2006, le ministre fédéral des Affaires indiennes et du Nord de l'époque (maintenant la ministre des Affaires autochtones et du Nord) a accepté le rapport et les recommandations de la Commission et a demandé à la Commission de délivrer un certificat de projet pour la proposition de projet de mine d'or de Meadowbank. Le 30 décembre 2006, la Commission a délivré le certificat de projet n° 004 pour le projet de mine d'or de Meadowbank.

Le 28 juillet 2014, AEM a écrit à la Commission pour l'informer que pour des raisons économiques AEM proposait des modifications au projet de la mine d'or de Meadowbank en vue d'étendre les activités du gisement Vault à Phaser Lake, soulignant le fait que cette expansion pourrait entraîner des modifications aux conditions particulières énoncées dans le certificat de projet n° 004.

Après avoir sollicité les commentaires des parties quant à savoir s'il était approprié pour la Commission de procéder à une évaluation des changements proposés aux activités et aux entreprises en vertu du chapitre 12, article 12.8.2 de l'Accord sur les revendications territoriales du Nunavut (ARTN), et de réexaminer les conditions du certificat de projet existant [n° 004] à la lumière des modifications proposées, la CNER a annoncé qu'une évaluation plus approfondie et un réexamen de la proposition de projet d'expansion du gisement Vault étaient justifiés et a demandé qu'AEM prépare un addenda à l'énoncé final des incidences environnementales présenté à l'appui de l'examen de la CNER du projet de mine d'or de Meadowbank en 2005 à 2006 (addenda à la EIEF).

Aux termes des modifications proposées par AEM telles qu'elles ont été décrites dans l'addenda à l'EIEF reçu par la Commission le 24 juillet 2015, AEM a proposé d'inclure les activités et les entreprises *supplémentaires* suivantes pour étendre les activités actuelles du gisement Vault à Phaser Lake :

- Expansion du gisement Vault à Phaser Lake en vue de développer Phaser et BB Phaser. Les petites fosses à ciel ouvert s'étendraient à partir du périmètre du gisement Vault vers le sud-ouest jusqu'à Phaser Lake;
- Exhaure et programme de pêche-sur-place du Phaser Lake;
- Compensation pour la perte d'habitat du poisson dans le lac Phaser;

- Construction et exploitation de routes de transport supplémentaires reliant les nouvelles fosses à l'infrastructure du gisement Vault;
- Utilisation de l'usine de concentration et de l'approvisionnement en eau existants de Meadowbank pour le traitement du minerai;
- Utilisation des installations de stockage des stériles existantes du gisement Vault pour l'entreposage des débris de roche;
- Utilisation des installations de stockage des résidus et de l'infrastructure existantes sur le site minier de Meadowbank et la route de transport du gisement Vault;
- Développement de Phaser et BB Phaser pour accroître les activités minières de 30 jours. AEM estime que cette activité s'inscrit dans le cadre du projet initial tel qu'il a été évalué et autorisé dans l'EIEF (pendant la durée de vie de 8 à 10 ans de l'exploitation);
- Le détournement de l'eau supplémentaire et la gestion de l'eau sur le site du gisement Vault prolongeraient de 30 jours supplémentaires l'exploitation de la mine;
- L'inondation de la fosse Phaser sera effectuée une fois que les opérations minières seront finies.

AEM a noté qu'aucun changement aux plans de fermeture n'a été prévu, y compris l'inondation de la fosse Vault tel qu'elle a été proposée initialement dans l'EIEF pour le projet de Meadowbank et la fermeture en question pour la zone de stockage des stériles de Vault.

Bien qu'il n'y ait aucune exigence obligatoire en matière de processus concernant l'évaluation et le réexamen de la Commission énoncés à l'article 12.8.2 de l'ARTN, la CNER a déterminé qu'un examen technique complet et approfondi de l'addenda à l'EIEF serait nécessaire et que la Commission exigerait également la tenue d'une audience publique dans la collectivité la plus susceptible d'être directement affectée par les activités et les entreprises révisées, à savoir Baker Lake, Nunavut.

Tout au long de l'évaluation et du réexamen de la proposition de projet d'expansion du gisement Vault par la CNER, la Commission a entendu les contributions d'AEM, du gouvernement du Nunavut, de la Nunavut Tunngavik Incorporated, de l'association inuite régionale, d'Environnement et Changement climatique Canada, (anciennement Environnement Canada), de Pêches et Océans Canada, d'Affaires autochtones et du Nord Canada (AANC) (auparavant Affaires autochtones et Développement du Nord Canada – AADNC), de Ressources naturelles Canada, de Transports Canada, de l'Organisation de chasseurs et de trappeurs (OCT) de Baker Lake, des représentants des collectivités de Chesterfield Inlet et de Baker Lake, et des membres du grand public, y compris les aînés, les jeunes, les femmes, les chasseurs et les trappeurs, et des représentants municipaux.

Lors de l'audience publique, des intervenants ont indiqué à la CNER qu'il n'y avait pas de préoccupations considérables concernant l'addenda proposé pour autant qu'AEM suive les mesures d'atténuation décrites dans l'EIEF et dans l'addenda. Des membres des collectivités ont demandé au promoteur du projet et aux autorités de réglementation des éclaircissements sur la portée de l'addenda proposé, et en particulier si le projet de développement de la zone Amaruq et de la route d'accès à l'exploitation a été inclus dans l'addenda (*ce qui n'était pas le cas*). Des membres de la collectivité avaient également des questions concernant les techniques utilisées pour assécher le lac et le transfert des poissons de Phaser Lake à Wally Lake. Des représentants de la collectivité ont également exprimé leur préoccupation au sujet de la poussière qui est produite par le site minier de Meadowbank et le long de la route d'accès praticable en tout temps. Enfin, les représentants de la collectivité ont fait part de leur préoccupation à l'égard de la zone en ce qui concerne l'utilisation traditionnelle des zones et des sentiers de chasse et leur accès.

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1. INTRODUCTION

1.1. PROJECT OVERVIEW

The Vault Pit Expansion Project proposal consists of a proposed amendment to the Meadowbank Gold Mine Project (NIRB File No. 03MN107; Project Certificate No. 004).¹ The Proponent for the Meadowbank Gold Mine Project, Agnico Eagle Mines Ltd. (the Proponent or AEM), is proposing to amend activities and components associated with the existing Vault Pit located approximately eight (8) kilometres (km) northeast of the main mine site.

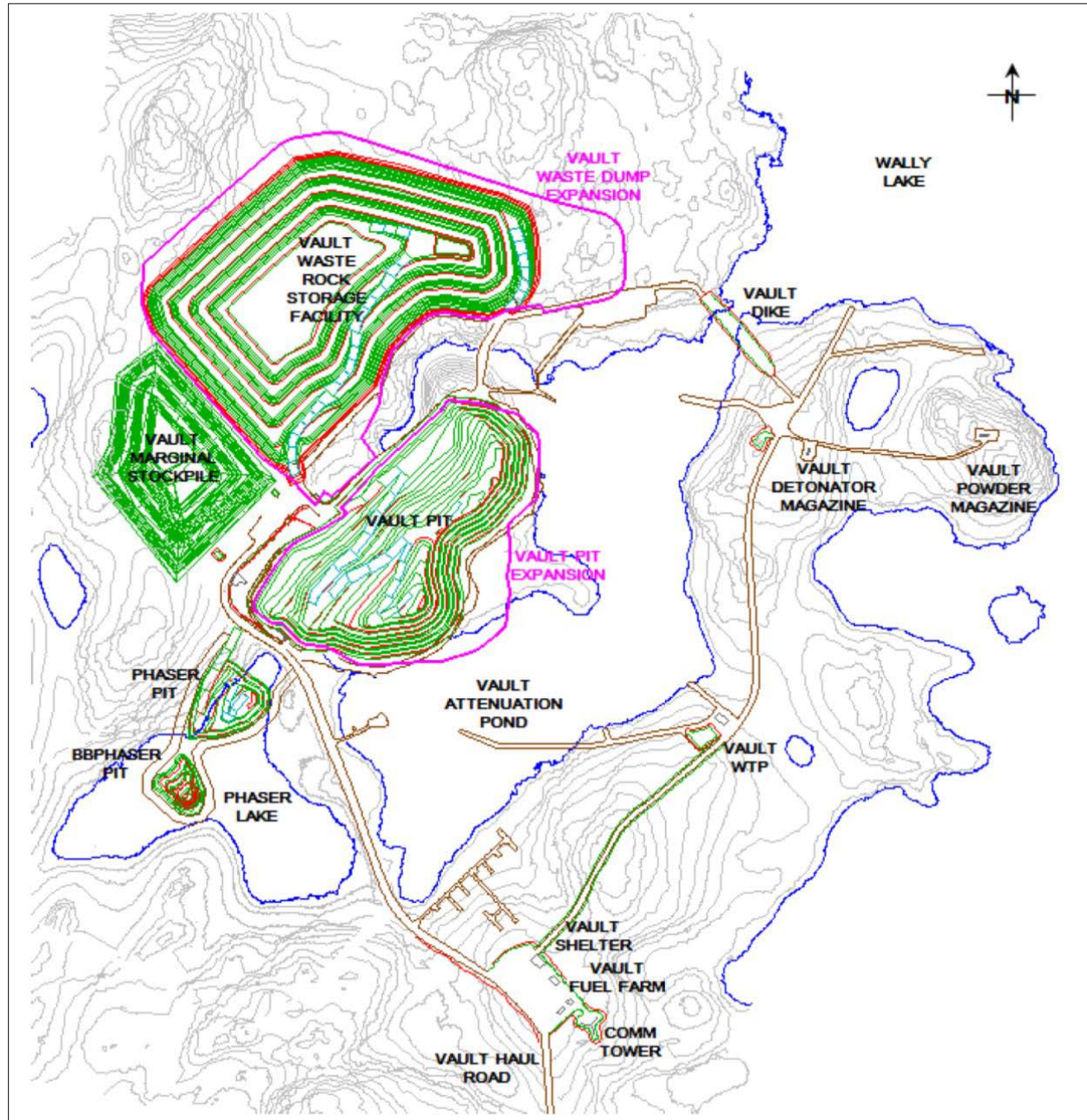
The Meadowbank Gold mine site is located approximately 70 km north of the Hamlet of Baker Lake on Inuit-owned surface lands. The currently-approved project components include: the Meadowbank mine site (main mine site); Vault mine site; marshalling facilities in Baker Lake; and a 110 km all weather access road (AWAR) connecting the Hamlet of Baker Lake with the Meadowbank mine site. The main mine site is comprised of: camp facilities, mill, maintenance and waste management facilities, fuel tank farm, airstrip, and active mine areas including the Goose pit (mining ended early 2015) and the Portage pits. The Vault mine site consists of: a maintenance shop, shelter/refuge facility, waste rock storage facility, water management facilities, and haul roads.

The Vault Pit Expansion Project proposal includes the expansion of the Vault Pit to develop two small extensions known as Phaser Pit and the BB Phaser Pit which is an extension of the Vault Pit deposit. These two small open pits would extend from the perimeter of Vault Pit to the southwest into Phaser Lake. The Vault Pit Expansion Project proposal includes the expected extraction of an additional 269,438 tonnes (t) of ore from Phaser Pit and 132,950 t from BB Phaser Pit. This would be in addition to the current approved production of approximately 29.8 million tonnes (Mt) and 10.7 Mt of ore from the entire Meadowbank mine pits and the Vault Pit, respectively, over the life of the mine. AEM further proposed the following activities and components at the Vault mine site: construction and operation of additional haul roads connecting the new pits to Vault Pit infrastructure; water diversion and management activities; dewatering and fish-out of Phaser Lake; and eventual re-flooding of Phaser Pit and BB Phaser Pit along Vault Pit.

The proposed Vault Pit Expansion Project would extend the life of the mine by approximately 30 days and dewatering activities and construction would commence in 2016 following the amendment to the Project Certificate. All activities associated with the construction, development, and operation of the proposed Phaser and BB Phaser Pits would continue to utilize the currently approved mine facilities.

¹ The NIRB issued Project Certificate No. 004 to Cumberland Resources Ltd. on December 30, 2006 following the then Minister of Indian and Northern Affairs' approval of the Meadowbank Gold Mine Project.

Figure 1: Location of Project Components at Vault Mine Site, FEIS Addendum Figure 4.10.1



1.2. PROCEDURAL HISTORY

1.2.1 Key Procedural Steps in the 12.8.2 Reconsideration of the Terms and Conditions of the Project Proposal

The original application for the Meadowbank Gold Mine project was screened by the Nunavut Impact Review Board (NIRB) in accordance with Article 12, Part 4 of the NLCA and on September 23, 2003 the NIRB recommended to the then-Minister of Indian Affairs and Northern Development that pursuant to Section 12.4.4(b) the Project should be the subject of a Review. On December 3, 2003 the Minister referred the Meadowbank Gold Mine project to the NIRB for Review pursuant to Article 12, Part 5 of the NLCA. The NIRB conducted a thorough public review of information provided by Cumberland Resources Ltd. and parties, including numerous opportunities for technical review and public input, and the solicitation of expert testimony and community-level input at a Final Hearing held from March 27 through March 31, 2006 in the communities of Baker Lake, Chesterfield Inlet and Rankin Inlet, Nunavut. Upon completion of the Final Hearing, the NIRB provided a report of its findings to the then-Minister of Indian and Northern Affairs Canada on August 30, 2006.² Following the Minister's acceptance of the Board's recommendation that the project should be allowed to proceed, the NIRB issued Project Certificate No. 004 to Cumberland Resources Ltd on December 30, 2006. In early 2007, Agnico Eagle Mines Ltd. – Meadowbank Division (AEM) acquired the Meadowbank Gold Mine project from Cumberland Resources Ltd. and became bound by the terms and conditions of the NIRB Project Certificate No. 004 as they develop the Meadowbank Gold Mine project.

[Table 1](#) below provides a summary of the key procedural steps associated with the NIRB's assessment and reconsideration process as set out under Article 12, Section 12.8.2 of the NLCA for the Vault Pit Expansion Project proposal, commencing with the receipt of the amendment application proposal from Agnico Eagle Mines Ltd. In July 2014 and continuing through to the completion of the Board's Public Hearing in Baker Lake on March 2 and March 3, 2016 (please refer to [Appendix A](#) for a record of proceedings for the Public Hearing, [Appendix B](#) for list of commitments confirmed by parties at the Public Hearing and [Appendix C](#) for a list of exhibits presented at the Public Hearing). [Table 1](#) also identifies key milestones, opportunities for public participation, and involvement of parties and intervenors throughout the NIRB's reconsideration process and associated timelines. Please refer to Appendix B for a list of the commitments confirmed by the parties at the Vault Pit Expansion Project Public Hearing. Please refer to Appendix C for a list of exhibits presented at the Public Hearing.

As this summary is not exhaustive, parties wishing to develop a more complete understanding of the activities associated with the Board's reconsideration process for this amendment proposal to the original Meadowbank Gold Mine project are encouraged to consult the complete listing of all associated documentation available from the NIRB's public registry for the Meadowbank Gold Mine project (NIRB File No. 03MN107). Copies of the specific documents referenced in the listing and associated with the NIRB's Review of the Project can be accessed online from the Board's public registry at the following location: <http://ftp.nirb.ca>.

² NIRB Final Hearing Report for the Meadowbank Gold Mine project, NIRB File No. 03MN107, submitted to the Minister of Indian and Northern Affairs Canada, August 30, 2006.

Table 1: Procedural History

Review Step	Party	Timeline	Process Steps	Notes ^a
	Agnico Eagle Mines Ltd. (AEM or Proponent)	July 28, 2014	Nunavut Impact Review Board (NIRB or Board) receives 'Vault Pit Expansion' project description from AEM ¹	
	NIRB	August 14, 2014	Notes requirement of conformity determination prior to commencement of assessment	
	Fisheries and Oceans Canada (DFO)	September 4, 2014	DFO refers proposal to the NIRB for review	Correspondence noted DFO received an Application form for Paragraph 35(2)(b) <i>Fisheries Act Authorization (Normal Circumstances)</i> from AEM to dewater Phaser Lake.
	Nunavut Planning Commission	September 18 & November 28, 2014	Conformity review not required	Correspondence noted that all previous conformity determinations and requirements to remain in effect and be incorporated
	NIRB	November 18, 2014	Comments requested regarding reconsideration of proposal under Section 12.8.2	Correspondence noted amendment request received from AEM and released for comments to determine if amendments as requested warrant reconsideration under Section 12.8.2.
	Public/Parties	December 2 & December 9, 2014	Comments received on reconsideration process	Comments from: Nunavut Tunngavik Incorporated (NTI)/Kivalliq Inuit Association (KIA), Government of Nunavut (GN), Aboriginal Affairs and Northern Development Canada (AANDC), Environment Canada (EC), DFO, Natural Resources Canada (NRCan), and Transport Canada (TC)
	Nunavut Water Board (NWB)	January 7, 2015	Clarification provided to the NIRB regarding Type A water licence	Correspondence noted that additional activities as proposed would require an amendment to the Type A water licence.
	DFO	January 9, 2015	Comments provided regarding the NIRB's request for clarification on scope of No Net Loss Plan (NNLP)	Correspondence noted that current NNLP accounts for offsetting in the event Phaser Lake is dewatered; however noted that impacts to Phaser Lake have not been assessed.

Table 1: Procedural History

Review Step	Party	Timeline	Process Steps	Notes ^a
1. Reconsideration Process Announced	NIRB	January 23, 2015	Commencement of reconsideration process	Correspondence included Board's determination, the next steps in the reconsideration process and requested an Addendum to the Final Environmental Impact Statement (FEIS). Correspondence released separately to Minister of AANDC and to Proponent/parties
	AEM	February 13, 2015	Clarification requested regarding conformity to EIS guidelines	AEM submits preliminary conformity table of the original EIS guidelines to the project proposal
	NIRB	February 23, 2015	Response to AEM's request on applicability of EIS guidelines	Correspondence included edits to AEM's preliminary conformity table and indication of applicable guidelines
	Responsible Minister (AANDC)	May 19, 2015	Minister issues direction to the NIRB	Minister recommends an expeditious process
	AEM	May 26, 2015	AEM distributes correspondence to NIRB informing of anticipated submission date of FEIS Addendum	States anticipated submission date June 17, 2015
2. FEIS Addendum	AEM	July 15, 2015	Proponent develops and submits FEIS Addendum to NIRB ²	
3. Conformity Review of Addendum	NIRB	July 30, 2015	Addendum conformed to EIS Guidelines and parties requested to submit information request (IRs)	Correspondence noted commencement of public technical review period.
	Public/Parties	August 28, 2015	Parties submit IRs to NIRB	IRs received from the GN, AANDC, EC, DFO, TC, and a private citizen.
	NIRB	August 28, 2015	Comments requested regarding alternative timeline for assessment	Correspondence included an alternative process map with shorter timelines.
	Canadian Northern Economic Development Agency	September 2, 2015	Response to proposed assessment timeline	Correspondence notes that comments submitted on behalf of the Government of Canada, including input from AANDC, DFO, NRCan, and TC

Table 1: Procedural History

Review Step	Party	Timeline	Process Steps	Notes ^a
4. Technical Review of FEIS Addendum	NIRB	September 4, 2015	IRs forwarded to proponent	IRs request additional information from Proponent only.
	NIRB	September 9-11, 2015	Community information sessions	Meetings held in two Kivalliq communities: Baker Lake, Chesterfield Inlet
	AEM	October 1, 2015	Responses to IRs submitted to NIRB	
	NIRB	October 6, 2015	Technical review period commences for FEIS Addendum	60 day technical review period of FEIS Addendum.
	NIRB	October 9, 2015	Confirmation of technical meeting	
	NIRB	November 27, 2015	Releases final agenda for technical meeting	
	NIRB	December 1, 2015	Technical Meeting <i>via teleconference</i>	Parties in attendance included AEM, KIA, GN, Environment and Climate Change Canada (ECCC, previously EC), DFO, Health Canada, Indigenous and Northern Affairs Canada (INAC, previously AANDC), NRCan, and Canadian Northern Economic Development Agency.
	NIRB	December 2, 2015	Release of technical commitment made by AEM.	Correspondence noted next steps in the process with a tentative date for the public hearing.
	Public/Parties	December 4, 2015	Technical comments submission on the FEIS Addendum	Comment submissions received from NTI/KIA, GN, ECCC, DFO, INAC, and NRCan.
	NIRB	December 8, 2015	Technical comments forwarded to proponent	
	NIRB	December 12, 2015	Public Notice of Public Hearing Issued	Notice includes information regarding how to seek formal intervenor status at the Hearing.

Table 1: Procedural History

Review Step	Party	Timeline	Process Steps	Notes ^a
	AEM	December 22, 2015	Responses to technical review comments submitted to NIRB	
	Public/Parties	December 23, 2015	Application for Intervention Status filed	No applications were received by the NIRB
	NIRB	January 14, 2016	Request from communities for community representatives	Requested five community representatives from both the Baker Lake and Chesterfield Inlet
	NIRB	January 19, 2016	Logistic information released regarding the Public Hearing	
	Community organizations	February 1, 2016	Provide names of community representative	
	Public/Parties	February 12 to March 1, 2016	Final written submission on the FEIS Addendum	Comment submissions received from NTI/KIA, GN, DFO, ECCC, INAC and NRCan.
	AEM	February 19, 2016	Responses to final written submissions submitted to NIRB	Responses to facilitate Public Hearing
	NIRB	February 23, 2016	Release final agenda and details for Public Hearing	KIA, GN, GC, DFO, INAC, NRCan
5. Public Hearing	NIRB	March 2-3, 2016	Public Hearing including technical sessions and community roundtable	Held in Baker Lake and facilitated by Elizabeth Copland, Chairperson. Parties in attendance: KIA, GN, Department of Justice, DFO, INAC, NRCan, community representatives from Baker Lake and Chesterfield Inlet.

NOTES: a = Abbreviations: Aboriginal Affairs and Northern Development Canada (AANDC), Agnico Eagle Mines Ltd. (AEM), Environment and Climate Change Canada (ECCC), Environment Canada (EC), Final Environmental Impact Statement (FEIS), Fisheries and Oceans Canada (DFO), Government of Nunavut (GN), Indigenous and Northern Affairs Canada (INAC), Information Request (IR), Kivalliq Inuit Association (KIA), Natural Resources Canada (NRCan), Nunavut Impact Review Board (NIRB), Nunavut Tunngavik Incorporated (NTI), Nunavut Water Board (NWB), Transport Canada (TC).

1: see <http://ftp.nirb.ca/03-MONITORING/03MN107-MEADOWBANK%20GOLD%20MINE/01-PROJECT%20CERTIFICATE/05-AMENDMENTS/02-VAULT%20EXPANSION-CONDITION%2048/01-APPLICATION/>.

2: see <http://ftp.nirb.ca/03-MONITORING/03MN107-MEADOWBANK%20GOLD%20MINE/01-PROJECT%20CERTIFICATE/05-AMENDMENTS/02-VAULT%20EXPANSION-CONDITION%2048/05-ADDENDUM%20%26%20CONFORMITY%20REVIEW/02-ADDENDUM%20SUBMISSION/>.

1.3. MANDATE OF THE BOARD

As with all Nunavut Impact Review Board's (NIRB) functions, Article 12, Part 2, Section 12.2.5 of the Nunavut Land Claims Agreement (NLCA) requires that:

In carrying out its functions, the primary objectives of NIRB shall be at all times to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area, and to protect the ecosystemic integrity of the Nunavut Settlement Area. NIRB shall take into account the well-being of residents of Canada outside the Nunavut Settlement Area.

In the present context, the function of the Board is to gauge and define the extent of the regional impacts of the Vault Pit Expansion Project proposal, including a review of the ecosystemic and socio-economic impacts of the Addendum to determine if the Vault Pit Expansion Project should be allowed to proceed, and if so, whether any terms and conditions are required to be revised or added under Project Certificate No. 004 to address the anticipated impacts. Reflecting the provisions of the NLCA, in carrying out this function, the NIRB's primary objective is at all times the protection and promotion of the existing and future well-being of the residents and communities of the Nunavut Settlement Area, and protecting the ecosystemic integrity of the Nunavut Settlement Area

1.4. JURISDICTION OF THE BOARD

The provisions of Article 12, Section 12.8.2(b) of the NLCA provides that the NIRB, either on its own or upon application by a Designated Inuit Organization, the Proponent or other interested party may reconsider the terms and conditions contained in a Project Certificate if it is established that "the circumstances relating to the project or the effect of the terms and conditions are significantly different from those anticipated at the time the certificate was issued."

This section of the NLCA provides the Board with jurisdiction to assess revised project proposals and undertake a reconsideration of the terms and conditions of a previously issued Project Certificate. Pursuant to the Board's jurisdiction under both Article 12, Section 12.8.2 and Section 12.8.3 of the NLCA, which provides as follows "...the NIRB shall reconsider the terms and conditions contained in a certificate", the Board has assessed the Vault Pit Expansion Proposal and reconsidered the terms and conditions in Project Certificate No. 004 for the Meadowbank Gold Mine Project.

1.5. PURPOSE OF THIS REPORT

The reporting parameters for the Board's determination are found in Article 12, Section 12.8.3 of the NLCA:

Where the Minister determines that any of the conditions in Sub-sections 12.8.2(a), (b) or (c) have been established, NIRB shall reconsider the terms and conditions contained in a certificate, and NIRB shall produce a report of its reconsideration.

This Hearing Report presents the results of the NIRB's assessment of AEM's proposed Vault Pit Expansion Project and its reconsideration of the terms and conditions within the Meadowbank Gold Mine Project Certificate [004].

1.6. EVIDENTIARY ISSUES

1.6.1 The Burden and Standard of Proof

The Proponent has the onus of proof to demonstrate, on a balance of probabilities, that the Vault Pit Expansion Project is consistent with the Board's mandate and requirements of the NLCA. In the context of this reconsideration specifically, it is the responsibility of the Proponent to provide the Board with an addendum to the previously filed Final Environmental Impact Statement that fully reflects the NIRB-issued guidelines for the original Meadowbank Gold Project. In addition, the Addendum to the Final Environmental Impact Statement must also provide the Board with the information necessary to assess the potential ecosystemic and socio-economic impacts of the Vault Pit Expansion Project.

In addition to the overall onus remaining on the Proponent during the Board's consideration of the Vault Pit Expansion Project, individual participants throughout the assessment process must also meet the burden of proof for specific information or assertions offered to the Board. As stated in the NIRB Rules of Procedure any party offering evidence has the burden of ensuring that they have provided the Board with sufficient information to support that participant's position.³ Further, where there is conflicting information, the Board has the authority to decide which information will be accepted by the NIRB in whole or in part. The standard of proof in this reconsideration process required a careful balancing of all of the information filed in writing with the Board prior to the Public Hearing and the information provided to the Board in person at the Public Hearing. The sections of this Report discussing the Board's Views address how the Board balanced information provided on key topics. However, the onus remained on the Proponent throughout to demonstrate that the Vault Pit Expansion Project is consistent with the Board's mandate and requirements of the NLCA.

1.6.2 Inuit Qaujimaningit

As indicated in both the Environmental Impact Statement (EIS) Guidelines and the Board's previous decisions, in the Board's view, Inuit Qaujimaningit, which encompasses Inuit Traditional Knowledge (and variations thereof) as well as contemporary Inuit knowledge that reflects Inuit societal values and experience, contributes vital information to the NIRB's assessment process. The term Inuit Qaujimaningit is meant to encompass local and community-based knowledge, ecological knowledge (both traditional and contemporary), which is rooted in the daily life of Inuit people and represents experience acquired over thousands of years of direct human contact with the environment.^{4,5} With its emphasis on personal observation, collective experience and oral transmission over many generations, Inuit Qaujimaningit provides factual information on such matters as ecosystem function, social and economic well-being, and explanations of these facts and causal relations among them. In this regard, Inuit Qaujimaningit has played a significant role in this assessment by: contributing to the development of accurate baseline information; comparing predictions of effects with past experience; and assisting in the assessment of the magnitude of projected effects.

³ NIRB Rules of Procedure, September 3, 2009, Rule 32.1 at p. 18.

⁴ Berkes, F. 1993. Traditional ecological knowledge in perspective. In: Inglis, J. (ed.), *Traditional Ecological Knowledge: Concepts and Cases*. Ottawa: Canadian Museum of Nature, pp. 1-9.

⁵ Stevenson, M. G. 1996. *Indigenous knowledge in environmental assessment*. *Arctic*, 49(3), 278-291.

The Proponent was required to incorporate Inuit Qaujimaningit into the Addendum to the FEIS, to the extent that the Proponent had access to such information and in keeping with the expectation that the Proponent would undertake appropriate due diligence to gain access to the information but may be limited by obligations of confidentiality and other ethical obligations that may attach to such information. In addition to Inuit Qaujimaningit provided as part of the FEIS and FEIS Addendum or in questions or responses provided by the intervenors, Elders, Inuit harvesters and other community members freely shared Inuit Qaujimaningit with the Board during the Community Roundtable portion of the Public Hearing. The NIRB has benefitted from the Inuit Qaujimaningit provided in the FEIS Addendum and shared by the participants at the Public Hearing.

1.7. SCOPE OF THE NIRB'S ASSESSMENT AND ENVIRONMENTAL IMPACT STATEMENT GUIDELINES

On July 28, 2014 the NIRB received a project description from AEM, which outlined proposed changes to the project lifecycle, amendments to the Vault Pit mine and a request to the NIRB to reconsider terms and conditions within Project Certificate No. 004 for the Meadowbank Gold Mine Project. The scope of the proposed project included expanding the current Vault Pit operations from the perimeter of the Vault Pit to the southwest into Phaser Lake (referred to as Phaser Pit), dewatering and removal of fish from Phaser Lake, and use of existing infrastructure with mining of the proposed Phaser Pit to commence in 2017.

After considering the information provided by the Proponent, reviewing the Meadowbank Gold Mine Project, the Project Certificate, comments and concerns submitted by parties regarding the changes required to accommodate the proposed activities, and options available pursuant to the NLCA, the NIRB on January 23, 2015 determined that a reconsideration of the terms and conditions contained within Project Certificate No. 004 was warranted pursuant to Article 12, Section 12.8.2(b) of the NLCA.

The NIRB based its determination on the following:

- The proposed activities for the Vault Pit expansion are integrally linked to the Meadowbank Gold Mine Project as approved under Project Certificate No. 004.
- The proposed project amendments have not, to date, been subject to an impact assessment and also have not been subject to full technical review by the parties, public comment or approval by the various responsible authorities.
- The proposed activities do not constitute a distinct, stand-alone project that should be subject to a screening and review process separately from the Meadowbank Project as approved under Project Certificate No. 004.
- It would not be appropriate to assess any potential ecosystemic and socioeconomic effects associated with these proposed changes in isolation from the already approved Meadowbank Gold Mine Project.
- The economic circumstances relating to the Meadowbank Project or the effect of the terms and conditions are now significantly different than were considered at the time the Board issued its Final Hearing Report and recommendations in August 2006 and subsequently, when the Board issued Project Certificate No. 004.
- The potential ecosystemic and socioeconomic effects associated with these changes as proposed are most appropriately assessed pursuant to Article 12, Section 12.8.2 with

reconsideration and potential amendment to certain terms and conditions within the existing Project Certificate.

In order to facilitate the Board's assessment of the potential environmental and socio-economic impacts associated with the Vault Pit Expansion Project proposal, AEM was requested to prepare a comprehensive Addendum to the Meadowbank Gold Mine Final Environmental Impact Statement (FEIS) describing all aspects of the proposed amendments, including updates to relevant baseline data, impact predictions, proposed mitigation measures and monitoring plans and proposed community consultation. The Board further noted that the Addendum to the FEIS must meet the relevant criteria as set out in the NIRB's EIS Guidelines for the Meadowbank Project as issued to Cumberland Resources Ltd. on February 20, 2004.⁶

On February 23, 2015, in response to a request for clarification, the NIRB provided further direction to AEM in developing the Addendum to the FEIS with respect to the EIS Guidelines, and indicated that AEM should describe all aspects of the proposed amendments, and must be a stand-alone document capable of supporting the public review, comment, and assessment process associated with the NIRB's reconsideration. The NIRB further noted that clarification with the FEIS Addendum about the use or involvement of existing site infrastructure or mitigation/monitoring plans, and how these would function in relation to the proposed Vault Pit Expansion would be required to determine the potential impact of the proposed activities to the life of the infrastructure, design, or eventual remediation.

On July 24, 2015 the NIRB acknowledged receipt of AEM's Addendum to the FEIS for the Vault Pit Expansion Project proposal and initiated an internal review to determine whether or not the document conformed to the EIS Guidelines previously issued by the NIRB for the Meadowbank Gold Project. The Addendum to the FEIS noted changes to the scope of the original proposal submitted and included the development of two open pits – Phaser Pit and BB Phaser Pit; construction and operation of additional on-site haul roads connecting the new pits to Vault Pit infrastructure; water diversion and management activities; dewatering and fish-out of Phaser Lake; and eventual re-flooding of Phaser Pit and BB Phaser Pit along Vault Pit. AEM proposed to use existing mining, water diversion, and waste rock infrastructure and facilities extending the life of the mine by 30 days.

On July 30, 2015 the NIRB indicated to parties that it had completed its internal review of AEM's Addendum to the FEIS, determined that the submission conformed to the Board's EIS Guidelines and initiated the public technical review period requesting parties submit Information Requests.

1.8. KEY ISSUES

At the Public Hearing it was noted that the following additional key issues were the subject of discussion by parties, intervenors and community representatives:

- The need for dust control at both the mine site and along the all-weather road;
- Temporal scale of the Vault Pit Expansion proposal;
- Extension of mine life of Meadowbank and potential future developments;
- Removal of fish from Phaser Lake to Wally Lake; and
- Removal of waste rock to the Vault Waste Rock Facility.

⁶ NIRB Environmental Impact Statement (EIS) Guidelines for the Meadowbank Project, NIRB File 03MN107, February 2004.

2. PROJECT SETTING⁷

2.1. DESCRIPTION OF PROJECT LOCATION

The proposed Vault Pit Expansion Project would take place within the project footprint of the Meadowbank Gold Mine site at the Vault Mine site, located approximately eight kilometres (km) northeast of the main mine site and 70 km north of the Hamlet of Baker Lake (see [Figure 1](#)). The proposed amendment would necessarily share the same project location as the Meadowbank Gold Mine site within the Kivalliq region of Nunavut, Canada. Where appropriate, a focus on site features specific to the proposed Vault Pit Expansion Project have been provided in the sections below.

2.1.1 *Biophysical Conditions*

The Meadowbank Gold Mine and proposed Vault Pit Expansion Project are located in the Canadian Shield region, the largest physiographic region of Canada. Both the original project and proposed Phaser and BB Phaser Pits are located in the continuous permafrost zone, and permafrost and periglacial topographic features are dominant throughout the local landscape. The depth of permafrost is estimated between 450 and 550 metres (m), depending on local overburden and proximity to waterbodies. Taliks are common beneath lakes with depths greater than two (2) m, although not all taliks extend through the permafrost. The observed talik beneath Vault Lake does not penetrate the permafrost layer, and AEM predicted within the FEIS Addendum that this is likely the case for Phaser Lake as well.

Surface water, including lakes, ponds, rivers, and streams are abundant in the regional area. Poorly drained local areas in the region are characteristic of graminoid tussock-hummock tundra communities, while drier local areas including bedrock outcroppings and boulder fields are typical of arctic heath tundra systems. Low-growing shrubs are also commonly found in both dry and poorly drained areas across the region.

Lakebed substrate is a key habitat attribute that dictates species composition and abundance of benthic invertebrates. It typically consists of ice-scoured boulders, rocks, and cobbles at the water-substrate interface, with sediment grain size diminishing to sands, silts, and clays beneath four (4) m, and almost exclusively to a uniform silt/clay mixture beneath six (6) to eight (8) m. AEM noted that the aerial substrate distribution as described is found in all of the project lakes including Phaser Lake. AEM further indicated that metals concentrations in the project lake substrates can be regarded as representative of natural or background levels due to the near absence of anthropogenic activities, and are found to be similar across the area, including reference lakes.

Lakes in the project area are ultra-oligotrophic, characterized by soft water, low nutrient availability, neutral pH levels, and high oxygen concentrations. The lakes are isothermal, with limnological conditions tending stable with only minor and temporary seasonal stratification. Water clarity is typically high due to low concentrations of dissolved and suspended solids present in the water column. Phaser Lake is an isolated “offline” lake, approximately four (4) to five (5) m deep, draining into Vault Lake through a boulder field and there are no external sources of nutrients or sediment to contribute to

⁷ Unless otherwise stated, the Project Setting and Description is based on the information provided by the Proponent in the Project Proposal submitted to the NIRB on July 28, 2014 and Final Environmental Impact Statement (FEIS) Addendum submitted to the NIRB on July 15, 2015.

nutrient enrichment. AEM analyzed water quality in Phaser Lake on three separate dates in September and October 2013. Similar to other lakes in the area, Phaser Lake is considered to be ultra-oligotrophic. No parameters were found to exceed recommended water quality limits, and few exceeded laboratory detection limits.

AEM has reported no additional information on air and noise quality since the original FEIS baseline reports.

The most abundant fish species present in project area lakes are lake trout (*salvelinus namaycush*). Lake trout populations were found to be large, old, climax community populations, considered typical of oligotrophic arctic lakes. Other species found in decreasing abundance were round whitefish, arctic char, burbot, ninespine stickleback, and sculpins. Fish movement between project area lakes has been observed to be minimal, and there is no surface hydrological connection between Phaser Lake and Vault Lake. A small population of lake trout and whitefish were found in both lakes with approximately 100 fish were estimated to inhabit Phaser Lake (study conducted in 2004).

Traditional knowledge and baseline studies suggest that the Project area is not within caribou calving grounds. While caribou have been observed to be present around the project area from fall through spring, field observations and satellite collar locations show that the migratory herds' use of the area is transient, and caribou wintering in the region appears to originate from several different herds. Muskox, arctic hare, arctic ground squirrel, and arctic fox occupy the region year-round. Large predatory species, including grizzly bear, wolverine, and wolf, are present throughout the area but are observed infrequently.

2.1.2 Socio-economic Conditions

In the FEIS Addendum, AEM noted that the description of the socio-economic environment in Baker Lake and in communities in the Kivalliq region as presented in the original FEIS remained valid for the purposes of assessing new potential effects of the proposed Vault Pit Expansion Project. However, AEM acknowledged that the socio-economic environment in Baker Lake, identified as the primary area for resulting socio-economic impacts, has evolved since the original baseline studies were conducted in 2005. AEM referenced the more recent FEIS for its Meliadine Gold Mine and the proposed AREVA Kiggavik Uranium Mine Project for updated socio-economic data as it relates to the Kivalliq region.

2.2. PROJECT DESCRIPTION

As currently approved, the Meadowbank Gold Mine project consists of the construction, operation, maintenance, reclamation and abandonment of a gold mine. There are two active mine site locations: the Meadowbank mine site and the Vault mine site. The Vault mine site is located approximately eight (8) kilometres (km) northeast of the Meadowbank mine site, which is located approximately 70 km north of the hamlet of Baker Lake. The Vault Pit Expansion Project proposal includes the following additional activities and undertakings:

- Expansion of Vault Pit into Phaser Lake to develop Phaser Pit and BB Phaser Pit. Small open pits would extend from the perimeter of Vault Pit to the southwest into Phaser Lake;
- Development of Phaser and BB Phaser pits to include:
 - Dewatering of Phaser Lake (estimated volume of 700,000 cubic metres) in 2016
 - Removal of fish in 2016 (fishout)
 - Offsetting of loss of fish habitat in Phaser Lake

- Removal of 402,388 tonnes of additional ore (approximately 1.3 percent (%) of the total ore production of Meadowbank)
- Removal of 2,945,477 tonnes of waste rock (approximately 1.4% of total waste rock production at Meadowbank)
- Mining of pits to commence in 2017
- Construction and operation of additional haul roads connecting the new pits to Vault Pit infrastructure;
- Development of Phaser and BB Phaser pits to increase mine activities by 30 days. AEM considers this to be within the scope of the original project as permitted and assessed in the FEIS (within the 8-10 years of operation life);
- Water diversion and water management in the Vault area will extend by 30 days of operation; and
- Re-flooding of Phaser Pit once mining has been completed.

The proposed Vault Pit Expansion Project proposal would utilize the following existing components and activities at the Meadowbank Gold Mine Project as expressed in the original FEIS:

- Use of existing approved Meadowbank mill and current water supply for ore processing;
- Use of existing approved tailings storage facility and infrastructure and the Meadowbank Mine site;
- Use of existing approved Vault Waste Rock Facility for waste rock storage;
- Use of existing Vault haul road;
- Use of existing transportation corridors (marine and air) to transport goods, workers and ship extracted bullion;
- Treatment and disposal of sewage to continue through use of approved facilities;
- Power generation; and
- Site rehabilitation.

2.2.1 Need for the Project Amendment

The Meadowbank Gold Mine is scheduled to exhaust its mineable reserves as authorized under Project Certificate No. 004 by the end of 2017. As a result of updated feasibility studies, particularly regarding economic viability, AEM has considered the feasibility of expanding the Vault Pit beyond what was originally approved and included within the FEIS. As noted within the FEIS Addendum, AEM is proposing to extend the Meadowbank Gold Mine Project's mine life while continuing with exploration activity at the Amaruq site, located approximately 50 km northwest of the Meadowbank Gold Mine site. AEM also noted further possible steps outside of the proposed Vault Pit Expansion to extend the mine life of the Meadowbank Gold Mine beyond 2017, which are not part of the current proposal and assessment.⁸

AEM stated in the FEIS Addendum that extending the life of the mine by 30 days and then reclaim the Phaser and BB Phaser pits would enable the continuation of current employment and business opportunities, result in additional benefits to hamlet, territorial, and federal governments through tax collection, and provide ongoing benefits to Inuit via the current Inuit Impact Benefit Agreement and through royalties to Nunavut Tunngavik Incorporated. The Vault Pit Expansion Project proposal would also allow for continuation of current employment levels and training programs at the Meadowbank

⁸ Agnico Eagle Mines Ltd.'s FEIS submitted to the NIRB, *"Environment Impact Statement (EIS) Addendum for the Meadowbank Project: Vault Expansion to Include Phaser Pit and BB Phaser Pit"* NIRB File 03MN107, July 15, 2015.

Gold Mine with the additional 30 days of mining activities and associated preparatory and reclamation work.

2.2.2 Project Components and Activities

The major project components and associated project activities of the Vault Pit Expansion Project proposal, as described by AEM in its FEIS Addendum, include:

- 1) Dewatering of Phaser Lake.
- 2) Development of Phaser Pit and BB Phaser Pit.
- 3) Transportation of ore to the Meadowbank mill facility for processing.
- 4) Use of Vault waste rock storage facility for storage of waste rock.
- 5) Use of existing approved tailings storage facility and infrastructure and the Meadowbank Mine site.

2.2.3 Construction Phase

The Vault Pit Expansion Project proposal includes dewatering an estimated 700,000 cubic metres (m³) of water from Phaser Lake over a three (3) month period, commencing in quarter 2 (Q2) of 2016. Extracted water would be transferred to the Vault Attenuation Pond, treated, and discharged through a diffuser to Wally Lake once water quality requirements were met.

The proposed fishout is expected to be conducted consecutively with the dewatering of Phaser Lake and would be completed in Q3 of 2016 in advance of mining.

2.2.4 Operation Phase

Mining – AEM proposes to further mine the Vault Pit ore deposit, located at the Vault mine site, by developing two additional open pits – Phaser and BB Phaser pits. The mining conducted through the Vault Pit Expansion Project proposal would result in the extraction of an additional 402,388 tonnes of ore, which would represent 3.8% of the total ore of the Vault Pit deposit and approximately 1.3% of the total ore production at the Meadowbank Gold Mine site. AEM proposed to begin mining of the Phaser and BB Phaser pits in Q1 of 2017, once dewatering and fishout of Phaser Lake has been completed.

Approximately 2.95 million tonnes (Mt) of waste rock and approximately 0.4 Mt of overburden would be removed during the development of the two pits, then transported and stored at the previously approved Vault Waste Rock Storage Facility. The potential volume of waste rock is predicted to represent approximately 1.4% of total waste rock production at the Meadowbank Gold Mine site. AEM further noted that its tailings storage approach and infrastructure would not change from what was previously approved and would accommodate the additional throughput of ore.

AEM would utilize equipment already on-site and in use for the Meadowbank Gold Mine operations and mining methods and ore handling would be the same as approved in the original FEIS.

Access – AEM would construct and operate haul roads connecting the proposed Phaser and BB Phaser pits to the Vault Pit infrastructure.

Water management – AEM noted within the FEIS Addendum that water diversion and water management activities at the Vault Mine site would be extended for an additional 30 days of operation. The Nunavut Water Board (NWB) Type A Water licence for the Meadowbank Gold Mine site (NWB File No. 2AM-MEA0815), amended in 2015, permits the annual withdrawal of up to 1,150,000 cubic metres (m³) of freshwater. AEM noted within the FEIS Addendum that the approved increased freshwater use

would accommodate the water needs associated with the expansion of the Vault deposit into Phaser and BB Phaser Pits.

2.2.5 Decommissioning and Reclamation

Within the FEIS Addendum, AEM noted that the activities and components of the proposed Vault Pit Expansion Project would be reclaimed as part of Vault Pit and pursuant to AEM's 2014 Meadowbank Interim Closure and Reclamation Plan. Waste rock extracted from the Phaser and BB Phaser pits would be stored in the existing Vault Waste Rock Storage Facility and reclaimed as part of the facility. AEM noted that the additional waste rock from the proposed expansion would not materially affect the reclamation plans. AEM proposes to backfill portions of Phaser and BB Phaser pits and reflood Phaser Lake as early as possible during closure.

In the event of temporary closure, AEM noted that it would use the same plans referenced in the 2014 Meadowbank Interim Closure and Reclamation Plan. AEM noted in the 2014 plan that the objectives of temporary closure activities are to protect humans, wildlife and the environment, and maintain regulatory compliance until mining operations can resume. Temporary closure activities for the Meadowbank Gold Mine Project would include winterizing and securing equipment, fuel facilities and buildings, where necessary, and placing the site in a care-and-maintenance mode until the project was able to resume.

3. INVOLVEMENT OF INTERESTED PARTIES

3.1. ENGAGEMENT OPPORTUNITIES

3.1.1 Public Consultation

Public participation is a central objective of the NIRB's assessment processes, including the reconsideration of project certificate terms and conditions. Meaningful public participation within the reconsideration process requires that the assessment process address concerns of the general public regarding the anticipated or potential environmental effects of the Vault Pit Expansion Project proposal. The NIRB's reconsideration process must also involve potentially affected Nunavummiut (defined as the people inhabiting the territory of Nunavut) to address concerns regarding any changes that the Addendum may cause in the environment and the resulting effects of any such changes on the traditional and current use of land/ice and resources.

The Board's public consultation process included community consultations. For this assessment, the NIRB held public information meetings in two of the seven communities of the Kivalliq region of Nunavut deemed to be the most affected by the proposed Addendum - Baker Lake and Chesterfield Inlet.

The Public Hearing was held in Baker Lake, Nunavut, the nearest community to the proposed Project, and the Board sat extended hours so that members of the public had the opportunity to attend and ask questions during the day or evening to accommodate their work schedules. Elders and other community members who were present at the Public Hearing were encouraged to make statements, ask questions and identify their concerns with the project proposal. The NIRB further supported public participation by enabling Baker Lake and Chesterfield Inlet to each select and send up to five representatives to attend the whole of the Public Hearing, ask questions and make submissions.

Attendance at any of the NIRB's public meetings associated with this Addendum, including the Public Hearing, was tracked via the sign in sheets associated with these meetings. It is the NIRB's practice to ask all participants to sign in at the beginning of each day of proceedings; a full listing of sign in sheets from the Public Hearing is available online from the NIRB's public registry: <http://ftp.nirb.ca>.

The consultation efforts and opportunities for Nunavummiut and residents of Canada to provide their comments to the NIRB during the reconsideration process are outlined in [Table 1](#).

The Proponent was also required to document its efforts regarding consultation to ensure that Nunavummiut had the information they required regarding the Vault Pit Expansion project proposal and its potential impacts. In this regard, AEM's specific consultation efforts are summarized in the FEIS Addendum, Section 4.5.

3.2. THE PARTICIPANTS

3.2.1 Nunavut Tunngavik Inc.

Nunavut Tunngavik Incorporated (NTI) is the successor to the Tungavik Federation of Nunavut, which was the signatory to the Nunavut Land Claims Agreement (NLCA) and coordinates and manages Inuit responsibilities as set out in the NLCA. NTI is responsible for representing the Inuit of all the regions and communities of Nunavut to safeguard, administer and advance the rights and benefits that belong to the Inuit of Nunavut and to promote their economic, social, and cultural well-being through succeeding generations. This includes the administration and management of subsurface Inuit Owned Lands, and the collection of the Inuit share of royalties on both Inuit Owned Lands and Crown land such as are associated with proposed projects. NTI is responsible for determining which Inuit organization discharges implementation responsibilities under Article 39 of the NLCA.

NTI and the Kivalliq Inuit Association (KIA) coordinated their technical review of the FEIS Addendum. The purpose of technical review completed by NTI and the KIA was to ensure that the potential impacts and benefits were comprehensively assessed through scientific, socio-economic, impact assessment and Inuit Qaujimajatuqangit best practices.

3.2.2 Kivalliq Inuit Association

The Kivalliq Inuit Association (KIA) is a Designated Inuit Organization under the Nunavut Land Claims Agreement, representing interests, rights and values of Inuit in the Kivalliq Region at the territorial and regional levels. The KIA supports sustainable economic development opportunities for Inuit beneficiaries. As a Designated Inuit Organization, the KIA is mandated to deal with Inuit Owned Land management issues within the Kivalliq Region. Through its Lands Department the KIA administers the use of Inuit-owned surface lands such as are associated with the Meadowbank project, in order to meet legal obligations respecting surface land management. The KIA negotiates Inuit Impact Benefit Agreements in accordance with Article 26 of the NLCA.

As noted above, KIA and NTI coordinated their technical review of the FEIS Addendum. The KIA was involved in the NIRB process throughout, and participated at the Public hearing.

3.2.3 Government of Nunavut

The Government of Nunavut (GN) noted that the GN has significant jurisdictional responsibility and permitting authority over activities that affect wildlife and wildlife habitat, Commissioner's lands, municipalities, education, health, social services, public safety, culture, community development, property rights and the administrations of the laws in Nunavut.

The GN reviewed the Addendum considering the following throughout the review:

- The requirements and principles (including the principles of conservation) found in the Nunavut Land Claims Agreement;
- The requirements of the laws and regulations of Nunavut;
- The priorities of the Government of Nunavut and Nunavummiut; and
- The NIRB's guiding principles – the "Precautionary Principle" in particular.

The GN was involved in the NIRB process throughout and participated at the Public Hearing.

3.2.4 Environment and Climate Change Canada

Environment and Climate Change Canada (ECCC, previously Environment Canada) is responsible for leading implementation of the Government of Canada's environmental agenda, and is committed to contributing to the realization of sustainable development in Canada's North. ECCC's mandate covers the preservation and enhancement of the quality of the natural environment, including water, air, soil, flora and fauna, as well as species at risk and migratory birds. In addition to ECCC's mandate to conserve and enhance the quality of the natural environment, the Department administers subsection 36(3) of the *Fisheries Act*, which prohibits the deposit of a deleterious substance into fish-bearing waters. ECCC also administers the permitting of disposal at sea and participates in the regulation of toxic chemicals pursuant to the pollution provisions of the *Fisheries Act*, and the development and implementation of environmental quality guidelines pursuant to the *Canadian Environmental Protection Act*, 1999. ECCC is responsible for protecting and conserving migratory bird populations and individuals, under the *Migratory Birds Convention Act*, 1994, and administers the *Species at Risk Act* in cooperation with Fisheries and Oceans Canada and the Parks Canada Agency.

ECCC was involved in the NIRB process throughout and although not able to attend the Public Hearing in person, the Government of Canada, Department of Justice representative attending the Public Hearing was in contact with ECCC representatives and provided the Board with ECCC's submissions and responses to questions as became necessary during the Public Hearing.

3.2.5 Fisheries and Oceans Canada

Fisheries and Oceans Canada (DFO) is the federal government that exercises authority over sea, coastal and inland fisheries within Canada's territorial boundaries. 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 mandate of the Fisheries Protection Program of DFO 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."

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*).

The purpose of technical review undertaken by DFO of the FEIS Addendum was to ensure that works, undertakings and activities proposed in and around fisheries are conducted in such a way that the proponent would be in compliance with the applicable provisions of the *Fisheries Act*.

DFO was involved in the NIRB process throughout and participated at the Public Hearing.

3.2.6 Indigenous and Northern Affairs Canada

Indigenous and Northern Affairs Canada (INAC, previously Aboriginal Affairs and Northern Development Canada) is the federal government department responsible for meeting the Government's obligations and commitments to First Nations, Inuit and Métis, and for fulfilling the federal government's constitutional responsibilities in the North. In Nunavut, INAC has responsibilities for land and water resource management. In the NIRB Review process, INAC provided technical advice relative to its mandate and made recommendations to the NIRB to assist with the reconsideration of the Vault Pit Expansion Project proposal.

INAC's Minister, in concurrence with other responsible Ministers, will have a decision-making role in response to the Board's reconsideration. If the proposed project is approved to proceed, INAC will be responsible for inspecting and enforcing those conditions contained within any Crown land authorization and water license associated with the Vault Pit Expansion Project proposal. INAC participated actively in the NIRB Review process.

INAC was involved in the NIRB process throughout and participated at the Public Hearing.

3.2.7 Natural Resources Canada

The mandate of Natural Resources Canada (NRCan) is to develop, implement and deliver policies, programs, science and technology for the sustainable development and responsible use of Canada's mineral, energy and forestry resources. NRCan has the jurisdiction to issue a licence governing the manufacturing and storage of explosives through the federal *Explosives Act*. NRCan provided scientific and technical expertise to the NIRB's Review in the areas of hydrogeology, permafrost and terrain conditions.

NRCan was involved in the NIRB process throughout and participated at the Public Hearing.

3.2.8 Transport Canada

Transport Canada (TC) is responsible for development and administration of transportation policies and programs for Canada. TC also has a responsibility to regulate associated transportation infrastructure, equipment, and personnel in accordance with key relevant pieces of legislation, including the *Navigation Protection Act*, *Aeronautics Act*, *Canada Shipping Act, 2001*, *Arctic Waters Pollution Prevention Act*, *Marine Liability Act*, *Marine Transportation Security Act*, and the *Transportation of Dangerous Goods Act*.

Following review of the FEIS Addendum and additional information provided by the Proponent during the Information Request period, TC determined that it had no regulatory role in the Vault Pit Expansion Project proposal and did not participate further in the review of the proposal. However, TC noted that it would be available to provide advice and/or information regarding any activities related to its mandate.

3.2.9 Local Community Representatives

The NIRB invited five (5) community representatives each from Baker Lake and Chesterfield Inlet to attend the Public Hearing in Baker Lake as these two communities were identified as being potentially affected by the proposed Project. Community organizations were contacted in order to solicit representatives from broad demographic groups to participate, including local women's groups, Hunters and Trappers Organizations, Elders' societies, Hamlet Councils, and youth groups. Where no local group existed, the NIRB sought advice from regional associations and organizations to confirm participants for the Public Hearing. A total of seven (7) community representatives were confirmed to attend the public hearing but due to changes in personal schedules, a total of 12 representatives ended up participating through the community roundtable session.

A total of 12 community representatives from Baker Lake and Chesterfield Inlet attended the technical sessions of the Public Hearing and participated directly in the community roundtable portion of the Hearing.

The format of the Public Hearing allowed the community representatives to observe the technical presentations provided by AEM and the Intervenor during the first day of the proceedings, after which they participated directly through the community roundtable portion of the Public Hearing. During the community roundtable, representatives from the two communities replaced the registered Intervenor at the table to hear summary presentations by AEM regarding each component of the project proposal, followed by summary presentations from Intervenor regarding their respective mandates, jurisdictions and the conclusions of their review of the Proponent's Addendum to the FEIS. Community representatives were then invited to pose questions to AEM and/or Intervenor and to provide their comments and concerns directly to the Board for consideration.

Sections 4, 5 and 6 of this report include specific reference to relevant comments, issues, and concerns expressed by community representatives at the Public Hearing; [Table 2](#) and [Table 3](#) below provide a very brief summary of the key issues, concerns and perspectives offered by the community representatives and members of the public during the community roundtable session.

Table 2: Key Issues as Raised by Community Representatives regarding the Addendum

SUBJECT	ISSUES/CONCERNS/COMMENTS
ECOSYSTEMIC EFFECTS	
Birds	Will there be any monitoring of the birds in this area to make sure that these activities are not impacting the water quality and then having effects on the birds?
Caribou Crossings	There are caribou crossings in that area that you need to be careful about disturbing when you are doing the expansion.
Dust	How are you going to start doing a better job of controlling dust along the road; we have been talking about this since 2010?

Table 2: Key Issues as Raised by Community Representatives regarding the Addendum

SUBJECT	ISSUES/CONCERNS/COMMENTS
	Will you increase the dust control measures for the overall project at the same time that you are doing dust control for the expansion?
	The calcium chloride liquid used for dust suppression causes skin rashes; has AEM considered using UK35 (more natural and made from tree sap).
Effect on Local Trails	Phaser Lake is adjacent to a trail that goes to Gjoa Haven and this expansion should not interfere with that trail to the extent possible. Any effects on the trail should be discussed with elders and ways to limit the potential impacts should be considered by AEM.
	Are we going to have travel around the expanded pit to bypass it on the trail?
	This may affect hunters hunting for wolves and wolverine because the hunters go along there.
	Can KIA require AEM to put snowmobile crossings across the access roads where there are existing trails that were there before the Meadowbank Mine was there?
Fish	Does Phaser Lake freeze to the bottom every year, or is there a place that is deep enough that fish can over-winter?
	When you remove the fish, where will you put them?
	When you move them to a different lake (Wally Lake), will the fish survive in that different lake (different fish habitat and different food sources than they are used to)?
	Have the fishout plans for Phaser Lake been discussed with the community and Baker Lake HTO before, or is this the first time that we're hearing about this?
	Did you receive feedback from the community about the methods used for the fishout; and if you did was the feedback positive—did they say it was okay?
	When you did the fishout of Vault Lake how well did they survive and what happened to the fish that died?
	When you are doing blasting in Phaser Lake could the explosions have an effect on the fish in Wally Lake?
	Will DFO be on-site and/or engage in other forms of monitoring of the fishout when it occurs?
Fish	What kind of impacts to fish does DFO authorize and what are the kinds of terms and conditions are contained in the authorizations that DFO would issue to allow for these impacts?
Fuel Tanker Spills	Is the KIA aware of any fuel tanker spills associated with the Meadowbank Mine? If so, does the KIA attend on-site or plan for any monitoring when fuel transfer is taking place?
Haul Trucks	Will you be increasing the number of haul trucks to accommodate the truck?
Mining	Once you dewater the lake where will you mine for gold?
Road Traffic	Will there be more traffic on the road? Fuel shipments, cargo, etc.
Project Footprint	Will the expansion increase the project footprint and take land out of use?
	What is the size of the pits—you said the size of "Baker Lake"...did you mean the Lake or the Community?
Pit Refilling	How are you going to refill the pit when you have finished mining the pit?

Table 2: Key Issues as Raised by Community Representatives regarding the Addendum

SUBJECT	ISSUES/CONCERNS/COMMENTS
Project Approval	Have you started to take steps to dewater Phaser Lake or do you have to wait until this process is finished?
Reclamation and Closure of the Phaser and BB Phaser Pit	What will be left on the landscape when you are finished mining and reclamation—will you be leaving empty pits behind? Will you put all the rock back into the pits before you reflood?
Shipping	Will there be more shipping caused by this expansion? If so, we are already seeing less sea mammals and more shipping would be a problem and the channels are already getting shallower and shallower.
Tailings Facilities	How big are the tailings facilities? Is there contingency so that if there is a significant rainfall, freshet, etc., that these facilities will not overflow? How much additional tailings will you produce for the Vault Pit Expansion?
Vegetation	It appears that there is considerable dust falling on the vegetation along the road and we want that vegetation to be protected—we pick berries in those areas and we don't want the dust to affect the vegetation and the berries.
Waste Rock	Where will the extra waste rock go—will it be put back into the pit that is mined, or not? How much bigger will the Vault Pit waste rock piles become when this expansion is complete? Will the waste rock pile have rocks in it that have been exposed to chemical processing?
Water management	How will all the lakes in the area be affected by this, because the lakes are currently low; will this lower the lakes further?
Water quality monitoring	Can you describe what general water quality monitoring the KIA is conducting associated with this project? During the KIA's water quality monitoring has the KIA identified water quality problems?
Wildlife	Will the health of the wildlife be monitored around the area to make sure that impacts to the water are not affecting the wildlife?
SOCIO-ECONOMIC EFFECTS	
Alternatives	Is this 30 days of milling worth it? What would happen if the Community would say "No"?
Economics of the Mine	How much is a gold bar worth?
Employment	Manager's jobs are not being advertised and offered to Inuit and local community members. Does KIA provide support to Inuit workers at the mine if they are having issues at the mine site or with AEM as their employer? Job opportunities are needed for our young people.
Life of the Mine	Will the Meadowbank Mine continue to stay open longer as a result of this project? Is the extension of the mine life dependent on finding more gold, or are you certain that the expansion will only extend the mine life by 30 days? Is the gold in the existing Meadowbank mine almost gone?

Long-term project monitoring was also addressed in a written comment filed with the Board during the Public Hearing on March 3, 2016 by a resident of Baker Lake, Paula Hughson.⁹ The letter identified concerns with respect to the long-term monitoring of the mine after closure and noted that the period of time when a mine is active is only a short part of the history of a project. Citing the example of the Giant Mine in the Northwest Territories, Ms. Hughson cautioned that the issues of long-term monitoring and mitigation should be built into the project assessment and approval process so that land owners do not have to assume responsibility for clean-up and long-term monitoring that results after the mine has closed. She also questioned what the appropriate time period for long-term monitoring will be, noting that effects such as freezing and thawing due to climate change may dictate requirements for longer term monitoring and that monitoring parameters need to be sensitive enough to detect changes but also flexible enough to adapt to changes over time.

The community members also raised several questions about the potential Amaruq project, but the community members were advised that the Amaruq project is currently in the exploration phase and has yet to be submitted to the Nunavut Impact Review Board for assessment (potential submission in 2016). The questions related to the Amaruq project included the following:

Table 3: Key Issues as Raised by Community Representatives regarding the Amaruq Project

SUBJECT	ISSUES/CONCERNS/COMMENTS
Amaruq—Wildlife/Monitoring	Amaruq project the big boulders have been moved around and the wolverines in that area have denning areas around there—have these changes affected the wolverines and their cubs—is AEM going to be required to monitor for effects on the wolverine’s denning habitat?
Amaruq	Amaruq road construction is that part of this amendment and if so who will be responsible for regulation and construction of the road?

3.3. LIMITS TO PUBLIC PARTICIPATION

Participation of intervenors and the public is important in the NIRB’s process, especially for responsible authorities who would be exercising on-going jurisdiction over several key aspects of the project potentially affected by the proposed Vault Pit Expansion. Attendance at public hearings by responsible authorities with jurisdiction for the project proposal is important and the Board’s expectation is that if the reconsideration of the Project Certificate terms and conditions would ultimately result in amendments to the existing Project Certificate, then the regulatory authorities would be responsible for implementing these changes in accordance with their authorities and jurisdictional responsibilities as required under Article 12, Section 12.9.1 of the NLCA.

Although the NIRB is mindful of the fact that travel is both time consuming and expensive, particularly for those government agencies without offices physically located in Nunavut, the NIRB emphasizes that participants routinely find considerable value in attending Public Hearings in person, not the least of which is the active engagement between the parties that can take place during face to face discussions that is not at all the same when a participant attends by teleconference only. It has been the NIRB’s experience in past Public Hearings that teleconference participation is not an effective substitute for the kind of engagement that arises when a department representative is available in person to ask

⁹ P. Hughson, Baker Lake, NIRB Public Hearing File No. 03MN107, Exhibit #17.

questions, and just as importantly, to be questioned by the Proponent, public, Community Representatives and Board Members at the Public Hearing.

Further, the NIRB reminds all parties that even when a responsible authority reaches agreement with the Proponent on the technical issues raised in that agency's submissions, this does not mean that the Board and other participants in the process will necessarily agree that the issue has been resolved to their satisfaction. Consequently, there may still be considerable discussion required at the Public Hearing with respect to issues considered by the responsible authority to be "resolved". Conducting these types of open discussions in a Public Hearing via teleconference is less than ideal.

Finally, the NIRB notes that it is very difficult for community members to establish an effective and on-going working relationship with responsible authorities that do not make the effort to travel to their community. Responsible authorities who fail to appear in person at the Public Hearing have difficulty establishing the kind of on-going working relationship with affected communities that supports effective regulation of projects in the territory. This is particularly the case where there is no, or only limited agency presence in the region generally.

4. ECOSYSTEMIC EFFECTS

Agnico Eagle Mines Ltd. (AEM) focussed its approach in the assessment of environmental and socio-economic effects on the potential impacts of the new project components (e.g., Phaser Pit), the physical expansion of previously permitted components (e.g., Vault Pit waste rock area), and the incremental impact of increased activity (e.g., increased water discharge and road traffic).

The assessment approach was based on ecological, cultural, and socio-economic principles and environmental best practice. Key elements of the assessment methods and approach considered by AEM included the following:

- Determining links between the proposed operational expansion to include Phaser Pit and BB Phaser Pit and valued environmental components;
- Determining project-specific effects;
- Outlining mitigation measures to minimize impacts;
- Determining if impacts would remain after mitigation measures were in place; and
- Proposing monitoring and follow-up.

AEM noted that the original Meadowbank Final Environmental Impact Statement (FEIS) was completed to determine the potential effects that the various activities of the project would have on identified Valued Ecosystem Components (VECs) and Valued Social and Economic Components (VSECs). Predictions were outlined in the FEIS and supporting documents and impacts were predicted for the Vault area; however these predictions did not include the Vault expansion to include Phaser Pit and BB Phaser Pit that would primarily impact Phaser Lake. AEM focused its discussion on the proposed expansion, the potential additional impacts generated by the expansion, and how the expansion would affect the impact predictions outlined in the original FEIS. The FEIS identified valued ecosystem components, which were defined as: water quantity, water quality, air quality, noise, terrestrial wildlife, and fish and fish habitat.

For the purposes of this environmental assessment, AEM defined the temporal boundary for construction, operation, and closure of the Phaser and BB Phaser pits to be an additional 30 days of mining which is considered within the scope of the original project as permitted and assessed in the original FEIS (within the 8-10 years of operation life).

4.1. AIR QUALITY AND NOISE

4.1.1 Views of the Proponent

In the original FEIS, air quality and noise data were collected and used to establish baseline conditions and predict potential impacts of the Meadowbank Gold Mine Project in regards to dust and other emissions. AEM outlined the predicted changes to air quality and noise parameters as a result of the proposed Vault Pit Expansion Project in Section 4.19.1 of the FEIS Addendum. AEM concluded that changes to air quality and noise related to the Vault Pit Expansion Project would be insignificant and effectively mitigated by management strategies currently in place at the existing Meadowbank Gold Mine.

AEM did not consider the spatial boundaries to have changed from those established in the original FEIS with regards to evaluating effects on air quality and noise as a result of the proposed Vault Pit Expansion.

AEM predicted that the proposed Vault Pit Expansion Project would extend mine operations by 30 days, leaving the total operations period within the 8 to 10 year window previously assessed in regards to potential effects to air quality and noise.

AEM noted that the Vault Pit Expansion Project proposal includes a small increase in overburden stripping, excavation, and mine activity; however no additional vehicles or machinery would be required beyond those presently in use at the Meadowbank Gold Mine. AEM further noted that dust and other emissions are expected to be produced as a result of additional mine activity in the Phaser and BB Phaser pits, as well transportation between the new pits and the existing mill. AEM noted that the existing dust and noise mitigation plans would continue to be followed and in light of this, AEM predicted that potential changes to air quality and noise levels would be insignificant, and that the predictions made in the original FEIS remain relevant for the proposed Vault Pit Expansion Project.

4.1.2 Views and Concerns of Interested Parties

In a joint final written submission, Nunavut Tunngavik Inc. (NTI) and the Kivalliq Inuit Association (KIA) concluded that the small increase in overburden stripping, excavation, and other mine activity related to the proposed Vault Pit Expansion project would be effectively mitigated by the continuation of dust and noise control measures currently employed at the Meadowbank Gold Mine, and that the predictions made in the original FEIS remained applicable for the current addendum. During the Public Hearing, the KIA noted during its presentation that as long as the existing air quality and noise procedures are followed, the impacts from the Vault Pit Expansion Project would not be significant.¹⁰

During the Public Hearing, several community representatives from Baker Lake raised concerns with respect to dust created at the mine site and along the all-weather road. Concerns were related to potential impacts to humans, wildlife, vegetation, berries, and hunting, and whether monitoring was being conducted. The community representatives requested whether AEM has any plans to put in place dust control along the all-weather road and whether the KIA could follow-up with AEM in order to do something about this issue that has been raised on several occasions to both the AEM and the KIA. One community representative from Baker Lake noted the following:

*This dust control problem has been going on for years, ever since the mine started, especially between here and Meadowbank. Have you got any plans between here and Baker Lake [sic] to try and control the dust?*¹¹

Another community representative from Baker Lake noted:

...you are constantly asked about the dust control. Like, even the -- it's a very huge dust when the wind shifts. It gets to the lakes. It's like that. Like, every spring, we go fishing, and we know that. When the wind starts shifting, there's dust that travels everywhere, and ever since Agnico opened -- and just the dust control, like, has been monitored by Agnico Eagle, and -- because we did -- why is it that? Why are we not being looked after in our community when it comes to dust control? There's caribou that may eat, and Inuit pick berries out in the mainland, and they are already covered by dust, blueberries and -- and blackberries. If you are working -- if you are

¹⁰ L. Manzo, KIA, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 203, lines 5-7.

¹¹ D. Toolooktook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 153, lines 12-14.

*doing dust control, then why are you guys so slow? You need to -- if you are going to be keeping this mine open for long, you need to start thinking about it. In some summers, it's -- it would be nice to see that dust control be -- like, we talked about this for so many years, us from Baker Lake. Like, we never thought that we would see that much dust, but we already do.*¹²

While a community representative from Chesterfield Inlet questioned AEM regarding its dust control methods:

*Why don't Agnico Eagle use water to suppress the dust? Once you -- if you watered down the roads, then there wouldn't be that much dust. Once you just wet the roads, then there won't be much dust. Is that a consideration or -- the people of Baker Lake are asking the question, and you know that you didn't mention it.*¹³

AEM noted that for safety reason that dust control is implemented at the mine site and along the road between the Baker Lake fuel storage facility and the gatehouse but at this time no dust control is being applied along the all-weather road.¹⁴ In response to questions about its plans for implementing dust control measures, AEM noted that since 2011 it has undertaken dust monitoring along the all-weather access road and AEM is also looking at applying dust control along certain critical areas along all-weather access road including Whitehills, which were based on concerns raised by the community members of Baker Lake.¹⁵ AEM further noted that calcium chloride (CaCl) can be used as a dust suppressant but needs to outweigh the impacts to vegetation from CaCl versus the impacts from dust on the environment.¹⁶

A community representative from Baker Lake questioned KIA on dust control as follows:

*Can we get help to get the dust control going somehow? I'm asking KIA. Can you help us out soon? ...the community's been asking for dust control for so many years now, is not getting anywhere. Is there any way that KIA can get Agnico to work on it?*¹⁷

The KIA responded to the community representatives' question regarding assistance with the dust issue and lack of dust control by noting that KIA has reviewed AEM's dust protocols and water management and confirmed that AEM has been compliant with its dust management plans. In addition, based on water quality samples collected by KIA and from review of AEM's results, no impacts to water quality have been observed outside the immediate area of the mine site. KIA further noted that:

¹² D. Aksawnee, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 169-170, lines 1-26 and 1-9.

¹³ Leo Mimialiq, Chesterfield Inlet, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 213, lines 9-14.

¹⁴ S. Robert, AEM, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 153-154, lines 21-26 and 1-14.

¹⁵ R. Vanengen, AEM, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp.155-157, lines 23-26, 1-26 and 1-5.

¹⁶ R. Vanengen, AEM, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 171-172, lines 18-26 and 1-6.

¹⁷ D. Owingayak, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 218, lines 1-26 and 7-14.

*... we've been trying to address the communities' concerns to see if that dust gets further away from the road by reviewing AEM's annual reports to see if that dust that is landing on the snow is having a significant impact away from that immediate-road area, and we have, so far, not seen the dust get too far away when the snow melts and gets into the water.*¹⁸

4.1.3 Views of the Board

The Board places a great deal of importance on dust management, in particular dust management for increased traffic in and around the mine site. Dust management is required to minimize potential impacts on adjacent freshwater habitats and species, on vegetation, on terrestrial wildlife through uptake of vegetation, and on human health and safety at the mine site due to diminished breathing air quality and through impairment of visibility. The Board stresses the importance of the Proponent implementing the dust emission control and monitoring measures referenced in the FEIS Addendum and during the Public Hearing for the Vault Pit Expansion proposal to minimize impacts from the proposal. Further, in general, the Board stresses that it is clear from the concerns expressed by community members at the Public Hearing that AEM needs to be more proactive with its dust management along the all-weather access road. It is clearly the view of the Board (as previously expressed in the Board's Monitoring Reports for the Project) that existing Project Certificate term and condition 74 applies to the all-weather road as well as the mine site.

During the Public Hearing, the Board requested clarification from Environment and Climate Change Canada (ECCC) regarding whether the department had any concerns specific to the air quality conclusions for this Addendum as it relates to the air quality management standards.¹⁹ ECCC noted that it carried out a thorough assessment of the air quality section of the Addendum, taking into account the Canadian ambient air quality standards, and had no further comments.²⁰

The Board notes that there is the potential for small increases in noise levels at the mine site due to construction and operations activities. The Proponent has noted the noise increase can be mitigated by implementing the existing mitigation plans and that the predictions made in the original FEIS remain relevant for the proposed Vault Pit Expansion Project.

4.1.4 Conclusions and Recommendations of the Board

In considering the issue of air quality, the NIRB notes that the terms and conditions previously developed for the original Meadowbank Gold Mine Project through Project Certificate No. 004 have been designed to address potential project specific impacts to air quality. In the Board's view, the potential impacts of the amended project activities will be adequately addressed through application of existing Project Certificate No. 004 term and condition 74.

In considering the issue of noise related to the amended activities, the terms and conditions previously developed for Project Certificate No. 004 have been designed to address project specific effects of the Project; and on this basis the Board is not recommending additional terms and conditions at this time. The Board notes that the Noise Monitoring and Abatement Plan for the Meadowbank Project should be updated to include the Vault Pit Expansion infrastructure.

¹⁸ R. Nesbitt, KIA, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 214-215, lines 7-21 and lines 16-26.

¹⁹ E. Copland, NIRB, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 85, lines 13-17.

²⁰ D. Keates, Department of Justice, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 175-176, lines 25-26 and 1-4.

4.2. TERRESTRIAL ECOSYSTEM

4.2.1 Views of the Proponent

In the original FEIS, seven VECs were considered as part of the impact assessment for the terrestrial environment and included: vegetation, raptors, other breeding birds, waterfowl, predatory mammals, small mammals, and ungulates. AEM outlined the predicted changes to these VECs in regards to the proposed Vault Pit Expansion in Section 4.19.2 of the FEIS Addendum (*4.19.2.1 Vegetation; 4.19.2.2 Raptors, other breeding birds, and waterfowl; 4.19.2.3 Mammals and ungulates*). AEM concluded that changes to all seven VECs would likely be insignificant and mitigable by management plans currently in place at the existing Meadowbank Gold Mine.

Vegetation

The original FEIS identified vegetation degradation and loss as potential effects of the construction and operation of Vault Pit. Additional pit stripping for the proposed Vault Pit Expansion would occur primarily in Phaser Lake, leading to an additional 3.94 hectares (ha) of vegetation loss beyond the original project footprint. AEM also noted that although the project certificate approved up to 867 ha of vegetation loss, current losses amounted to only 775.71 ha, leaving the predicted lichen-rock and heath tundra vegetation losses associated with the Vault Pit Expansion Project within the original impact predictions.

AEM further clarified that all existing Meadowbank Gold Mine monitoring and mitigation strategies would remain in place for the Phaser Pit and BB Phaser Pit operations. In light of this, AEM considers the original FEIS predictions for impacts to vegetation applicable to the proposed Vault Pit Expansion Project.

Raptors, other breeding birds, and waterfowl

The original FEIS discussed potential effects to raptors, breeding birds, and waterfowl as a result of the Meadowbank Gold Mine, in particular habitat loss, traffic-related mortality, reduction in habitat use related to noise, habitat degradation related to dust and other emissions, and the potential for increased contaminant loading in prey. In the FEIS, the original Proponent stated that none of these predicted effects had been observed to date during the initial mining of the Vault Pit.

AEM noted the potential temporary loss of waterfowl habitat related to the dewatering of Phaser Lake, but indicated no significant changes were predicted as the lake is not a highly-used habitat by waterfowl citing personal observations (one waterbird observed occupying the area in 2005).

AEM stated that similar monitoring and mitigation strategies to those currently employed at the Meadowbank Gold Mine would be continued, and that it considered the original predictions for potential impacts to raptors, breeding birds, and waterfowl applying to the proposed Vault Pit Expansion.

Mammals and ungulates

Potential impacts to mammals and ungulates were previously identified in the original FEIS, specifically the loss and disturbance of foraging habitat, traffic-related mortality, reduction in habitat use related to noise, habitat degradation related to dust and other emissions, and the potential for increased contaminant loading in prey. Similar to raptors, breeding birds, and waterfowl, AEM stated that none of

these predicted effects had been observed to date during the initial mining of Vault Pit. AEM further noted that no significant residual effects on mammals and ungulates were expected, and considered the original impact assessment applicable for the proposed Vault Pit Expansion.

4.2.2 Views and Concerns of Interested Parties

In a joint final written submission, NTI/KIA concluded that based on plans for the construction, operation, and closure of the proposed Phaser and BB Phaser pits, as well as results of current Meadowbank site monitoring programs, the impacts to vegetation, raptors, other breeding birds, waterfowl, predatory mammals, small mammals, and ungulates would remain unchanged from those predicted in the original FEIS. NTI/KIA did note that there would be some vegetation loss and degradation due to the Vault Pit Expansion. However, NTI/KIA noted that the majority of the pit stripping would occur within Phaser Lake and therefore the predications made in the original FEIS should remain unchanged.

During the Public Hearing, a community representative from Chesterfield Inlet noted concern with the expansion of the Meadowbank project, future expansion of other sites in the area and the effects of climate change to wildlife.²¹ The community representative from Chesterfield Inlet further discussed the effects of dust on the lakes and vegetation, noting that *“if you look at it carefully, the vegetation is well looked after down south, but for people up north, vegetation is not well looked after. That’s what I noticed, and we’re berry-pickers too.”*²²

A community representative from Baker Lake noted the importance of the environment to future generations and requested clarification from AEM whether monitoring will be completed on wildlife, birds and water quality after closure and what would be done if impacts are observed.²³ AEM noted that monitoring would be conducted as part of the closure plan.

Another community representative from Baker Lake noted *“...there are some caribou that pass around that area, caribou crossing...”* and that AEM needs to be careful with these areas.²⁴

A community representative from Baker Lake filed written comments related to long-term project monitoring, noting the need for proper monitoring and mitigation, consideration for climate change, monitoring of specific parameters to track minute changes over time, flexibility in monitoring programs, and reclamation liability to ensure a plan is in place when clean-up becomes the responsibility of the landholder.²⁵

In response to the submission, AEM noted that a closure plan is place for the Meadowbank project with a planned monitoring period of 20 years but this timeline would depend on consultation with regulatory bodies. KIA indicated that the current plan would require review shortly and believed that the monitoring period would be longer than 20 years to ensure the area is protected. INAC noted that as

²¹ Leo Mimialik, Chesterfield Inlet, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 144-147, lines 11-26, 1-26, 1-26 and 1-16.

²² Leo Mimialik, Chesterfield Inlet, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 215, lines 5-7.

²³ M. Kaluraq (sp?), Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 251-252, lines 8-26 and 18.

²⁴ D. Owingayak, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 187, lines 1-4.

²⁵ P. Hughson, Baker Lake, NIRB Public Hearing File No. 03MN107, Exhibit #17.

part of the recent water licencing process with the Nunavut Water Board, a reclamation cost estimate was agreed upon and financial assurance were provided to the Minister of INAC and to the KIA. Further, INAC indicated that the duration of post-closure monitoring cannot be prescribed because the period is subject to when the site is chemically and physically stable and the Proponent is required to consider climate change.²⁶

4.2.3 Views of the Board

The Board notes that there is the potential for small increases in impacts to the terrestrial ecosystem with loss to vegetation and degradation due the development of Phaser Pit and BB Phaser Pit. The Board stresses the importance of continuing to implement the mitigation and management plans that are currently in place at the existing Meadowbank Gold Mine to minimize the impacts from the development of these pits, particularly the Wildlife Protection and Response Plan, Terrestrial Ecosystem Management Plan, Mine Waste Rock and Tailings Management Plan, the Hazardous Materials Management Plan, and the Spill Contingency Plan.

During the Public Hearing, the Board requested clarification from Environment and Climate Change (ECCC) on the two migratory bird habitats identified as being unique by AEM and whether AEM's proposed activities might have an impact to birds migrating to the area, and also what specifically would occur to the habitats with the development of the pits.²⁷ ECCC noted that migratory birds feed on fish from Phaser Lake and during the review of the Addendum, ECCC requested information on baseline water bird usage of Phaser Lake and requested a description of mitigation measures to prevent bird by-catch during the fishout program of Phaser Lake. ECCC was informed by AEM that during the seven (7) years of baseline surveys conducted that only one common loon was observed in 2005. Based on this information, ECCC does not foresee significant impacts to the migratory bird habitat.²⁸

4.2.4 Conclusions and Recommendations of the Board

In considering this issue, the NIRB notes that the terms and conditions previously developed for the original Meadowbank Gold Mine Project through Project Certificate No. 004 have been designed to address potential project specific impacts to the terrestrial ecosystem. In the Board's view, the potential impacts of the amended project activities will be adequately addressed through application of existing Project Certificate No. 004 terms and conditions 7, 60, 75, 79, and 85. Additionally, the Board notes that the Closure and Reclamation Plan for the Meadowbank Project should be updated to include the Vault Pit Expansion infrastructure to ensure long term safety to the public and wildlife once the mine has been closed and the project areas reclaimed.

4.3. PHYSICAL ENVIRONMENT

4.3.1 Views of the Proponent

Within Sections 4.19.3.1 and 4.19.3.2 of the FEIS Addendum, AEM outlined potential changes to surface water quantity and quality resulting from activities associated with the proposed Vault Pit Expansion Project. AEM concluded that potential changes to surface water quantity and quality resulting from the proposed dewatering of Phaser Lake and the construction and operation of Phaser Pit and BB Phaser Pit

²⁶ NIRB Public Hearing File No. 03MN107 Transcript, March 3, 2016, pp. 12-14, lines 16-26, 1-3, 13-26 and 1-20.

²⁷ K. Kaluraq, NIRB, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 85, lines 1-6.

²⁸ D. Keates, Department of Justice, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 174-175, lines 15-26 and 1-14.

was considered within the scope of the original FEIS, and would have no significant residual impacts on the physical environment.

Surface water quantity

The original FEIS discussed the potential effects on surface water quantity due to the Vault Pit mining activity, in particular dewatering and mining activities at Vault Pit were predicted to alter the water quantity of Phaser Lake (increase in volume of water over time) and Turn Lake (pumping of water from Phaser Lake to Turn Lake to maintain water levels in Phaser Lake). Following dewatering activities of Vault Pit in 2014 and during the initial phase of the Vault Operations, AEM determined that it was not necessary to construct the diversion ditches as originally proposed and therefore eliminated the need to discharge water into Turn Lake and ended up protecting Turn Lake and maintaining the fish habitat in Phaser Lake.

AEM proposed to complete the dewatering and fish-out of Phaser Lake in Q2 and Q3 of 2016. AEM stated that water from Phaser Lake would be transferred to the Vault Attenuation Pond and eventually discharged through a diffuser into Wally Lake. AEM concluded that by discharging into Wally Lake, there would be no changes to water levels in Wally Lake, Turn Lake, or Drill-tail Lake. AEM further stated that the historical drainage patterns within the Vault Lake watershed would be maintained, that changes to surface drainage within the Phaser Lake watershed would be minor in nature, and no additional impacts to the watershed would occur than what was originally predicted in the FEIS for the Vault Area. AEM concluded that the proposed dewatering of Phaser Lake was considered within the scope of the original FEIS and is approved pursuant to the Nunavut Water Board (NWB) Type A Water Licence Part D, Item 16 (2AM-MEA0815). AEM further noted that it is approved to dewater lakes and committed to following all dewatering strategies, mitigation, and monitoring plans as related to the original development of Vault Pit and identified in the original FEIS. AEM further predicted that the proposed development of the Phaser and BB Phaser Pit would not result in any significant residual impacts beyond those described in the original FEIS.

Surface water quality

The original FEIS identified potential impacts to surface water quality resulting from dewatering, operations, and waste rock storage activities associated with the Vault Operation at the Meadowbank Gold Mine. The original FEIS further identified potential impacts to water quality in Vault Lake and Phaser Lake resulting from run-off from the Vault waste rock storage facility during operations and closure. AEM stated in the FEIS Addendum that water collected due to activities associated with the proposed Vault Pit Expansion would be collected and pumped into the Vault Attenuation Pond. AEM noted that while water quality predictions indicate good water quality, it would monitor water quality in the Vault Attenuation Pond prior to discharge, as outlined in the original FEIS.

In the FEIS Addendum, AEM noted that the proposed dewatering of Phaser Lake could potentially result in the discharge of total suspended solids into Wally Lake. To offset potential impacts, AEM proposed to transfer water from Phaser Lake into the Vault Attenuation Pond for treatment if needed and to use a diffuser when discharging water into Wally Lake in accordance with the NWB Type A Water Licence Part F, Item 3.

As with water quality, AEM committed to following best management practices and using all appropriate mitigation strategies proposed within the original FEIS. AEM concluded that there would be no significant residual impacts to water quality due to the proposed Vault Pit Expansion Project.

4.3.2 Views and Concerns of Interested Parties

NTI/KIA concluded within the final written submission that impacts to surface water quantity would be effectively mitigated by existing permitting requirements, and that no new impacts to surface water quality beyond those previously assessed for the original Vault Pit at the Meadowbank Gold Mine would occur.

Indigenous and Northern Affairs Canada (INAC) commented within its final written submission that additional geochemical characterization of rock types in the new Phaser and BB Phaser pits was needed prior to the commencement of construction to ensure that proposed mitigation measures would be effective. INAC further noted that borehole samples of the proposed Phaser Pit site had incomplete spatial coverage to provide a complete characterization of rock types in the project area. In addition, INAC highlighted results from AEM's borehole samples showing that the Felsic Volcanics in the project area have slightly elevated concentrations of sulphide sulphur, with one sample classified by AEM as being of uncertain acid generating potential. INAC further noted that Shake Flask Extraction testing showed that all Felsic Volcanic samples, half of the Intermediate Volcanic samples, and half of the Iron Formation samples showed leachable arsenic concentrations above CCME guidelines. INAC requested that AEM perform additional geochemical analysis of all rock types to be encountered during construction and operation of Phaser and BB Phaser pits to increase confidence in current predictions of metal leaching. On the same issue, in its final written submission, Natural Resources Canada (NRCAN) expressed confidence in AEM's geochemical site characterizations to date, and suggested that the geochemical composition of waste rock produced from the proposed Phaser and BB Phaser pits was unlikely to differ from the existing characterizations of the Vault Pit area. During the Public Hearing, INAC noted that there remained commitments that it would like to see completed. The one commitment is that AEM continue with the confirmatory testing while mining to confirm these results. AEM agreed to this commitment in its final written submission.²⁹

NRCAN also provided final comments on potential seepage into the dewatered Phaser Lake and permafrost and other terrain conditions at the expansion site. NRCAN indicated that it has confidence in AEM's conclusions regarding seepage into the new Phaser and BB Phaser pits and that there would be no significant residual impacts to water quality. NRCAN noted the potential development of a through talik beneath the expanded lake and reflooded pits post-closure over the course of many centuries but agreed with AEM's conclusions that water quality in the reflooded pit lake is unlikely to be a concern. NRCAN also expressed confidence in AEM's conclusions that general site water quality and quantity was unlikely to change due to the proposed Vault Pit Expansion. NRCAN suggested changes to ground thermal conditions during dewatering and flooding of lakes and pits could result in localized permafrost thaw and ground instability; however, it noted that the design of the proposed Phaser and BB Phaser pits included mitigation measures to minimize disturbance and promote stabilization. Finally, NRCAN agreed with AEM's conclusions that the existing waste rock and tailings storage plans in place at the Meadowbank Gold Mine are sufficient for the processing and containment of wastes to be produced during the proposed Vault Pit Expansion Project. During the Public Hearing, NRCAN re-iterated its conclusions with respect to the Addendum and its confidence in the Proponent's conclusions with respect to the impact assessment of the Addendum.³⁰

²⁹ L. Harris, INAC, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 103, lines 4-20.

³⁰ R. Besner, NRCAN, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 115, lines 11-24.

During the Public Hearing, a community representative from Chesterfield Inlet requested that AEM explain where the waste rock from Phaser Pit and BB Phaser would be stored and whether “it [would] go back in the pit or stay outside” and how the landscape would change.³¹ Community representatives from Baker Lake requested clarification on the size of the waste rock pile and whether it would change the landscape:

...you're taking out, it's going to become a hill, and it will change the landscape when you have waste rock put in the waste area. Are you going to put it back into the pit?...³²

...I take it that you will return some of that material back to the pit, but some of the material that you removed will be out still and on the rock pile -- waste rock pile. In other words, the landscape will never ever be the same again once you're done?...³³

A community representative from Baker Lake also requested whether chemicals were used in the process of removing the gold from the bedrock.³⁴ AEM noted that explosives are used at site to blast the rock to remove it and some of the explosives material may still be in the waste rock but AEM noted that when the pit is reflooded, it would be monitored and safe for the environment.³⁵

The same community representative from Baker Lake requested clarification from AEM on the size of the tailings pond, noting concerns regarding potential overflow from the tailings facility and impacts to the environment and asked if “is there some kind of plan or something in place should there be an overflow of some sort somewhere”.³⁶ AEM noted that its goal is to not have an impact on the environment; AEM will ensure no overflow would occur of the tailings and the facility will be dewatered at closure.³⁷

A community representative from Baker Lake requested clarification from the KIA on how often the mine sites are inspected, whether inspections are conducted randomly, whether any impacts are observed from the mines and whether the inspectors are on-site when refuelling occurs from the fuel tankers to the fuel tank farm.³⁸

The KIA noted that inspections occur three to four times a year and that the KIA has also conducted its own water quality program and to date no issues have been observed with the water quality. With respect to the comment on whether inspectors are on-site during refuelling, the KIA noted that this concern was previously raised during a community meeting and based on the comments have requested

³¹ C. Kriterdluk, Chesterfield Inlet, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 139, lines 5-10.

³² T. Aniriq, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 166, lines 1-4.

³³ D. Toolooktook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 189, lines 12-17.

³⁴ D. Toolooktook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 190, lines 9-13.

³⁵ S. Robert, AEM, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 190-191, lines 17-26 and 1-11.

³⁶ D. Toolooktook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 150-151, 13-20 and 5-13.

³⁷ S. Roberts, AEM, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 151, lines 15-26.

³⁸ D. Toolooktook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 210-212, lines 1-6, 26, 1-3, 24-26 and 1-6.

that AEM collect water quality samples around the marshalling area during the sealift season and that the KIA will also be collecting water samples.³⁹

Finally, community representatives of Baker Lake requested information from AEM on what the plans are following closure of the mine and how the pits would be refilled.

*...I wanted to ask, in the Phaser Lake you want to dewater, you are going to extend the life by a month, and if you find gold in that portion of Phaser Lake -- if you find gold, are you going to extend the 30 days? Or is it just going to be the 30 days? That's my question. And the pit that you create after you dewater it, you've said you're going to refill it.*⁴⁰

*...After you dewater that lake and you close it off, once you close it off, then you start looking for gold. Once it's dewatered, do you close it off and look for gold?*⁴¹

*...Once you remove all the water, remove the material on the bottom of the lake and then reach your rock, remove the rock to retrieve your gold the size of your Kleenex per day for 30 days, that's 30 million bucks plus maybe. Once you get all that done, okay, and then time to close it, do you just flood it? Or do you replace all that material rock that you removed? Do you put it all back? Or is it going to stay out?*⁴²

AEM provided a summary of its plans following mining of Phaser Pit and BB Phaser noting that the waste rock material from Phaser Lake would go to the Vault waste rock pile while the waste rock material from BB Phaser would go into the Phaser Pit. Once mining is complete and prior to reflooding, AEM would re-contour some of the areas within the old Phaser Lake, remove the roads in the area and then reflood both pits.⁴³

The Board also requested that AEM provide clarification on the length of the proposal, including timing for dewatering and fishout and milling of the ore from Phase Lake.⁴⁴ AEM noted that it proposed 30 days of additional milling, but would require approximately four months to dewater and remove the top layer from the Phaser Lake to access the ore.⁴⁵

4.3.3 Views of the Board

The Board acknowledges the measures that have been developed and proposed by AEM for the Vault Pit Expansion proposal. The potential changes in surface water and sediment quality, the groundwater distribution and permafrost that are directly or indirectly attributable to the development of the pits and activities associated with the Project would require monitoring throughout the life of the mine. Again, the Board stresses the importance of continuing implementing the mitigation and management plans that are currently in place at the existing Meadowbank Gold Mine to minimize the impacts from

³⁹ L. Manzo, KIA, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 210-212, lines 10-22, 5-20 and 7-19.

⁴⁰ T. Aniriq, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 164, lines 12-19.

⁴¹ E. Elytook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 184, lines 20-23.

⁴² D. Toolooktook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 188, lines 3-10.

⁴³ R. Vanengen, AEM, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 188-189, lines 12-26 and 1-10.

⁴⁴ K. Kaluraq, NIRB, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 167, lines 17-20.

⁴⁵ S. Robert, AEM, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 222, lines 20-25.

the development of these pits, particularly the Core Receiving Environmental Management Plan, the Groundwater Monitoring Plan, the Hazardous Materials Management Plan, and the Spill Contingency Plan.

During the Public Hearing, the Board requested clarification from NRCAN on whether there were concerns with potential seepage into the dewatered Phaser Lake.⁴⁶ NRCAN noted that it believed seepage into Phaser Lake would be minimal.⁴⁷

The Board requested clarification from AEM on when the last time permafrost studies were conducted around the site.⁴⁸ AEM noted that ongoing permafrost monitoring is being conducted at the Meadowbank tailings facility and waste rock piles and that the studies are conducted on the surface to determine how permafrost would react over time and how it would freeze-back. However, the studies as outlined within the FEIS were completed in 2004 to 2005 with no additional studies conducted since that period.⁴⁹

The Board questioned both AEM and NRCAN on how the Proponent would ensure that a talik does not form or that permafrost underneath Phaser Lake does not diminish over a long period of time.⁵⁰ AEM attempted to answer the question; however, both NRCAN and AEM were unable to answer the question to the Board's satisfaction.

The Board requested that AEM provide a visual example of the size of the waste rock material that would be removed from the pits and the size of the Vault waste rock pile at closure.⁵¹ The Board also requested that AEM provide a figure of the proposed area and pits to clarify to the public on what AEM is proposing and to include where the water from Phaser Lake would be dewatered to.^{52,53}

4.3.4 Conclusions and Recommendations of the Board

In considering this issue, the NIRB notes that the terms and conditions previously developed for the original Meadowbank Gold Mine Project through Project Certificate No. 004 have been designed to address potential project specific impacts to the physical environment. In the Board's view, the potential impacts of the amended project activities will be adequately addressed through application of existing Project Certificate No. 004 terms and conditions 7, 11, 13, 14, 23, 26, 27, 75, 79 and 85.

Additionally, the Board notes that the Closure and Reclamation Plan for the Meadowbank Project should be updated to include the Vault Pit Expansion infrastructure to ensure long term safety to the public and wildlife once the mine has been closed and the project areas reclaimed. The Closure and Reclamation Plan should demonstrate consideration for maintaining the integrity of the groundwater quality around the mine site and, the long term integrity of the project infrastructures following closure. Consideration

⁴⁶ E. Copland, NIRB, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 61, lines 19-22.

⁴⁷ R. Besner, NRCAN, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 107, lines 21-25.

⁴⁸ E. Copland, NIRB, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 117-118, line 17 and lines 9-10.

⁴⁹ S. Roberts, AEM, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 117-118, lines 20-26, 1-5 and 13-26.

⁵⁰ K. Kaluraq, NIRB, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 249, lines 1-8.

⁵¹ K. Kaluraq, NIRB, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 141-142, lines 9-12, 25-26 and 1.

⁵² G. Alikut, NIRB, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 143, lines 1-5.

⁵³ E. Copland, NIRB, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 158, lines 19-20.

for potential effects of climate change and the need for long term monitoring of the site, particularly related to the tailings impoundment area, should be clearly identified and discussed as appropriate.

4.4. FISH AND FISH HABITAT

4.4.1 Views of the Proponent

AEM outlined potential changes to fish and fish habitat associated with the proposed Vault Pit Expansion Project in Section 4.19.4 of the FEIS Addendum. AEM concluded that the proposed habitat offsetting is consistent with the original FEIS and previous approvals, and that based on the current No Net Loss Plan (NNLP), the predicted net changes to fish habitat in Phaser Lake would be positive in nature.

AEM noted that baseline studies of fish and fish habitat for the Meadowbank area were conducted prior to 2007, and in 2008 the first NNLP was granted DFO approval (File No. NU-03-0191). In 2012, AEM submitted a revised NNLP to the DFO for the Meadowbank site for approval in 2012, which included expected impacts to fish habitat and habitat compensation within the Vault Lake area; revised authorizations were received in 2013. AEM clarified that although the proposed Vault Pit Expansion was not considered as part of the amended Vault Lake Area Authorization, potential losses and gains due to habitat loss in Phaser Lake associated with the Vault Pit Expansion were accounted for in the Addendum to the 2012 NNLP.

AEM predicted that activities associated with the proposed Vault Pit Expansion would result in the loss of fish habitat in Phaser Lake. To mitigate potential adverse effects to fish populations in Phaser Lake, AEM proposed a fish salvage program (similar to the one carried out during the 2013 dewatering of Vault Lake) to transfer fish to Wally Lake or other nearby waterbodies, which would offset some of the expected temporary losses in fish productivity in the area. AEM stated that compared to Vault Lake and other previously impacted waterbodies, Phaser Lake is an isolated and offline lake with small populations of round whitefish and lake trout, limited overwintering habitat, and no known history of sport, traditional, or commercial fishing.

Post-closure, AEM proposed to connect Vault and Phaser Lakes via Vault Pit by re-flooding all pits and former lakebeds to ultimately connect with the larger Wally Lake. Vault Dike, separating Vault Lake and Wally Lake, would be removed after water quality standards were met. AEM argued that by connecting the previously isolated waterbodies, additional overwintering habitat would be made available for fish populations, and the improved connection between Wally Lake and Vault Lake would allow fish passage within the Wally, Vault, and Phaser Lake system year-round.

AEM concluded that during post-closure, the newly connected Wally, Vault, and Phaser Lake system would constitute a positive impact on fish, fish habitat, and system productivity due to the fish salvage program during construction and operations as well as the gain in available fish habitat in the reflooded Phaser Lake. Subsequently, AEM argued that with regards to fish and fish habitat, the proposed Vault Pit Expansion Project should be considered consistent with the original FEIS and predicted that proposed activities would result in no long-term adverse effects on fish populations due to revised offsetting and NNLPs.

During the Public Hearing, AEM requested that term and condition 48 be removed from Project Certificate 004 and term and condition 49 be amended to include a reference to Phaser Lake.

4.4.2 Views and Concerns of Interested Parties

In a joint final written submission, NTI/KIA concluded that based on the current and proposed No Net Loss and water management plans, the predictions related to impacts to fish and fish habitat from the original FEIS should remain unchanged.

As part of its final written submission, DFO noted that it had no further comments on the information presented in the FEIS Addendum and no further information to present should a hearing be scheduled. DFO did provide a set of responses to items that would be discussed during the regulatory review phase, should the project proceed, and requested clarification from the NIRB regarding whether the requirement to re-flood mine pits during closure activities was, or could be, included in the existing project certificate.

During the Public Hearing, the NIRB staff questioned Fisheries and Oceans Canada (DFO) on AEM's request to remove term and condition 48 from Project Certificate No. 004 and the amendment suggested to term and condition 49. DFO noted that it was in support of the changes as requested by AEM and had no concerns.

During the Public Hearing, a community representative from Chesterfield Inlet questioned AEM on the overwintering capacity of Phaser Lake:

My last question is in regard to Phaser Lake. You stated that it's a small lake, and it contains some fish, and it's only about 5 metres deep. Does that lake freeze solid in the winter? Or is there a spot that it doesn't freeze right through? And you said there are some fish.⁵⁴

AEM noted that Phaser Lake is a small basin lake, that there is a small overwintering habitat where the lake is deep enough to not freeze to the bottom, and the fish are able to overwinter in this area of the lake. However, AEM noted that the fish population is small. AEM further noted that part of the offsetting plan is to connect all of the lakes after closure which would offer additional overwintering habitat for some of the fish.⁵⁵

Another community representative from Chesterfield Inlet requested clarification from AEM on whether the fish would survive when they are moved to a different lake [Wally Lake] due to different fish habitat and food source availability as follows:

The Phaser Lake that you want to dewater, the fish that are there, when you're moving the fish, where are you going to put them? And because it's their -- their lake that they've been stuck in and if they move to a different lake, they're going to have a different diet, are they not going to die away if you move them to a different lake because there's different foods in the other lake, I guess.⁵⁶

AEM noted that it is working with Fisheries and Oceans Canada to determine the best path forward for a fishout work plan and part of the process is to recover as many fish as possible. AEM further noted that

⁵⁴ H. Aggark, Chesterfield Inlet, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 138, lines 4-9.

⁵⁵ R. Vanengen, AEM, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 138, lines 12-22.

⁵⁶ Leonie Mimialik, Chesterfield Inlet, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 177, lines 1-8.

when it had previously fished out Vault Lake, the success rate was 60% of fish and that AEM is hoping to do achieve better results with the fish in Phaser Lake. AEM did note that the community representative was correct in that the fish from Phaser Lake would be introduced to a different habitat and potentially different food source, but AEM believed that the fish would be able to survive.⁵⁷

Community representatives from both Baker Lake and Chesterfield Inlet requested further explanation from AEM on the fishout plan being proposed, the type of fish that was previously observed during the fishout program from Vault Lake, the amount of fish that survived during the fishout program and what occurred to the fish that did not survive the fishout program.

*...that lake that you want to defish. During the process of your dewatering and defishing, will you be doing that at the same time? Or will you take the fish out first and then remove the water? Or how do you go about that?*⁵⁸

*...After you have removed, like, from -- when you started working over there, were they -- were the fish alive? Or were there already dead fish in that area when you started working? When you were taking out all the fish and moving them to a different lake after you guys -- I'm pretty sure you did that. How were they? Can you tell us what happened...*⁵⁹

AEM provided a summary on the dewatering and fishout programs and the steps that would be completed when the fish were removed. AEM also noted that the fishout program previously conducted for Vault Lake was successful with approximately 60% transferred to Wally Lake. The remaining fish were either sacrificed for biological studies as required by DFO or died during the fishout program. The fish were frozen and given to the community of Baker Lake and from AEM's understanding the fish were used as food for the dogs in the community. AEM hopes to improve on the fishout program for Phaser Lake.⁶⁰

A community representative from Baker Lake requested information on whether the "...explosives [used in Phaser Lake would] have an effect on the fish that are in Wally Lake at that point in time while you are doing the explosives work".⁶¹ AEM responded by noting that a blast monitoring program has been implemented with sensors installed near Wally Lake to ensure that the blasting program in Vault Pit is not having an effect on the fish in Wally Lake. The monitoring program has to be conducted prior to each blasting program.⁶²

Following the presentation by Fisheries and Oceans Canada (DFO), a community representative requested clarification on whether "...a DFO staff member [will be] monitoring the movement of the fish

⁵⁷ R. Vanengen, AEM, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 177-178, lines 12-26 and 1-20.

⁵⁸ D. Toolooktook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 187, lines 10-14.

⁵⁹ Leo Mimialik, Chesterfield Inlet, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 191, lines 20-26.

⁶⁰ R. Vanengen, AEM, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 187, 192, lines 17-26, 4-23.

⁶¹ D. Toolooktook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 194, lines 4-7.

⁶² S. Robert, AEM, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 194, lines 11-25.

from one lake to another.⁶³ Another community representative requested information on the protection program legislation asking:

*...you mentioned that you allow or authorize a certain amount of impacts with conditions. What -- what sort of impacts are we talking about under certain conditions? What -- what kind of impacts are you allowing to happen to the fish or water or whatever that is allow -- that you're allowing?*⁶⁴

DFO noted that during the Phaser Lake fishout program, DFO would be monitoring AEM's activities both by being on-site as well as through reviewing the monitoring reports which are required as the fishout program occurs. The monitoring of the fishout program would be similar to what was completed for the Vault Lake. With respect to the legislation, DFO noted that it would be authorizing the loss of fish within Phaser Lake as there would be a certain percentage of fish loss due to the fishout program and DFO would also issue an authorization that would have various conditions that AEM must follow to mitigate the fish habitat loss during the development of Phaser Lake.⁶⁵

4.4.3 Views of the Board

During the Public Hearing, the Board heard concerns by the public on the fish-out program of Phaser Lake, the impacts to Wally Lake and the removal of Phaser Lake as fish habitat. The Board acknowledges the measures that have been developed and proposed by AEM for the Vault Pit Expansion proposal which includes measures for fish and fish habitat. The potential changes with respect to fish and fish habitat that are directly or indirectly attributable to the development of the pits and activities associated with the Project would require monitoring throughout the life of the mine. Again, the Board stresses the importance of continuing implementing the mitigation and management plans that are currently in place at the existing Meadowbank Gold Mine to minimize the impacts from the development of these pits, particularly the Habitat Compensation Plan, Core Receiving Environmental Management Plan, the Groundwater Monitoring Plan, the Hazardous Materials Management Plan, and the Spill Contingency Plan.

The Board requested clarification from DFO on whether offsetting as planned by AEM would be taking place near the Meadowbank site or further away from site to replace the habitat that would be displaced by the proposal.⁶⁶ DFO noted that offsetting would occur primarily at Phaser Lake with the potential that additional offsetting would occur off site. The offsetting plans as required by DFO would be addressed during the regulatory phase.⁶⁷

4.4.4 Conclusions and Recommendations of the Board

In considering the potential impacts to fish and fish habitat related to the amended activities, the NIRB notes that the terms and conditions previously developed for the original Meadowbank Gold Mine Project through Project Certificate No. 004 have been designed to address potential project specific impacts in this area. In the Board's view, the potential impacts of the amended project activities will be

⁶³ E. Elytook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 237, lines 1-4.

⁶⁴ D. Toolooktook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 237-238, lines 24-26 and 1-4.

⁶⁵ E. Patreau, DFO, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 96, lines p. 237, lines 12-18, and p. 238, lines 12-26.

⁶⁶ K. Kaluraq, NIRB, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 96, lines 6-9.

⁶⁷ E. Patreau, NIRB, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 96, 12-22.

adequately addressed through application of existing Project Certificate No. 004 terms and conditions 7, 75, 79, and 85. The Board also notes that the Closure and Reclamation Plan for the Meadowbank Project should be updated to include the Vault Pit Expansion infrastructure with the objective of ensuring long term safety to fish and fish habitat once the mine has been closed and the project areas reclaimed.

Furthermore, the Board is recommending the following changes to specific terms and conditions to ensure that Phaser Lake and the effects on the lake are explicitly included.

The NIRB recommends the removal of term and condition 48 from the Project Certificate as it would no longer be applicable with the development of the Vault Pit Expansion proposal.

Condition 48:

Cumberland shall demonstrate to the satisfaction of the DFO that the water management framework, including the embankment details and diversion ditch, will permit the maintenance of over-wintering fish habitat in Phaser Lake through the life of the Project.

The NIRB recommends that existing terms and conditions 49 and 53 be applied to the Vault Pit Expansion Project proposal, with the following minor revisions.

Condition 49:

~~Cumberland~~ **Agnico Eagle Mines Ltd.** shall develop, implement and report on the fish-out programs for the dewatering of Second Portage Lake, Third Portage Lake, ~~and~~ Vault Lake ~~and~~ **Phaser Lake**. This must be done in consultation with the DFO, Elders and the HTOs, and in a manner that optimizes the acquisition of northern fisheries science and augments baseline fisheries data to support monitoring programs and the final design of fish habitat compensation for the Project.

Condition 53:

~~Cumberland~~ **Agnico Eagle Mines Ltd.** shall, in consultation with the HTOs and DFO, develop a Fish Habitat Monitoring Plan, including augmenting baseline fisheries data in the period prior to operation, with the clear objective of demonstrating the success of the No Net Loss Plan approved by the DFO. **The Fish Habitat Monitoring Plan should include Phaser Lake.**

5. SOCIO-ECONOMIC EFFECTS

As noted in [Section 4](#), Agnico Eagle Mines Ltd. (AEM) focussed its approach in the assessment of environmental and socio-economic effects on the potential impacts of the new project components (e.g., Phaser Pit), the physical expansion of previously permitted components (e.g., Vault Pit waste rock area), and the incremental impact of increased activity (e.g., increased water discharge and road traffic).

The assessment approach was based on ecological, cultural, and socio-economic principles and environmental best practice. For the socio-economic and cultural components, AEM used the 2011-2014 results from its socio-economic monitoring program for the Meadowbank Gold Mine to assess potential impacts of the proposed Vault Pit Expansion Project.

AEM noted that the development of Phaser and BB Phaser pits would not materially change the socio-economic and cultural effects that have been and continue to be observed in Baker Lake and other communities in the Kivalliq region due to the Meadowbank Mine. AEM predicted that the proposed Vault Pit Expansion Project would result in overall net positive socio-economic benefits for the community of Baker Lake and the Kivalliq region.

5.1. BUSINESS AND EMPLOYMENT OPPORTUNITIES

5.1.1 Views of the Proponent

Within the FEIS Addendum, AEM identified the community of Baker Lake as the primary area to see positive project-induced socio-economic impacts due to proximity to the project site. However, AEM noted that some benefits would also accrue to individuals and business located in other communities in the Kivalliq region and Nunavut.

In 2006, the original project owner, Cumberland Resources, and the Kivalliq Inuit Association (KIA) signed an Inuit Impact Benefits Agreement (IIBA) for the Meadowbank Gold Mine Project. The IIBA was renewed in 2011 and 2014 by AEM and the KIA to reflect the continued evolution of the relationship between the Kivalliq Inuit population and the Meadowbank Gold Mine. AEM stated that the IIBA addresses impacts and benefits pursuant to the Nunavut Land Claims Agreement (NLCA) and provides the following assurances for Inuit Beneficiaries of the Kivalliq region: employment and training opportunities, preferential hiring programs, business development and contract arrangements, participation in monitoring activities, and a dispute resolution process for the KIA and AEM. AEM expected that a third renewal of the IIBA would be completed in 2015, to harmonize where practical the terms and conditions within the Meadowbank with the new Meliadine IIBA. The third renewal would also include arrangements covering the proposed Vault Pit Expansion Project.

Business Opportunities

AEM observed that impacts from mine expenditures have been of moderate significance, and relative to the size of the regional economy, between 2011 and 2014 through mine expenditures. AEM further observed that contracting goods and services for local businesses have been of high significance for individual businesses, but overall moderate significance relative to the size of the regional market. AEM reported the potential for annual mine expenditures of \$23 million over 10 years. AEM reported that in 2014 it had paid over \$105 million to Nunavut based companies, which represented 46% of total expenditures. Of this, over \$37 million was disbursed to Baker Lake businesses. This is compared to \$479 million, or 52.2% of total expenditures, paid to Nunavut based companies in 2011. AEM noted that the financial benefits have not been evenly distributed among businesses in Baker Lake and the Kivalliq region; three (3) Baker Lake businesses have received the majority of the mine expenditures in Baker Lake, amounting to 22.4% of total expenditures in 2011. AEM discussed the potential for further business growth and development in Baker Lake and the Kivalliq region and stated that it had established the Building People Initiative and Inuit Business Opportunities programs to assist Kivalliq and Inuit businesses, respectively, in meeting market demand and pursuing contract opportunities with the Meadowbank Gold Mine. AEM further concluded that the current business levels observed as a result of the Meadowbank Gold Mine would continue for an additional 30 days of mine operations as outlined in the Vault Pit Expansion Project proposal.

Employment Opportunities

AEM observed that impacts of employment have been of high significance at the individual level, and relative to the size of the labour force in Baker Lake and to the Kivalliq region in general. AEM employment statistics stated that as of December 31, 2014 it had employed 1,012 people directly or indirectly as a result of the Meadowbank Gold Mine, of which 788 people were directly hired by AEM. AEM stated that 88% of the direct hires were full time employees, 12% were temporary employees, 34% were Inuit employees, and 15% were female employees. Ninety-five percent (95%) of the temporary jobs were filled by Inuit employees and all were filled by Nunavummiut. As of the end of 2014, AEM estimated that approximately 81% of Nunavummiut employees held skilled or semi-skilled positions. AEM also noted that as of December 31, 2014, approximately 58% of the Nunavut-based employees were from Baker Lake, 16% were from Rankin Inlet, and 14% were from Arviat.

AEM further observed that increased income disparity would be of moderate significance, which could be mitigated by community initiatives. AEM noted that generating income is not necessary the primary concern of Inuit employed at the Meadowbank Gold Mine, and that other responsibilities would take priority. AEM identified that employment and income generation from the Meadowbank Gold Mine has resulted in substantial rent increases for some mine employees in Baker Lake and other communities. It was suggested that as a result of project-associated rent increases, this created a disincentive for some employees to continue to work at the mine, that some employees were not necessarily able to meet all of their needs and thus discontinued their employment with the Meadowbank Gold Mine. AEM also presented anecdotal evidence of decreased dropout rates and higher graduation rates in Baker Lake and suggested that the potential for employment at the Meadowbank Gold Mine could act as an incentive for students to complete high school.

AEM predicted that the proposed expansion of the Vault Pit into Phaser Lake would allow the current employment levels and training programs at the Meadowbank site to continue for at least an additional 30 days with the current employment levels as described above.

5.1.2 Views and Concerns of Interested Parties

During its final remarks at the Public Hearing, the KIA noted that it would be reviewing and updating the Meadowbank IIBA to include the Vault Pit Expansion Project if it were to be approved.⁶⁸

In its final written submission, Indigenous and Northern Affairs Canada (INAC) noted that project employment conditions at the time of the proposed development could differ from what was outlined within the FEIS Addendum. INAC requested that wording be included in the terms of reference for the Meadowbank Socio-Economic Monitoring Committee to ensure that all existing socio-economic monitoring requirements (including participation in regional socio-economic monitoring committees) extend to the proposed Vault Pit Expansion Project. During the Public Hearing, INAC noted that it was satisfied with AEM's response to technical review comments and that the "Agnico Eagle agreed to the wording recommended by [INAC] and... will be considered final and incorporated into the terms of reference."⁶⁹

During the Public Hearing, multiple community members from Baker Lake commented on Inuit employment opportunities at the Meadowbank Gold Mine. One community representative noted that

⁶⁸ K. Gilson, KIA, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 258, lines 14-16.

⁶⁹ L. Harris, INAC, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 104, lines 7-11.

there was a lack of advertising for opportunities for management positions for Inuit and local community members at Meadowbank Gold Mine. The community representative further noted that AEM needs “to advertise more available jobs to the Inuit before you go down south” to offer employment opportunities.⁷⁰ Another community representative noted that “it’s impossible to find jobs in the Arctic, and the only job opportunities that we have is Agnico Eagle” and expressed to the KIA the importance of support for the younger generation in finding employment opportunities.⁷¹

One community representative from Baker Lake further commented on the role of the KIA with regards to employee support at the Meadowbank Gold Mine and asked if “the KIA [does] any kind of support for the person talking to KIA in regards to the work problems over there?”⁷² The KIA responded that it would be working to assist and address issues with respect to employee support but in the end any issues arising involving Inuit employees would need to be discussed and addressed by AEM through human resources and with on-site supervisors. The KIA further discussed the role of the Inuit Impact Benefit Coordinator, who “helps Inuit workers to find answers to their questions and to direct them to the place they should be going, if they have employment issues.”⁷³

5.1.3 Views of the Board

The Board recognizes that the Vault Pit Expansion proposal would result in the continuation of employment levels and training programs at the Meadowbank mine site for at least an additional 30 days. The Board further recognizes as well that the current Meadowbank IIBA would be revised and updated to include the Vault Pit expansion project if it were to be approved.

The Board acknowledges that AEM has agreed to include in the terms of reference for the Meadowbank Socio-Economic Monitoring Committee to ensure that all existing socio-economic monitoring requirements extend to include the proposed Vault Pit Expansion Project. The Board recommends that AEM continues to work with the committee with respect to the socio-economic monitoring requirements.

5.1.4 Conclusions and Recommendations of the Board

In considering business and employment opportunities related to the amended activities, the NIRB notes that the terms and conditions previously developed for the original Meadowbank Gold Mine Project through Project Certificate No. 004 have been designed to address potential project specific impacts in this area. Although the NIRB is not recommending any additional terms and conditions with respect to Business and Employment Opportunities, the Board notes that terms and conditions 64 and 65 require the Proponent to carry out socio-economic monitoring and research activities to provide project specific socio-economic data. The NIRB recommends that the Proponent demonstrate consideration for the Vault Pit Expansion Project as part of this socio-economic monitoring program.

⁷⁰ E. Elytook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 161, lines 3-5.

⁷¹ D. Owingayak, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 220-221, lines 23-26 and 1-7.

⁷² E. Elytook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 204, lines 17-20.

⁷³ K. Gilson, KIA, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 204-205, lines 23-26 and 1-9.

5.2. TRAINING

5.2.1 Views of the Proponent

Using 2011-2014 results from its socio-economic monitoring program for the Meadowbank Gold Mine, AEM concluded that its training programs have resulted in benefits that have been of high significance at the individual level by increasing the capacity of the local labour force to participate in the formal economy and to take skilled positions at the Meadowbank Gold Mine site. AEM further observed moderate significance regarding its impacts of its project initiatives on high school completion rates, noting that the impacts at the individual level could have high significance.

AEM identified three types of training opportunities at the Meadowbank Gold Mine site: on-site health and safety training, general and specific job-specific instruction. Training methods included the use of e-learning formats, classroom lessons, and on-the-job training. In 2014, AEM provided 32,742 hours of training to 944 employees for the Meadowbank Gold Mine Project, of which 14,344 hours were provided to Inuit employees.

AEM reported that by the end of 2011, 75% of the Inuit workers hired from Baker Lake were employed in skilled positions. In 2014, 35 Inuit employees held skilled positions at the Meadowbank Gold Mine, compared to eight in 2008. AEM identified the Kivalliq Mine Training Society, of which it is a funding party, on-site training, and apprenticeship programs as contributing factors to the upward trend it observed of Inuit employees filling skilled positions. AEM stated that these trends suggest that Inuit employees are taking advantage of training initiatives offered at the Meadowbank Gold Mine, and highlighted its Career Path program for driver placements and associated on-site haul-truck simulator.

AEM predicted that the proposed expansion of the Vault Pit into Phaser Lake would allow the current training programs at the Meadowbank site to continue for at least an additional 30 days with the current training programs as described above.

5.2.2 Views and Concerns of Interested Parties

During the review of this project proposal, no party raised concerns regarding Training.

5.2.3 Views of the Board

The Board notes that parties did not raise any concerns with respect to Training for the Vault Pit Expansion Project during the review of this proposal and at the Public Hearing. The Board recognizes that the Vault Pit Expansion proposal would result in the continuation of employment levels and training programs at the Meadowbank mine site for at least an additional 30 days. The Board further recognizes as well that the current Meadowbank IIBA would be revised and updated to include the Vault Pit expansion project if it were to be approved.

The Board acknowledges that AEM has agreed to include in the terms of reference for the Meadowbank Socio-Economic Monitoring Committee to ensure that all existing socio-economic monitoring requirements extend to include the proposed Vault Pit Expansion Project. The Board recommends that AEM continues to work with the committee with respect to the socio-economic monitoring requirements.

5.2.4 Conclusions and Recommendations of the Board

In considering this issue, the NIRB is not recommending any additional terms and conditions with respect to Training. However, the Board notes that term and condition 64 requires the Proponent to carry out socio-economic monitoring and research activities to provide project specific socio-economic data. The NIRB recommends that the Proponent includes the Vault Pit Expansion Project as part of this socio-economic monitoring program.

5.3. TRADITIONAL ACTIVITY AND KNOWLEDGE

5.3.1 Views of the Proponent

Using 2011-2014 results from its socio-economic monitoring program for the Meadowbank Gold Mine, AEM concluded that project-induced impacts on access to traditional land have been of moderate negative significance for individual users, and that any resulting reduction in traditional activities, including harvesting, has both been of low negative significance as well as had potential positive impacts at the individual level. AEM further found that any undervaluing of traditional ways and loss of knowledge as a result of the project has been of low significance. In Section 4.19.10 of the FEIS Addendum, AEM predicted that while the Meadowbank Gold Mine Project could result in both positive and negative impacts on traditional ways of life, it would not significantly restrict land productivity associated with subsistence hunting and gathering activities. AEM further noted that there was no known sport fishing occurring in Phaser, no traditional Inuit fishing, and given that Phaser is a disconnected lake, it would not support a commercial fishery.

Within the FEIS Addendum, AEM justified its conclusions regarding project-induced impacts to traditional land use and practice of traditional activities by noting that the overall number of traditional land users impacted would likely be limited and that individual choice rather than lack of opportunity would impact participation in traditional activity. AEM reported that respondents to interviews presented in the 2011-2014 socio-economic monitoring programs discussed harvesting activities more frequently than general environmental impacts; AEM interpreted these responses to mean that Baker Lake residents were more concerned with impacts to harvesting. AEM presented conflicting anecdotal evidence from the monitoring program on the type and level of impact that the Meadowbank Gold Mine Project has had on traditional activities, including harvesting. Many respondents concluded that the time off afforded by rotational work at the mine and the financial capability to purchase equipment has increased the ability for many community members to participate in traditional land-based activities. Conversely, some community members concluded that factors such as stress and work fatigue were limiting the length of time individuals could spend on the land. There was further concern expressed through interviews that increased participation in the wage economy and dependence on southern material goods and values were displacing Inuit values, particularly the influence of Elders in the community.

AEM used language as an indicator of impacts to traditional ways of life and loss of language. Through analysis of data from the Nunavut Bureau of Statistics, AEM observed that in Baker Lake, English appears to be increasingly spoken in the home when compared to Inuktitut. Although AEM stated that the use of Inuktitut in the home appears to be lower in Baker Lake than other communities in the Kivalliq region, AEM identified issues between Inuit and southern workers at the Meadowbank Mine site regarding language and culture. It was noted that up until 2012, employees were prohibited from using Inuktitut on site, while French was spoken by some southern workers; in 2011, some respondents of interviews

used in the 2011-2014 monitoring program attributed related issues as reasons for voluntary termination. AEM provided anecdotal evidence that communication and teamwork were important factors when addressing social and cultural tensions.

5.3.2 Views and Concerns of Interested Parties

During the Public Hearing, multiple community members discussed the impacts of project-related dust, particularly resulting from the all-weather access road, on vegetation and wildlife associated with traditional harvesting. Many of these concerns as related to air quality and vegetation were previously covered in [Section 4.1.2](#) and [Section 4.2.2](#). The following comments from parties are related to the potential impacts of dust to traditional activity. A community representative noted that *“there’s caribou that may eat, and Inuit pick berries out in the mainland, and they are already covered by dust, blueberries and blackberries.”*⁷⁴ Additional interactions between hunters utilizing areas near the all-weather access road, including the caching of meat were discussed. The dissatisfaction with current levels of dust was further expressed in the following comment: *“Dust that travels all over. I really encourage you to at least try, and we’re not going to shut up until – the community will not shut up until something is done.”*⁷⁵

Several community members from Baker Lake noted the existence of a snowmachine trail that goes through the area to Gjoa Haven, that the trail goes over Phaser Lake and that the trail is used for hunting and travelling.^{76,77} One community representative noted:

*...I've travelled this way by Ski-Doo, and that's where our trail goes when we're going hunting, both to Kawita [phonetic] and Uqsuqtuuq. Now that I see the map, I recognize where it is, where exactly you want to dewater the lake. It's right on the trail for Inuit that are going to Uqsuqtuuq or Baker Lake, which is Gjoa Haven. That's -- when they go to Gjoa Haven, that's the road to Gjoa Haven. And when the people from Gjoa Haven are coming to Baker Lake, that's the road they use, through that lake. I wanted to -- I don't know what my community members feel about that trail is -- I've used it.*⁷⁸

One community representative noted that snow is being piled up on the snowmachine trail or covered by snow causing travellers to go further away from the main trail over rougher and rockier terrain. The community representative asked KIA whether there was anything that can be done.⁷⁹ Another community representative from Baker Lake noted that the snowmachine crossings over the all-weather road have large boulders and the trail should be fixed so that snowmachines can cross over it without damaging the machines, and requested if there was anything KIA can do about it.⁸⁰

⁷⁴ D. Aksawnee, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 169-170, lines 25-26 and 1.

⁷⁵ D. Aksawnee, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 172-173, lines 16-26 and 1.

⁷⁶ D. Aksawnee, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 196-197, lines 25-26 and 1-6.

⁷⁷ E. Elytook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 207, lines 22-25.

⁷⁸ E. Elytook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 180-181, lines 23-26 and 1-9.

⁷⁹ E. Elytook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 205-206, lines 12-26 and 1-5.

⁸⁰ D. Aksawnee, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 208-209, lines 21-26 and 1-9.

The KIA noted that it is familiar with the trail that is being referred to and believes that the trail is approximately 50 kilometres from Phaser Lake. However, the KIA indicated that they could discuss further with AEM on working on a map that would include the snowmachine trail to Gjoa Haven that the community members are referring to that is closer to Phaser Lake, conduct density analyses of the area, work with hunters to develop different scenarios on the trail, provide information to the members and hunters and potentially come up with different scenarios for hunters.⁸¹ The KIA further noted that they are revising a work plan for AEM and could request that the Proponent include fixing the snowmachine crossings over the all-weather access road in the plan.⁸²

One community representative stated that measures should be put into place to limit potential impacts and ensure that the proposed amendment does not interfere with the access trail and recommended that AEM consult with Elders as follows:

...Phaser Lake is a trail that's going to Gjoa Haven and from Gjoa Haven to Baker Lake, so I think this is something that the community members will have to consider, that travel in the springtime to Gjoa Haven or from Gjoa Haven to Baker Lake. It's right on the trail to -- so -- when they travel by snowmobile, so I think we're going to have reconsider this project. I know 30 days is not going to make much of a difference for Meadowbank, in my opinion. I know the gold is almost gone at Meadowbank, so I'm unsurprised. However, the people that lived in that area are Elders now. When they were children, they grew up in that area. If they -- if we can -- in my opinion, you have to meet with the Elders -- that's from my own opinion -- to consider their comments and questions.⁸³

AEM remarked later during the Public Hearing that it had met with various groups, including Elders, during its Traditional Knowledge and Inuit Qaujimajatuqangit acquisition studies and workshops for the Amaruq Exploration Access Road Project. AEM further noted that during these workshops, community members shared that there are traditional snowmobile trails west of the Meadowbank Gold Mine site that travel along the lakes in the winter to Gjoa Haven (*Exhibit #16*).⁸⁴

One community representative discussed the additional distances that hunters need to travel as a result of decreased access to trails and alluded to subsequent potential financial difficulties in undertaking harvesting activities:

They do travel a lot during this time of year, our hunters. ...The hunters that go up to that area looking for wolves and wolverines, they're going to lose out, and I feel for them because they're going to lose out. They are making money. Even though they are working, they have a hard time buying gas to go hunting. I wonder how our hunters should come down here and speak their mind. I wonder how we can achieve that?⁸⁵

⁸¹ L. Manzo, KIA, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 206-207, lines 24-26 and 1-12.

⁸² L. Manzo, KIA, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 209, lines 18-20.

⁸³ D. Aksawnee, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript March 2, 2016, pp. 196-197, lines 24-26 and 1-19.

⁸⁴ R. Vanengen, AEM, NIRB Public Hearing File NO. 03MN107 Transcript, March 2, 2016, pp. 223-224, lines 4-13, 18-26 and 1-12.

⁸⁵ E. Elytook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 207-208, lines 24-25 and 5-11.

5.3.3 Views of the Board

The Board commented on the Baker Lake community member's comment regarding hunters having to travel further for harvesting activities that *"based on her knowledge, harvesters are having to go further away to hunt carnivores"* and questioned the KIA on whether *"there [is] a mechanism, through the IIBA, that harvesters can access benefits to help them go further, such as obtaining funds for getting gasoline"*⁸⁶ The KIA responded that while *"[t]here is no such program under the existing Inuit Impact Benefit Agreement ... there is nothing at the current time, it's something we could certainly think about, and I have made a note that we would put it on our topic for discussion in the IIBA negotiations."*⁸⁷

5.3.4 Conclusions and Recommendations of the Board

In considering potential impacts to traditional activity and knowledge related to the amended activities, the NIRB notes that the terms and conditions previously developed for the original Meadowbank Gold Mine Project through Project Certificate No. 004 have been designed to address potential project specific impacts in this area. Accordingly, the NIRB is not recommending any additional terms and conditions with respect to Traditional Activity and Knowledge, however, the Board notes that the Closure and Reclamation Plan for the Meadowbank Project should be updated to include the Vault Pit Expansion infrastructure to ensure long term safety to the public and wildlife once the mine has been closed and the project areas reclaimed. Furthermore, the plan should demonstrate consideration for the traditional trails or travel route that may be displaced by the dewatering of Phaser Lake. The Board believes that restoration of this trail or travel route will be important for local residents and, therefore, the Board recommends that AEM ensure that the traditional trail over Phaser Lake is traversable following closure of the mine.

5.4. CULTURAL, ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES

5.4.1 Views of the Proponent

In Section 4.19.10 of the FEIS Addendum, AEM noted that it had not identified any archaeological sites within the proposed Vault Pit Expansion area and predicted that the proposed project would not result in any new effects or impacts on archaeological resources or sites of cultural or heritage importance. AEM stated that it had undertaken archaeological field studies between 1999 and 2010 and that in 2014 it had not identified any activities undertaken or planned within areas of the mine site that had not been previously assessed for potential archaeological impacts. AEM stated that staff would undertake ongoing monitoring to ensure that no identified archaeological sites would be impacted or disturbed and that project activities would not take place beyond the defined mine site boundaries. AEM added that the Archaeology Resources Management Plan, submitted to the NIRB in 2005, would still be in effect for the duration of the Vault Pit Expansion Project.

5.4.2 Views and Concerns of Interested Parties

In a joint final written submission, NTI/KIA noted that no new archaeological sites have been identified thus the proposed Vault Pit Expansion Project should pose no new significant impacts on the archaeology components and overall the predictions should remain unchanged as discussed in the original FEIS.

⁸⁶ K. Kaluraq, NIRB, Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 220, lines 1-5.

⁸⁷ K. Gilson, Kivalliq Inuit Association, Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 220, lines 9-16.

During the Public Hearing, the Government of Nunavut (GN) noted that a section of the Vault Pit road would require an archaeological survey. The GN provided a joint commitment with AEM during the Public Hearing which noted that a short section of the Vault Pit road remains to be surveyed and the survey would be completed by the AEM under the 2016 archaeological permit (Exhibit #5).⁸⁸

5.4.3 Views of the Board

The Board notes that AEM has not identified any new archaeological sites within the proposed Vault Pit Expansion proposal but that AEM has committed to conduct additional surveys along the Vault Pit road. The Board stresses the importance of ongoing monitoring to ensure that no identified archaeological sites would be impacted or disturbed from the amended project activities.

5.4.4 Conclusions and Recommendations of the Board

In considering this issue, the NIRB notes that the terms and conditions previously developed for the original Meadowbank Gold Mine Project through Project Certificate No. 004 have been designed to address potential project specific impacts to archaeological and cultural sites. In the Board's view, the potential impacts of the amended project activities will be adequately addressed through application of existing Project Certificate No. 004 terms and conditions 69 and 70.

5.5. INDIVIDUAL AND COMMUNITY WELLNESS

5.5.1 Views of the Proponent

Using results from its 2011-2014 socio-economic monitoring programs for the Meadowbank Gold Mine, AEM made observations in the FEIS Addendum that the project has resulted in positive impacts that have been of high significance related to increased individual, family and community wellness, based on the assumption that increased income is correlated with increased wellness, and to overall increased economic activity. AEM further observed that the Meadowbank Gold Mine Project has resulted in negative impacts and has been of low to high negative and positive significance at the individual level resulting from impacts related to financial decision making, income disparity, and job related stress. In Section 4.19.10 of the FEIS Addendum, AEM predicted that potential impacts resulting from the proposed Vault Pit Expansion Project related to increased income, rotational employment, and migration to and from Baker Lake would not substantially differ from impact predictions made in the original FEIS. AEM concluded that the proposed project would not materially change the original individual and community wellness impacts as made within the original FEIS. AEM committed to continue to undertake the individual and community wellness related initiatives, programs and monitoring activities it established in 2008 for the Meadowbank Gold Mine Project for the proposed Vault Pit Expansion project.

5.5.2 Views and Concerns of Interested Parties

During the review of this project proposal, no party raised concerns specifically regarding Individual and Community Wellness.

⁸⁸ J. Rogers, Government of Nunavut, Exhibit 5, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 225, lines 19-24.

5.5.3 Views of the Board

The Board notes that parties did not raise any concerns with respect to Individual and Community Wellness for the Vault Pit Expansion Project during the review of this proposal and at the Public Hearing. The Board recognizes that the current Meadowbank IIBA would be revised and updated to include the Vault Pit expansion project if it were to be approved.

The Board further acknowledges that AEM has agreed to include the proposed Vault Pit Expansion Project in the terms of reference for the Meadowbank Socio-Economic Monitoring Committee to ensure that all existing socio-economic monitoring requirements extend to the entire development. The Board recommends that AEM continues to work with the committee with respect to the socio-economic monitoring requirements.

5.5.4 Conclusions and Recommendations of the Board

In considering this issue, the NIRB is not recommending any additional terms and conditions with respect to Individual and Community Wellness. However, the Board notes that terms and conditions 64 and 65 requires the Proponent to carry out socio-economic monitoring and research activities to provide project specific socio-economic data. The NIRB recommends that the Proponent includes the Vault Pit Expansion Project as part of this socio-economic monitoring program.

5.6. COMMUNITY INFRASTRUCTURE AND PUBLIC SERVICES

5.6.1 Views of the Proponent

Community Infrastructure

AEM used 2011-2014 results from its socio-economic monitoring program to observe that the Meadowbank Gold Mine had resulted in negative impacts to housing and other infrastructure from immigration to Baker Lake, which had resulted in increased demand and need for improvements. In Section 4.19.10 of the FEIS Addendum, AEM explained that it would use existing mine infrastructure during the proposed Vault Pit Expansion Project and predicted that as a result, there would be no additional project induced effects on existing community infrastructure and that no new support infrastructure would be required. AEM concluded that the proposed project would not materially change the original predictions of project impacts on infrastructure and social services as made in the original FEIS.

Public Services

Through its 2011-2014 socio-economic monitoring programs, AEM observed that direct and indirect employment opportunities associated with the Meadowbank Gold Mine had resulted in decreased reliance on social assistance by community members in Baker Lake as well as had a positive impact on material well-being. AEM added that it was possible that the economic gap could be widening between community members relying on social assistance and those with access to higher wages. AEM used information from the Kivalliq Socio-economic Monitoring Committee (KSEMC) to report decreasing use of social assistance by community members in Baker Lake and Rankin Inlet, particularly as a result of the Meadowbank Mine site. However, AEM also reported an increase in reliance on social assistance by community members in other Kivalliq communities. AEM concluded that the current impact on social services observed as a result of the Meadowbank Gold Mine would continue for the additional 30 days

of mine operations as outlined in the Vault Pit Expansion Project proposal, and would likely have less of an effect than predicted as a result of final project closure.

5.6.2 Views and Concerns of Interested Parties

During the review of this project proposal, no party raised concerns regarding Community Infrastructure and Public Services.

5.6.3 Views of the Board

The Board notes that parties did not raise any concerns with respect to Community Infrastructure and Public Services for the Vault Pit Expansion Project during the review of this proposal and at the Public Hearing. The Board recognizes that the current Meadowbank IIBA would be revised and updated to include the Vault Pit expansion project if it were to be approved.

The Board further acknowledges that AEM has agreed to include the proposed Vault Pit Expansion in the terms of reference for the Meadowbank Socio-Economic Monitoring Committee to ensure that all existing socio-economic monitoring requirements extend to include the Project. The Board recommends that AEM continues to work with the committee with respect to the socio-economic monitoring requirements.

5.6.4 Conclusions and Recommendations of the Board

In considering this issue, the NIRB is not recommending any additional terms and conditions with respect to Community Infrastructure and Public Services. However, the Board notes that term and condition 64 requires the Proponent to carry out socio-economic monitoring and research activities to provide project specific socio-economic data. The NIRB recommends that the Proponent includes the Vault Pit Expansion Project as part of this socio-economic monitoring program.

5.7. HEALTH AND SAFETY

5.7.1 Views of the Proponent

AEM used 2011-2014 results from its socio-economic monitoring program to observe that the Meadowbank Gold Mine had resulted in negative impacts due to increased public health and safety risks, particularly crime related to drugs, alcohol, and gambling, however the impacts were determined to be of low significance. AEM noted that project induced effects on increased public health and safety related risks would be of low significance as there would be many related external factors, including an overall positive impact on individual behaviour resulting from project effects on community prosperity.

AEM noted that its on-site management of occupational health and safety, including but not limited to risk management, employee involvement, hazard analysis and emergency response, is directed by the framework established through its Occupational Health and Safety Plan. In addition, AEM stated that all of the programs and initiatives included in the Meliadine Human Resources Plan would also be applied at the Meadowbank Gold Mine site and would extend for the duration of the Vault Pit Expansion Project. AEM further noted that it is in the process of developing an Employee Assistance Program that would include financial management training and family counselling with a focus on individuals and families adjusting to employment and shift rotations. Using information from the Nunavut Bureau of Statistics, AEM observed that in the last decade, crime rates in the Kivalliq region have increased at a faster rate than in Nunavut as a whole. However, AEM reported that visits to the community health centre in Baker Lake have decreased 2006 to 2011.

5.7.2 Views and Concerns of Interested Parties

During the review of this project proposal, no party raised concerns regarding Health and Safety.

5.7.3 Views of the Board

The Board notes that no party raised concerns with respect to Health and Safety for the Vault Pit Expansion Project during the review of this proposal and at the Public Hearing.

5.7.4 Conclusions and Recommendations of the Board

In considering the issue of health and safety, the NIRB notes that the terms and conditions previously developed for the original Meadowbank Gold Mine Project through Project Certificate No. 004 have been designed to address potential project specific impacts to health and safety. In the Board's view, the potential impacts of the amended project activities will be adequately addressed through application of existing Project Certificate No. 004 terms and conditions 75, 78 and 79. Additionally, the Board notes that the Closure and Reclamation Plan for the Meadowbank Project should be updated to include the Vault Pit Expansion infrastructure to ensure long term safety to the public and wildlife once the mine has been closed and the project areas reclaimed.

6. OTHERS MATTERS TAKEN INTO ACCOUNT

6.1. ALTERNATIVE ANALYSIS

6.1.1 Views of the Proponent

In the FEIS Addendum, AEM indicated that the alternative to the Vault Pit Expansion proposal would be the "no-go" or no-project alternative. AEM noted that alternative mining methods such as extraction via underground mining were explored but were dismissed as being not economically feasible. AEM further noted that without the expansion, the Meadowbank Mine will close one month earlier. While the potential positive effects outweigh the negative effects, AEM believes that all negative effects can be mitigated in the short term if the proposed expansion is to go ahead.

6.1.2 Views and Concerns of Interested Parties

A community representative from Baker Lake questioned AEM on the proposed extension of the life of the mine and the gold reserves left at Meadowbank. The community representative commented on the practicality of extending the life of the mine by 30 days and undertaking a public hearing considering the expected amount of gold to be produced. The community representative further questioned AEM as to the impact of community members saying no to the proposed amendment.⁸⁹ AEM responded that its goal is to extend the mine life in an effort to minimize the gap between the closure of Meadowbank Gold Mine at the end of 2017 (or 2018) and the potential development of Amaruk site which would ensure continued employment opportunities. AEM further noted that it would require four months to dewater Phaser Lake, remove the soils and to mine the area before commencing the 30 days of milling.⁹⁰

⁸⁹ D. Aksawnee, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 195-196, lines 7-14 and 2-7.

⁹⁰ S. Robert, AEM, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 195-196, 222, lines 20-26, 1, 10-22 and 21-25.

Another community representative from Baker Lake requested clarification from AEM on how long the mine life would be: “...you are going to extend the life by a month, and if you find gold in that portion of Phaser Lake -if you find gold, are you going to extend the 30 days? Or is it just going to be the 30 days?”⁹¹ AEM noted that it is only looking at extending the mine life by 30 days.

6.1.3 Views of the Board

The Board acknowledges that out of context there may be very little difference between extending the life of a mine by 30 days and adding about 6 months of additional development work associated with the Vault Pit Expansion and the “no go” alternative. However, the Board understands that when viewed in the full context of the proposed expansion acting as a “bridge” to keeping mine infrastructure in use and mine personnel employed while future development plans are pursued, the significance of the Vault Pit Expansion as a project increases greatly and the Board accepts the conclusions reached by AEM regarding the project modification being a preferred alternative to the only other alternative of not proceeding with the expansion.

6.1.4 Conclusions and Recommendations of the Board

In considering this issue, the NIRB acknowledges that the alternative to the development of the Vault Pit Expansion proposal would be the no-project alternative (or “no-go” analysis). Based on the information provided by AEM and the views and concerns raised by interested parties, the Board is not recommending additional terms and conditions to address the area of Alternative Analysis.

6.2. CUMULATIVE EFFECTS

6.2.1 Views of the Proponent

In Section 4.19.6 of the FEIS Addendum, AEM indicated that the cumulative effects predicted for the Meadowbank Gold Mine in the original FEIS remain unchanged for the proposed Vault Pit Expansion. AEM considered this due to the insignificant change in operations and overall footprint, the offsetting of fisheries habitat, and mitigation measures for the dewatering of Phaser Lake. AEM also stated that the additional 30 days of mining activity should be considered within the scope of the original project (within the 8-10 years of operation life previously permitted and assessed in the original FEIS).

6.2.2 Views and Concerns of Interested Parties

In a joint final written submission, NTI/KIA agreed with AEM’s conclusions that no significant cumulative effects were predicted for the proposed Vault Pit Expansion Project beyond those discussed in the original FEIS.

During the Public Hearing, a community representative from Baker Lake requested clarification from the KIA whether any issues have been observed related to water quality from the gold mine.⁹² In response, the KIA noted that a monitoring program has been conducted to identify any cumulative effects on the Thelon watershed from exploration projects, from the Meadowbank project and any other projects in the Kivalliq region. The KIA noted that to date no effects have been observed.⁹³

⁹¹ T. Aniriq, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 164, lines 13-16.

⁹² D. Toolooktook, Baker Lake, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, pp. 210-211, lines 26 and 1-3.

⁹³ L. Manzo, KIA, NIRB Public Hearing File No. 03MN107 Transcript, March 2, 2016, p. 211, lines 5-12.

6.2.3 Views of the Board

The Board understands that the proposed amendment would act as a “bridge” to keep the Meadowbank mine infrastructure in use and mine personnel employed while future development plans are pursued. The Board recognizes that as AEM continues its mining and milling program it also actively pursues its exploration program and may consider bringing forward further proposed amendments to extend the mine life of the Meadowbank Gold Mine, which would need to be assessed by the NIRB as they are brought forward. The Board notes that care must be taken by AEM to thoroughly address the potential for cumulative effects when designing any further expansion proposals, with clear demonstration for the consideration of public concerns expressed and experience gained associated with the overall Meadowbank Gold Mine project.

6.2.4 Conclusions and Recommendations of the Board

In considering this issue, the NIRB is not recommending any additional terms and conditions with respect to Cumulative Effects.

6.3. PERFORMANCE BONDING

6.3.1 Summary of Key Issues

Section 12.5.5 of the NLCA requires the NIRB to take into account all matters that are relevant to its mandate, including the posting of performance bonds. Perhaps with the recognition that in Nunavut the detailed assessment of security is typically addressed during the water licensing process that follows the NIRB assessment, the Board received no comment on this issue from any of the other participants.

6.3.2 Conclusions and Recommendations of the Board

In considering this issue, the NIRB acknowledges that the Nunavut Water Board will undertake the detailed assessment of reclamation liability subsequently during the water licensing process. Consequently, the NIRB is confident that AEM has established, in a general sense, that it has, or prior to the commencement of the Vault Pit Expansion proposal will have, sufficient financial assurance mechanisms in place to prevent environmental degradation and preserve and protect the area’s ecosystemic integrity. On this basis, the NIRB has not recommended any additional terms and conditions with respect to performance bonding. However, the NIRB has previously recommended term and condition 5 for Project Certificate No. 004 which requires that the Proponent meet with respective licensing authorities prior to the commencement of construction to discuss the posting of adequate performance bonds and term and condition 78 that requires the Proponent to develop a Closure and Reclamation Plan that complies with Indigenous and Northern Affairs Canada’s policy of full cost of restoration and any related NWB requirements.

7. RECOMMENDATION TO THE MINISTER

After due consideration and in accordance with the process for reconsidering an existing Project Certificate established under Article 12, Part 8, Section 12.8.2 of the Nunavut Land Claims Agreement and reflecting the primary objectives of the Nunavut Land Claims Agreement, the Board has determined that Agnico Eagle Mines Ltd.’s “Vault Pit Expansion Project” proposal, NIRB File No. 03MN107 can proceed in accordance with the Board’s Public Hearing Report and recommendations.

8. RECOMMENDED PROJECT SPECIFIC TERMS AND CONDITIONS

8.1. THE NIRB'S MONITORING PROGRAM

As set out in Article 12, Sections 12.7.1 and 12.7.2 of the NLCA the NIRB has the jurisdiction to establish a project-specific monitoring program to: measure the ecosystemic and socioeconomic effects of a project; assess whether the project is in compliance with the prescribed project terms and conditions; share information with regulatory agencies to support the enforcement of land, water or resource use approvals and agreements; and to assess the accuracy of predictions contained in the environmental impact statements. Given the Board's application of the precautionary approach to several aspects of this Project proposal, in the Board's view project-specific monitoring will play a crucial role in addressing the uncertainty regarding project effects and enabling all parties to adapt mitigation measures on an ongoing basis to ensure the Project's negative effects are prevented or limited to the extent possible.

The role of the Board with respect to the establishment of monitoring programs is to focus the terms and conditions in relation to the Project. With respect to existing or future general regional and territorial monitoring programs that may include some of the same monitoring parameters/indicators as the project-specific monitoring program, the NLCA also directs the NIRB to avoid duplication but facilitate co-ordination and integration between the project-specific monitoring programs required by the NIRB and more general programs such as the Nunavut General Monitoring Program. Where the requirements of regional or territorial programs are more extensive or substantively different than those established through the project certificate, at all times the Proponent must ensure compliance with the project certificate terms and conditions.

In order to co-ordinate, integrate and avoid duplication with other monitoring programs, but also to ensure that the NIRB's project-specific monitoring program yields the information required to measure effects and adequately assess compliance with terms, conditions, regulatory instruments and agreements, the NIRB's monitoring program is developed after consultation with responsible authorities, the resource and land owners and the proponent following a Regulators' Meeting that typically occurs within several weeks after the responsible Minister has issued a decision that the Project can proceed to obtain regulatory authorizations and providing the Minister's direction regarding recommended terms and conditions. A short time after the Regulators' Meeting, the NIRB issues the project certificate, but the project-specific monitoring program, which is usually issued as an Appendix to the project certificate may not be issued in final form until some months after key regulatory authorizations, including land use permits, water licences, mineral leases, etc. are issued so that the monitoring program supplements and supports, and does not duplicate, the monitoring requirements in regulatory and land use instruments. Appendix D – Meadowbank Monitoring Program was issued to Agnico Eagle Mines Ltd. on July 14, 2011 following consultation with regulatory parties.

It is important to remember that the NIRB's monitoring program will have varying requirements over the course of the Project lifecycle, and that monitoring requirements will apply from construction to eventual abandonment and reclamation. In areas where there may be a need for flexibility in relation to the terms and conditions of the project certificate or their application, the NIRB has endeavoured to reflect this in the associated language and/or acknowledge that objectives may be achieved through various means. In addition, in the event that the monitoring program needs to be modified to better achieve its purpose, the Board, the Proponent, the Designated Inuit Organization or other interested

parties may cause the Board, under Section 12.8.2 of the NLCA to revisit the monitoring program, or any other terms and conditions in the NIRB project certificate.

8.1.1 Format of Recommendations

To maintain consistency with the existing Project Certificate and to provide clear direction on the intended application, objectives and reporting requirements, the NIRB has implemented a similar format for the revised project-specific terms and conditions as set out within this report.

It should be noted that for some of the existing terms and conditions of Project Certificate No. 004, a non-binding **Commentary** section had also been added following the specific term and condition as an aid to interpretation. The Commentary section reflects clarification of the term and condition, recording the common understanding and interpretation resulting from discussions and guidance provided at the Project Certificate Workshop. The Commentary section has been omitted from the revised terms and conditions as set out in [Section 8.2](#) below, should this report be accepted by the Minister, a Regulators' Meeting would be scheduled by the NIRB to revisit all associated commentary required to ensure effective implementation of approved terms and conditions moving forward.

8.1.2 General Provisions

The NIRB retains the ability to give additional clarification or direction, on an ongoing basis through its Monitoring Officer, with respect to compliance requirements for the Project. Upon request by the Proponent or other parties, the NIRB can provide additional clarification or direction regarding implementation of project certificate terms and conditions.

Where the objective of a project certificate term or condition can be achieved through more efficient alternate means, the Proponent is encouraged to consult with the NIRB (and other parties as required) to seek acceptance of proposed alternatives.

Where not specified, the NIRB recognizes and respects the role of other licensing and permitting processes yet to be completed. The NIRB strongly encourages the coordination of monitoring and reporting requirements in order to reduce duplication.

8.2. RECOMMENDED TERMS AND CONDITIONS

8.2.1 Original Project Specific Terms and Conditions

The NIRB recommends that the following project specific terms conditions of the approved Project Certificate No. 004 be applied to the Vault Pit Expansion Project proposal:

3. Cumberland must obtain all required federal and territorial permits and other approvals, and shall comply with the requirements of such regulatory instruments.
4. Cumberland shall take prompt and appropriate action to remedy any noncompliance with environmental laws and regulations and/or regulatory instruments, and shall report any non compliance as required by law immediately and report the same to NIRB annually.
5. Cumberland shall meet with respective licensing authorities prior to the commencement of construction to discuss the posting of adequate performance bonding. Licensing authorities are encouraged to take every measure to require that sufficient security is posted before

construction begins. This bonding should not duplicate other amounts of security required (eg. the NWB)

6. All monitoring information collected pursuant to regulatory requirements for the Meadowbank Project shall contain the following information:
 - a. The person(s) who performed the sampling or took the measurements including any accreditations;
 - b. The date, time and place of sampling or measurement, and weather conditions;
 - c. Date of analysis;
 - d. Name of the person(s) who performed the analysis including accreditations;
 - e. Analytical methods or techniques used; and
 - f. Results of any analysis.
7. Cumberland shall keep and maintain the records, including results, of any monitoring, data, or analysis, for a minimum of the life of the Project, including closure and post-closure monitoring. This time period shall be extended if requested by NIRB, GN, INAC, DFO, EC or the NWB.
11. Cumberland shall provide details regarding the effluent outfall configuration, including discharge characteristics, the likely behaviour of the plume(s), and bathymetric information for Wally Lake in the water license application to the NWB.
13. Cumberland shall not permit the water discharged into Wally Lake and Third Portage Lake to exceed receiving environment discharge criteria established by the NWB or as otherwise required by law.
14. Cumberland shall not remove dewatering dikes until the quality of water contained within them is of sufficient quality to meet receiving environment discharge criteria established by the NWB or as otherwise required by law.
23. For the purposes of monitoring quality assurance and quality control ("QA/QC"), Cumberland shall ensure that water quality monitoring performed at locations within receiving waters that allow for an assimilative capacity assessment of concern to regulators, be carried out by an independent contractor and submitted to an independent accredited lab for analysis, on a type and frequency basis as determined by the NWB. Results of analysis shall be provided to the NWB and NIRB's Monitoring Officer.
26. Cumberland shall ensure that spills, if any, are cleaned up immediately and that the site is kept clean of debris, including wind-blown debris.
27. Cumberland shall ensure that the areas used to store fuel or hazardous materials are contained using safe, environmentally protective methods based on practical, best engineering practices.
60. Whenever practical, Cumberland shall implement a stop work policy when wildlife in the area may be endangered by the work being carried out.
63. Within six (6) months of the issuance of a Project Certificate, the GN and INAC shall form a Meadowbank Gold Mine Socio-Economic Monitoring Committee ("Meadowbank SEMC") to monitor the socio-economic impacts of the Project and the effectiveness of the Project's

mitigation strategies. The monitoring shall supplement, not duplicate, the monitoring required pursuant to the IIBA negotiated for the Project, and on the request of Government or NPC, could assist in the coordination of data collection and tracking data trends in a comparable form to facilitate the analysis of cumulative effects. The terms of reference shall focus on the Project, include a plan for ongoing consultation with KivIA and affected local governments and a funding formula jointly submitted by GN, INAC and Cumberland. The terms of reference shall be submitted to NIRB for review and subsequent direction within six (6) months of the issuance of a Project Certificate. Cumberland is entitled to be included in the Meadowbank SEMC.

64. Cumberland shall work with the GN and INAC to develop the terms of reference for a socio-economic monitoring program for the Meadowbank Project, including the carrying out of monitoring and research activities in a manner which will provide project specific data which will be useful in cumulative effects monitoring (upon request of Government or NPC) and consulting and cooperating with agencies undertaking such programs. Cumberland shall submit draft terms of reference for the socio-economic monitoring program to the Meadowbank SEMC for review and comment within six (6) months of the issuance of a Project Certificate, with a copy to NIRB's Monitoring Officer.
65. Cumberland shall include in its socio-economic monitoring program for the Meadowbank Project the collection and reporting of data of community of origin of hired Nunavummiut.
69. Cumberland shall carry out the Project to minimize the impacts on archeological sites, including conducting proper archeological surveys of the Project area (including the all-weather road and all quarry sites). Cumberland shall provide to the GN an updated baseline report for archeological sites in the Project area, including:
 - a. referencing of sites as directed by the GN,
 - b. the process used for age determinations of archeological sites, and
 - c. the specific measures being taken to avoid listed sites, and
 - d. the monitoring that will take place, to the GN prior to the commencement of construction.
70. Cumberland shall report any archeological site discovered during the course of construction, including a burial site, immediately and concurrently to the GN and KivIA. Upon discovering an archeological site, Cumberland shall take all reasonable precautions necessary to protect the site until further direction is received from the GN. In the event that it becomes necessary to disturb an archaeological site, Cumberland shall consult with Elders, GN and KivIA to establish a site specific mitigation plan, and obtain all necessary authorizations and comply with all applicable laws.
74. Cumberland shall employ environmentally protective techniques to suppress any surface road dust.
75. Cumberland shall provide a complete list of possible accidents and malfunctions for the Project. It must consider the all-weather road, shipping spills, cyanide and other hazardous material spills, and pitwall/dikes /dam failure, and include an assessment of the accident risk and mitigation developed in consultation with Elders and potentially affected communities.
78. Cumberland shall file a complete Closure and Reclamation Plan developed to comply with INAC's policy of full cost of restoration and any related NWB requirements such that the Inuit

and taxpayers are not liable for any cost associated with the cleanup, modification, decommission, or abandonment.

79. In addition to the NWB's requirements, the final Closure and Reclamation Plan shall require Cumberland to:

- a. Ensure that mine facilities and infrastructure are abandoned in such a manner that:
 - i. The Project site is physically stable and any requirements for long term maintenance and monitoring are minimized;
 - ii. Threats to public safety and wildlife are eliminated; and
 - iii. Affected areas are returned to the original undisturbed conditions to the fullest extent possible.
- b. Prevent continuing impacts from contaminants and wastes on the environment including those associated with acid rock drainage;
- c. Remove all hazardous materials and waste and as much salvageable waste as practicable from the Project area; and
- d. Enter into written arrangements with its abandonment and reclamation contractors to ensure all site debris is cleaned up off the lands, including wind-blown debris.

80. Cumberland shall file annually with NIRB's Monitoring Officer an updated report on progressive reclamation and the amount of security posted, as required by KivIA, INAC, and/or the NWB.

85. Cumberland shall develop a detailed blasting program to minimize the effects of blasting on fish and fish habitat, water quality, and wildlife and terrestrial VECs. The Blasting Program shall be developed in consultation with the DFO and GN, and shall:

- a. comply with the *Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters* (Wright and Hopky, 1998) as modified by the DFO for use in the north;
- b. including a monitoring and mitigation plan to be developed in consultation with the DFO, and obtain DFO approval of the blasting program prior to the commencement of blasting;
- c. restrict blasting when migrating caribou, or sensitive local carnivores or birds may be negatively affected; and
- d. minimize the use of ammonium nitrate to reduce the effects of blasting on receiving water quality.

8.2.2 Revised Terms and Conditions

The NIRB further recommends inclusion of the following *revisions* to existing terms and conditions of Project Certificate No. 004 for application to the Meadowbank Gold Mine Project and the associated Vault Pit Expansion Project proposal:

Term and Condition No.	49
Category:	Fish and Fish Habitat
Responsible Parties:	The Proponent
Project Phase:	Construction
ORIGINAL Term or Condition:	Cumberland shall develop, implement and report on the fish-out programs for the dewatering of Second Portage Lake, Third Portage Lake and Vault Lake. This must be done in consultation with the DFO, Elders and the HTOs,

		and in a manner that optimizes the acquisition of northern fisheries science and augments baseline fisheries data to support monitoring programs and the final design of fish habitat compensation for the Project.
REVISED Condition:	Term or	Cumberland Agnico Eagle Mines Ltd. shall develop, implement and report on the fish-out programs for the dewatering of Second Portage Lake, Third Portage Lake and Vault Lake <u>and Phaser Lake</u> . This must be done in consultation with the DFO, Elders and the HTOs, and in a manner that optimizes the acquisition of northern fisheries science and augments baseline fisheries data to support monitoring programs and the final design of fish habitat compensation for the Project.

Term and Condition No.	53
Category:	Fish and Fish Habitat
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
ORIGINAL Condition:	Term or Cumberland shall, in consultation with the HTOs and DFO, develop a Fish Habitat Monitoring Plan, including augmenting baseline fisheries data in the period prior to operation, with the clear objective of demonstrating the success of the No Net Loss Plan approved by the DFO.
REVISED Condition:	Term or Cumberland Agnico Eagle Mines Ltd. shall, in consultation with the HTOs and DFO, develop a Fish Habitat Monitoring Plan, including augmenting baseline fisheries data in the period prior to operation, with the clear objective of demonstrating the success of the No Net Loss Plan approved by the DFO. <u>The Fish Habitat Monitoring Plan should include Phaser Lake.</u>

8.2.3 Removal of Terms and Conditions

The NIRB further recommends removal of the following existing term and condition from Project Certificate No. 004 for the Meadowbank Gold Mine Project, as it will no longer be applicable given the associated Vault Pit Expansion Project:

Term and Condition No.	48
Category:	Fish and Fish Habitat
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
ORIGINAL Condition:	Term or Cumberland shall demonstrate to the satisfaction of the DFO that the water management framework, including the embankment details and diversion ditch, will permit the maintenance of over-wintering fish habitat in Phaser Lake through the life of the Project.

Appendix A: Record of Proceedings

Project Proponent:	Agnico Eagle Mines Ltd. Meadowbank Division PO Box 540 Baker Lake, NU X0C 0A0
Date Project Description Received:	July 28, 2014
Positive Conformity Determination Received from the Nunavut Planning Commission:	September 18, 2014
Dates of Hearings:	Day 1: March 2, 2106, Baker Lake, NU
	Day 2: March 3, 2016, Baker Lake, NU
Board Members Present:	Elizabeth Copland, Chairperson
	Guy Alikut, Member
	Marjorie Kaviq Kaluraq, Member
Board Staff:	R. Barry, Executive Director
	T. Arko, Director, Technical Services
	S. Granchinho, Manager, Impact Assessment
	H. Rasmussen, Technical Advisor II
Board Legal Counsel:	T. Meadows
Interpreters:	L. Taparti
	M.R. Angoshadluk
Court Reporters:	T. Rizzoli, Dicta Court Reporting J. MacDonald, Dicta Court Reporting
Sound Technician:	R. Dempster, PIDO Productions
Parties:	
Proponent:	
Agnico Eagle Mines Ltd.	S. Robert, Manager, Regulatory Affairs R. Vanengen, Environment Superintendent – Permitting and Regulatory Affairs Nunavut C. Kowbel, Legal Counsel C. Lemieux, Communication Coordinator M. Theriault, Environment Coordinator

Appendix A: Record of Proceedings

Kivalliq Inuit Association:	L. Manzo, Director of Lands J. Hart, Lands Manager for Baker Lake R. Nesbitt, Consultant, Consulting Environment K. Gilson, Legal Counsel
Government of Nunavut	J. Rogers, Project Manager, Impact Assessment Department of Environment C. Lloyd, Regional Socioeconomic Coordinator, Department of Economic Development and Transportation
Canadian Northern Economic Development Agency (<i>via telephone</i>)	T. Simmons, Project Manager
Department of Justice (Canada):	D. Keates, Legal Counsel
Fisheries and Oceans Canada:	G. Cooper, Fisheries Protection Biologist E. Patreau, Senior Fisheries Protection Program Biologist (<i>via telephone</i>)
Indigenous and Northern Affairs Canada:	K. Costello, Director Resource Management L. Harris, Environmental Assessment Coordinator
Natural Resources Canada:	R. Besner, Senior Environmental Assessment Officer
<i>Community Representatives:</i>	
Baker Lake	D. Owingayak D. Aksawnee L.T. Iyaqo E. Elytook D. Toolooktook T. Aniriq
Chesterfield Inlet	Leo Mimialik Leonie Mimialik P. Kadjuk G. Thompson C. Kriterdluk H. Aggark

Appendix B: Table of Commitments from the Public Hearing

The following table provides a listing of commitments confirmed by the parties at the Vault Pit Expansion Project Public Hearing. Although some of these commitments have provided the basis for the Board's recommended terms and conditions, others, due to various reasons, such as limits on the Board's jurisdiction, are not expressly included as terms and conditions or recommendations to the parties. However, even for those commitments that have not become recommendations or recommended terms and conditions, it is the Board's expectation that all parties will make best efforts to fulfill all commitments included in the attached Table of Commitments. The Board notes the reliance of the parties and the Board on the commitments provided to come to resolution of outstanding issues during the technical review of the Vault Pit Expansion Project and at the Public Hearing. Consequently, the Board recognizes the importance of honouring commitments to the credibility of the Board's assessment process and expects that these commitments will be fulfilled by the Proponent.

No.	Subject	Commitment	Issue raised by (Date of Commitment)	Project Phase/Timing
Waste Rock Management				
	Site specific geological and geochemical characterization data for Phaser and BB Phaser pits	Perform geochemical characterizations characterization analysis of all rock types encountered during the mining operations to verify that the predictions and criteria used to assess PAG [<i>potentially acid generating</i>] in the Vault Pit are applicable to the expansion area.	Indigenous and Northern Affairs Canada (December 4, 2015); INAC & AEM, Public Hearing (March 2, 2016)	Operations
Cultural, Archaeological and Paleontological Resources				
1	Archaeological Sites	A short section of the Vault Pit road remains to be surveyed. This will be completed by AEM under the 2016 Archaeology permit	Government of Nunavut and AEM (March 2, 2015)	Pre-construction
Socio-Economic Monitoring				
2	Socio-Economic Monitoring of Project Effects	Terms and Conditions applying to the Meadowbank project related to a Socio-Economic Monitoring Committee and Socio-Economic Monitoring Program also apply to this proposed development	Indigenous and Northern Affairs Canada (February 4, 2016); Government of Nunavut (March 2, 2016)	All phases
3	Socio-Economic Monitoring	Continue to contribute to regional socioeconomic efforts through ongoing participation in the Kivalliq socioeconomic monitoring committee	Government of Nunavut (March 2, 2016)	Ongoing

No.	Subject	Commitment	Issue raised by (Date of Commitment)	Project Phase/Timing
<p>*Note: This table is a summary of commitments taken during proceedings and/or from the transcripts obtained during the Vault Pit Expansion Project Hearing.</p>				

Appendix C: List of Exhibits from the Vault Pit Expansion Project Public Hearing

Exhibit Number	Date of Receipt	Exhibit Description	Party Tendering Exhibit
1	March 2, 2016	Hardcopy Powerpoint Presentation Entitled: <i>NIRB Public Hearing: AEM's Addendum FEIS Vault Expansion into Phaser Lake</i> , March 1 and 2, 2016 (Inuktitut)	Agnico Eagle Mines Ltd.
2	March 2, 2016	Hardcopy Powerpoint Presentation Entitled: <i>NIRB Public Hearing: AEM's Addendum FEIS Vault Expansion into Phaser Lake</i> , March 1 and 2, 2016 (English)	Agnico Eagle Mines Ltd.
3	March 2, 2016	Hardcopy Powerpoint Presentation Entitled: <i>Vault Pit Expansion</i> , Public Hearings, March 1-2, 2016, Baker Lake, NU (English and Inuktitut combined)	Kivalliq Inuit Association
4	March 2, 2016	Hardcopy Powerpoint Presentation Entitled: <i>Meadowbank Vault Pit Expansion</i> , Public Hearing, Government of Nunavut (GN), March 1-2, 2016 (English and Inuktitut combined)	Government of Nunavut
5	March 2, 2016	Joint Submission on Commitments by Agnico Eagle Mines Ltd. And Government of Nunavut (English)	Government of Nunavut
6	March 2, 2016	Hardcopy Correspondence Entitled: <i>Agnico Eagle Mines Limited – Meadowbank Gold Mine Project – Proposed Vault Pit Expansion – Final Submission & Public Hearing – ECCC's Mandate</i> , March 1, 2016 (English)	Department of Justice (Canada) for Environment and Climate Change Canada
7	March 2, 2016	Electronic document: <i>AEM: Meadowbank Division Fish Habitat Offsetting Plan: Phaser Lake</i> , February 2016	Agnico Eagle Mines Ltd.
8	March 2, 2016	Hardcopy Powerpoint Presentation Entitled: <i>Meadowbank Mine Vault Expansion Project</i> , Presentation to the Nunavut Impact Review Board, Final Hearing, Baker Lake, NU, March 1-2, 2016 (Inuktitut)	Fisheries and Oceans Canada
9	March 2, 2016	Hardcopy Powerpoint Presentation Entitled: <i>Meadowbank Mine Vault Expansion Project</i> , Presentation to the Nunavut Impact Review Board, Final Hearing, Baker Lake, NU, March 1-2, 2016 (English)	Fisheries and Oceans Canada

Exhibit Number	Date of Receipt	Exhibit Description	Party Tendering Exhibit
10	March 2, 2016	Hardcopy Powerpoint Presentation Entitled: <i>Meadowbank Mine Vault Expansion Project</i> , Presentation to the Nunavut Impact Review Board, Final Hearing, Baker Lake, NU, March 1-2, 2016 (French)	Fisheries and Oceans Canada
11	March 2, 2016	Hardcopy Powerpoint Presentation Entitled: <i>Presentation for Final Hearing on Agnico Eagle Mines proposed Amendment to the Meadowbank Gold Project</i> , Baker Lake, March 1 and 2, 2016 (English and Inuktitut combined)	Indigenous and Northern Affairs Canada
12	March 2, 2016	Hardcopy Powerpoint Presentation Entitled: <i>NRCan's Final Hearing Presentation: Agnico Eagle Mine's Vault Pit Expansion, Meadowbank Gold Mine Project</i> , Prepared for the Nunavut Impact Review Board, Presented by Rachelle Besner, Senior Environmental Assessment Officer, March 1-2, 2016 (Inuktitut)	Natural Resources Canada
13	March 2, 2016	Hardcopy Powerpoint Presentation Entitled: <i>NRCan's Final Hearing Presentation: Agnico Eagle Mine's Vault Pit Expansion, Meadowbank Gold Mine Project</i> , Prepared for the Nunavut Impact Review Board, Presented by Rachelle Besner, Senior Environmental Assessment Officer, March 1-2, 2016 (English)	Natural Resources Canada
14	March 2, 2016	Hardcopy Powerpoint Presentation Entitled: <i>NIRB Public Hearing, Community Presentation: AEM's Addendum FEIS Vault Expansion into Phaser Lake</i> , March 1 and 2, 2016 (Inuktitut)	Agnico Eagle Mines Ltd.
15	March 2, 2016	Hardcopy Powerpoint Presentation Entitled: <i>NIRB Public Hearing, Community Presentation: AEM's Addendum FEIS Vault Expansion into Phaser Lake</i> , March 1 and 2, 2016 (English)	Agnico Eagle Mines Ltd.
16	March 2, 2016	Electronic map: <i>DRAFT Summary of Traditional Land Use and Traditional Knowledge for the Amaruq Exploration Area and Access Road - Cultural Sites & Trails</i> , October 7, 2015	Agnico Eagle Mines Ltd.

Exhibit Number	Date of Receipt	Exhibit Description	Party Tendering Exhibit
17	March 3, 2016	Written Comment Submission: <i>Re: AEM Vault Pit Expansion Comments</i> , March 3, 2015, Baker Lake, NU	Paula K. Hughson

Appendix D: List of Acronyms

በጥቅም ላይ የዋለው ልዩ ስምዎች ዝርዝር

AEM	Agnico Eagle Mines Ltd. ግንባታ ልማት ልማት ልማት
AANDC	Aboriginal Affairs and Northern Development Canada ከፍተኛ ልማት ልማት ልማት ልማት ልማት ልማት
AWAR	All Weather Access Road ጥንቃቄ ልማት
DFO	Fisheries and Oceans Canada ከፍተኛ ልማት ልማት ልማት ልማት ልማት ልማት
EC	Environment Canada ከፍተኛ ልማት ልማት ልማት ልማት ልማት ልማት
ECCC	Environment and Climate Change Canada ጥንቃቄ ልማት ልማት ልማት ልማት ልማት ልማት
EIS	Environmental Impact Statement ጥንቃቄ ልማት ልማት ልማት ልማት ልማት ልማት
FEIS	Final Environmental Impact Statement ጥንቃቄ ልማት ልማት ልማት ልማት ልማት ልማት
GN	Government of Nunavut ጥንቃቄ ልማት ልማት ልማት ልማት ልማት ልማት
ha	hectares ጥንቃቄ ልማት ልማት ልማት ልማት ልማት ልማት
HTO	Hunters' and Trappers' Organization ጥንቃቄ ልማት ልማት ልማት ልማት ልማት ልማት
IIBA	Inuit Impact and Benefit Agreement ጥንቃቄ ልማት ልማት ልማት ልማት ልማት ልማት
INAC	Indigenous and Northern Affairs Canada ከፍተኛ ልማት ልማት ልማት ልማት ልማት ልማት
IR	Information Request ጥንቃቄ ልማት ልማት ልማት ልማት ልማት ልማት
KIA	Kivalliq Inuit Association ጥንቃቄ ልማት ልማት ልማት ልማት ልማት ልማት
km	kilometer ጥንቃቄ ልማት ልማት ልማት ልማት ልማት ልማት
Mt	Million tonnes ጥንቃቄ ልማት ልማት ልማት ልማት ልማት ልማት
NIRB	Nunavut Impact Review Board ጥንቃቄ ልማት ልማት ልማት ልማት ልማት ልማት
NLCA	Nunavut Land Claims Agreement ጥንቃቄ ልማት ልማት ልማት ልማት ልማት ልማት
NNLP	No Net Loss Plan ጥንቃቄ ልማት ልማት ልማት ልማት ልማት ልማት

