PRE-HEARING CONFERENCE DECISION

CONCERNING

THE MELIADINE GOLD PROJECT

(NIRB FILE NO. 11MN034)

PROPOSED BY

AGNICO EAGLE MINES LTD.

Date of Conference: December 10-12, 2013
Date of Decision: January 16, 2014

Issued by:

NUNAVUT IMPACT REVIEW BOARD

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Cover photo: 1) Pre-Hearing Conference in Rankin Inlet

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LIST OF ACRONYMS

AANDC	Aboriginal Affairs and Northern Development Canada
AEM	Agnico Eagle Mines Ltd.
AWR	All-Weather Road
AWAR	All-Weather Access Road
BQCMB	Beverly and Qamanirjuaq Caribou Management Board
CCME	Canadian Council of Ministers of the Environment
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
DEIS	*Draft* Environmental Impact Statement
DFO	Fisheries and Oceans Canada
EA	Environmental Assessment
EC	Environment Canada
EIS	Environmental Impact Statement
FEIS	*Final* Environmental Impact Statement
GN	Government of Nunavut
IIBA	Inuit Impact Benefit Agreement
INAC	Indian and Northern Affairs Canada
IR	Information Request
KHTO	Kangiqliniq Hunters and Trappers Organization
KIA	Kivalliq Inuit Association
km	Kilometre
KRLUP	Keewatin Regional Land Use Plan
m	Metre
NIRB	Nunavut Impact Review Board
NLCA	Nunavut Land Claims Agreement
NPC	Nunavut Planning Commission
NRCan	Natural Resources Canada
NSA	Nunavut Settlement Area
NTI	Nunavut Tunngavik Incorporated
PHC	Pre-Hearing Conference
SEMC	Socio-Economic Monitoring Committee
TC	Transport Canada
VEC	Valued Ecosystemic Component
VSEC	Valued Socio-Economic Component

EXECUTIVE SUMMARY

Pursuant to the *Nunavut Land Claims Agreement* (NLCA), the function of the Nunavut Impact Review Board (NIRB or Board) is to assess the extent of the regional environmental and socio-economic impacts of the Meliadine Gold project proposal (Project) proposed by Agnico Eagle Mines Ltd. (AEM or the Proponent) to determine whether the Project should proceed, and if so, under what terms and conditions. In carrying out this function, the Board's primary objectives are at all times to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area (NSA), and to protect the ecosystemic integrity of the NSA, while also taking into account the well-being of the residents of Canada outside of the NSA.

From December 3-5, 2013 a Technical Meeting was held in Rankin Inlet facilitated by the Board staff and chaired by the Board's Executive Director, Ryan Barry. The Proponent's and parties' technical experts were in attendance for the purpose of reviewing, discussing and, where possible, resolving outstanding technical issues identified by commenting parties with respect to the *Draft* Environmental Impact Statement (DEIS) filed by the Proponent in April 2013. At the Technical Meeting, AEM made a number of commitments in response to the technical comments and requests of the parties, which are listed in Appendix 2. As noted at the Technical Meeting and explained during the subsequent Pre-Hearing Conference (PHC), it is the Board's expectation that these outstanding commitments will be met, and where applicable, the additional information will be provided by the Proponent through inclusion in the *Final* Environmental Impact Statement (FEIS) for the Project.

On December 10-12, 2013 the NIRB conducted the PHC in Rankin Inlet, which included a Community Roundtable and was chaired by the Board's Chairperson, Elizabeth Copland with support from Board staff. In addition to representatives from the Proponent and parties, community members from Rankin Inlet and delegates selected by the Kivalliq communities that may potentially be affected by the Project (Arviat, Baker Lake, Chesterfield Inlet, Coral Harbour, Repulse Bay, and Whale Cove) were also present to ask questions and provide the Board, the Proponent and the parties with their views, comments and concerns. During the PHC, the NIRB heard submissions on the following seven specific issues:

1. Anticipated date for submission of the Final Environmental Impact Statement.
2. Date, time and location of the Final Hearing.
3. Timetable for the exchange of documents and information requests prior to the hearing.
4. Formulation of issues for the hearing.
5. Procedures to be followed in the hearing.
6. Equipment, language, interpretation, translation and transcript requirements.
7. Other matters that may aid in the simplification of the hearing.

AEM indicated that the anticipated date for submission of its FEIS was approximately April 15, 2014, although this date would be contingent on the extent of additional information requirements placed upon the Proponent. Given the importance of filing a complete FEIS, the NIRB recognizes that the timing of the filing of the FEIS and the process for its preparation are the responsibility of the Proponent and will reflect the Proponent's timing, but the Board notes

for all parties, that in the interests of achieving timely, predictable and effective environmental assessment, the NIRB has based the procedural direction provided within this Decision on the assumption that AEM does meet the commitment of filing its FEIS by mid April 2014.

Until such time as the FEIS is received, the Board is not in a position to schedule the date of the Final Hearing as it is recognized that this date is highly dependent on the actual date of the filing and acceptance of a complete FEIS submission. The Final Hearing date will be confirmed following the NIRB's receipt, compliance review and acceptance of the FEIS and upon the initiation of the technical review period; however, it should be noted that when the communities were polled at the PHC with respect to their preferences for the timing of the Final Hearing, it was noted that the beginning of August would be preferred. Consequently, when the Board is in a position to schedule the Final Hearing, reflecting the NIRB's obligation to promote public participation pursuant to Article 12, Section 12.2.27 of the NLCA, the Board will take into account the input of the communities, as well as the Board's schedule of other ongoing assessments.

In consultation with the communities, the parties and the Proponent, the Board has determined that the venue for the Final Hearing should be the community of Rankin Inlet. The NIRB is committed to ensuring that representatives from each of the potentially affected communities (Arviat, Baker Lake, Chesterfield Inlet, Coral Harbour, Rankin Inlet, Repulse Bay, and Whale Cove) will have an opportunity to participate fully in the Final Hearing proceedings.

In addition, as requested during the Community Roundtable Session, and as discussed with the Proponent, the community members and the parties during the PHC, it is the Board's intention to schedule a site visit to the Project in conjunction with the Final Hearing proceedings. During the site visit, community members and parties will be given the same opportunity to see the site as the Board and staff. The agenda, activities and places viewed during the site visit will be as agreed to in advance by AEM, the Board and the parties. A public summary of the site visit will be provided as an appendix to the NIRB's Final Hearing Report.

As is the Board's usual practice, the Final Hearing will commence with formal technical presentations organized by subject. Informal community roundtable sessions will follow the technical presentations. All parties will be required to ensure sufficient technical expertise is available for both the formal sessions and the community roundtable portion of the Final Hearing.

Once filed, the FEIS will be subject to a technical review period, including a minimum of 60 days for the preparation and provision of final written submissions by parties following the acceptance of the Proponent's FEIS and a 14 day period for AEM to file a written response. As is required by the Board's Rules of Procedure, all written materials to be relied upon at the Final Hearing are required to be filed at least 14 days before the Final Hearing commences. At this time, the NIRB does not anticipate soliciting Information Requests (IRs) as part of the technical review of the FEIS. However, the Board reserves the right to extend the technical review period if it finds that additional time is necessary to deal with issues arising from the FEIS. Further, the NIRB reserves the right to schedule another meeting of technical experts (i.e., a technical meeting) and/or another PHC prior to the Final Hearing if the Board considers such meetings necessary.

The NIRB believes that AEM will resolve many of the technical issues raised by parties if it endeavours to comply with the specific direction and intention of the NIRB's Guidelines for the Preparation of the EIS for the Meliadine Gold Project (EIS Guidelines) and by fully meeting its commitments as set out in Appendices 1 and 2 of this Decision. The Board encourages AEM to continue to work with parties to resolve the balance of issues identified during the PHC.

Further, the Board requires that AEM address the following within its FEIS:

- Improvements to the baseline data and analysis presented for Meliadine Lake and for terrestrial species;
- Updated information on regulatory items and authorizations;
- Provide monitoring and mitigation plans, including specifically a Dust Monitoring and Mitigation Plan, Roads Management Plan, and Wildlife Mitigation and Monitoring Plan;
- Provide visual aids to facilitate an understanding of the scale of the proposed project;
- Address increased marine traffic associated with the Project;
- Updates to cumulative effects assessment as it relates to other projects in the region, includes consideration of caribou herds, and impacts from marine shipping;
- Include more discussion of impacts to Rankin Inlet and other Kivalliq communities;
- Provide updated labour force analysis to address employment targets and levels of people available in the Kivalliq region and Nunavut; and
- Provide non-confidential information regarding the draft IIBA.

Subject to the variations set out in this Decision, the Final Hearing will proceed in accordance with the NIRB Rules of Procedure (dated September 3, 2009). The Board has decided to vary Rule 18.2 and 20.1(b) respectively to reduce the normal 60 day notice period that is required if the NIRB wishes to convene a meeting of technical experts (technical meeting) and/or conduct a Pre-hearing Conference (PHC). Reflecting the proposed variation from the NIRB's Rules, in the event that the Board decides to hold a technical meeting and/or PHC, the Board may provide 30 days' notice to the Proponent and project distribution list prior to these meetings. The Board will establish equipment, language, interpretation, translation and transcript requirements at a later date when the scheduling of the Final Hearing is confirmed.

In order to simplify the Final Hearing, the Board encourages AEM to hold community information sessions in all potentially affected communities once the FEIS has been submitted and prior to the Final Hearing. The information sessions should address the questions raised during the Community Roundtable sessions of the PHC (i.e., see Section 2.9 for a summary listing of issues identified by the community members), provide an overview of how the key conclusions in the FEIS were reached, and also directly address how Inuit Qaujimajatuqangit values were incorporated into impact determination, mitigation, Project design, and monitoring programs. During the Community Roundtable session, the Board also heard communities' concern and frustration that they are not being made aware of, or gaining access to, relevant technical information either collected from the communities or generated by independent researchers that is currently administered by government agencies (for example, information about sites of historical importance, the identification of raptor nest sites, etc.). In response, the Board's Chairperson urged all government agencies to provide community members (including those with limited or no internet access) with greater and easier access to such information using a variety of mechanisms (such as communication via radio, social media, conducting local visits, etc.) in an effort to ensure that all participants have access to the relevant information required to

form a complete understanding of the Project, the FEIS, the conclusions contained in the FEIS and issues or concerns with the FEIS as may be raised by the submissions of other parties.

Further, as indicated previously, the Board encourages all government reviewers to ensure corporate knowledge is appropriately transitioned as may be required leading up to the technical review of AEM's FEIS and to the Final Hearing for the Meliadine Gold Project. The Board also encourages AEM and the Government of Nunavut to engage in discussions with Hamlet councils and social service providers in potentially affected communities to discuss the socio-economic impact assessment and related mitigation and monitoring plans prior to the Final Hearing. Finally, the Board recognizes the ongoing work undertaken by the parties, the public and community representatives from Arviat, Baker Lake, Chesterfield Inlet, Coral Harbour, Rankin Inlet, Repulse Bay, and Whale Cove, and encourages these parties to continue with their efforts into the final stage of the NIRB's Review process.

1.0 BACKGROUND

1.1 Procedural (Project) History

On May 3, 2011 the Kivalliq Inuit Association (KIA) referred the Meliadine Gold project to the NIRB for screening pursuant to Article 12 of the NLCA. On May 4, 2011 the NIRB received the Meliadine Gold project proposal from AEM. On June 8, 2011 the NIRB received a positive conformity determination from the Nunavut Planning Commission (NPC or the Commission) for the Project in relation to the Keewatin Regional Land Use Plan (KRLUP).

The NIRB proceeded to screen the Project in accordance with Part 4 of Article 12 of the NLCA, and on July 8, 2011 issued a screening decision report to then-Minister of Indian and Northern Affairs Canada (INAC; now Minister of Aboriginal Affairs and Northern Development or the Minister), the Honourable John Duncan, recommending a review under Part 5 or 6 of Article 12 of the NLCA.

During the screening assessment for the Project, on February 16, 2011 the NIRB received a referral from the KIA to assess AEM's proposed All-Weather Road (AWR) from Rankin Inlet to the Meliadine Gold Mine site (NIRB File No. 11RN017). On July 4, 2011 pursuant to Article 12, Section 12.4.4(c) of the NLCA, the NIRB determined that there was insufficient information to permit proper screening and recommended to the Minister and the President of the KIA that not only should the project proposal be returned to the Proponent but that the proposed AWR would be more appropriately considered within the context of the proposed Meliadine Gold project proposal.

On September 14, 2011 pursuant to Section 12.4.7 of the NLCA, the Minister referred the Meliadine Gold project proposal to the NIRB for a review of the ecosystemic and socio-economic impacts pursuant to Part 5 of Article 12 of the NLCA. Further, the Minister encouraged AEM to consolidate the Meliadine Gold project proposal and the AWR project proposal. In addition, the Minister also responded to three other issues of concern identified in the NIRB's Screening Decision Report for the proposed Meliadine Gold project including:

1. *Potential Cumulative Effects of Increasing Mineral Development in the Kivalliq Region* – The Minister agreed that the cumulative ecosystemic and socio-economic effects resulting from the increasing levels of mineral development in the Kivalliq Region warranted special consideration, and further observed that in assessing cumulative impacts on caribou, it is essential that the scope of the Board's review include consideration of transboundary effects.
2. *Level of Information Currently Available in Support of the Project Proposal* – The Minister emphasized his support for ensuring that sufficient information was in place prior to commencing key stages in the review process.
3. *Availability of Participant Funding* – The Minister stated that, while funding had been provided for a limited number of complex projects in Nunavut on a case by case basis in the past, Aboriginal Affairs and Northern Development Canada (AANDC) does not have an established participant funding program. As such, he was not in a position to provide participant funding for the review at this time.

On September 15, 2011 the NIRB distributed the Minister's decision and notified parties that direction regarding the next steps of the Review would be released when available, and on September 16, 2011 the NIRB requested that the Proponent submit an updated project proposal.

On September 29, 2011 the NIRB received a proposal from AEM for an All-Weather Access Road (AWAR) from Rankin Inlet to the proposed Meliadine mine site as well as an application to allow a first phase of this AWAR to be considered as an allowable exception to the NIRB's Review of the Meliadine Gold project proposal under Article 12, Section 12.10.2(b) of the NLCA. AEM's application indicated that the proposed first phase of the AWAR would include the construction and operation of a single lane road from Rankin Inlet to the Project site with restricted public access solely for the purpose of resupplying its ongoing exploration and bulk sampling programs with fuel and materials. AEM indicated that the second phase of the AWAR development would be included within the Proponent's EIS for the Meliadine Gold project and would be subject to the NIRB's Review.

On October 7, 2011 the NIRB distributed a *draft* scope list for the Project which included the proposed second phase of the AWAR. The NIRB provided additional information describing the Review process and the specific steps to be taken to assess AEM's application to have the first phase of the AWAR development be considered an allowable exception from the NIRB's Review pursuant to the NLCA Section 12.10.2(b). The NIRB requested that parties review the *draft* scope list for the Project and provide comments to the Board on or before October 28, 2011 based on their areas of expertise and/or mandate. Comments on the *draft* scope list were received on or before November 7, 2011 from the KIA, the Government of Nunavut (GN), Aboriginal Affairs and Northern Development Canada (AANDC), Fisheries and Oceans Canada (DFO), Environment Canada (EC), Natural Resources Canada (NRCan), and Transport Canada (TC).

On October 20, 2011 the NIRB invited parties to comment by November 21, 2011 on AEM's application to have Phase One of the AWAR development considered an allowable exception from the NIRB's Review. On or before November 22, 2011 comments were received from Nunavut Tunngavik Inc. (NTI), KIA in a joint submission, GN, AANDC, DFO, EC, NRCan and TC.

On November 9, 2011 the NIRB invited parties to provide comments on the *Revised Draft* scope list and *draft* EIS Guidelines for the Meliadine Gold project based on their areas of jurisdiction and/or expertise on or before December 8, 2011. Comments on the *Revised Draft* scope list and *Draft* EIS Guidelines were received by the NIRB on or before December 8, 2011 from the GN, AANDC, DFO, EC, NRCan, TC and AEM.

In order to engage with members of the public and to encourage effective public participation in the Board's Review, the NIRB facilitated public scoping meetings in the Kivalliq communities from November 13-30, 2011. Meetings were held in Rankin Inlet, Arviat, Whale Cove, Chesterfield Inlet, Coral Harbour, Repulse Bay, and Baker Lake (which was cancelled due to weather). The NIRB incorporated comments and concerns raised during these scoping meetings into its *revised draft* scope list for the Project and into its *Draft* Guidelines where appropriate. On January 19, 2012 the NIRB issued the *Public Scoping Meetings Summary Report for the*

NIRB's Review of Agnico-Eagle Mines Ltd.'s Meliadine Gold Project which included notes of comments and concerns raised during these sessions.

On December 16, 2011 the NIRB issued the final Scope for the Project, the *Revised Draft* EIS Guidelines as well as notification of the EIS Guidelines Workshop which was to be held in Rankin Inlet on January 31 and February 1, 2012. The NIRB requested that interested parties and responsible authorities review the *Revised* EIS Guidelines and provide comments to the Board based on their areas of expertise and/or mandate on or before January 20, 2012. The NIRB received comments on January 20, 2012 from the KIA, GN, AANDC, DFO, EC, and AEM.

On January 19, 2012 the Proponent notified the NIRB of intentions to modify the scope of the Project to include only the Tiriganiaq, Wesmeg, and F Zone deposits and to remove the Wolf, Discovery and Pump deposits from the development proposal with intentions of possibly including them at some future point. The NIRB facilitated an EIS Guidelines Workshop in Rankin Inlet January 31 and February 1, 2012 in order to bring together those parties with jurisdictional authority over the proposed Project and/or with technical expertise to offer in order to assist the NIRB in finalizing the Guidelines for the Proponent's preparation of an EIS. Further, the NIRB confirmed during the workshop that it would amend the EIS Guidelines and remove the Wolf, Discovery and Pump deposits from its assessment although they would be included as items of general discussion in terms of future developments and associated potential cumulative impacts.

Pursuant to Article 12, Section 12.5.2[1] of the NLCA, on February 20, 2012 the NIRB issued the *Guidelines for the Preparation of an Environmental Impact Statement for the Meliadine Gold project proposal (NIRB File No. 11MN034)* to AEM.

In addition on February 20, 2012, the NIRB notified the following of its determination that AEM's 'Phase 1: All-Weather Road' project proposal would be excepted from the Review process pursuant to Article 12, Section 12.10.2(b) of the NLCA and could therefore proceed to the licensing/permitting stage: then-President of the KIA, Mr. David Ningeongan; then-Minister of Community and Government Services for the GN, the Honourable Lorne Kusugak; then-the Minister of Aboriginal Affairs and Northern Development, the Honourable John Duncan; then-Minister of Fisheries and Oceans, the Honourable Keith Ashfield; then-Minister of Natural Resources Canada, the Honourable Joe Oliver; and then-Minister of Transport, Infrastructure and Communities, the Honourable Denis Lebel. Construction of the first phase of the AWAR was completed by AEM in 2013.

On January 25, 2013 AEM submitted its DEIS for the Meliadine Gold project to the NIRB. The Board initiated an internal review of the DEIS to determine whether or not it conformed to the EIS Guidelines issued to AEM on February 20, 2012. On February 11, 2013 the NIRB issued

[1]Article 12, Section 12.5.2 of the NLCA states: *"When a project proposal has been referred to NIRB by the Minister for review, NIRB shall, upon soliciting any advice it considers appropriate, issue guidelines to the Proponent for the preparation of an impact statement. It is the responsibility of the Proponent to prepare an impact statement in accordance with any guidelines issued by NIRB..."*

correspondence to the Proponent which indicated that the DEIS did *not* conform to the EIS Guidelines and requested that AEM provide a resubmission which would address the deficiencies identified during the Board's conformity review as well as address an Amendment of Scope that AEM had proposed within its DEIS submission.

On February 13 and February 19, 2013 AEM provided clarification to the NIRB with regards to the proposed change of scope and requested that the NIRB's assessment take into account the following:

- The development, construction, operation, decommissioning, reclamation and post-closure monitoring of the Pump and Discovery Deposits be included within the Scope of the Project as well as confirmed that the additional deposits would include open pit mines, waste rock storage areas, associated access and haul roads, water management structures and other supporting infrastructure;
- The removal of the Wolf deposit and its associated infrastructure from the Project Scope;
- That the scope be inclusive of the construction, operation and decommissioning of a haul road between the proposed Tiriganiaq mill site and the Discovery deposit; and
- The inclusion of a biopile treatment area to be sited within the B7 East waste rock storage pile, adjacent to the proposed mine landfill site within the Project Scope.

On March 6, 2013 the NIRB issued an *updated* Project Scope and also provided AEM with supplemental information requirements to the EIS Guidelines for its consideration in preparing a revised DEIS.

On April 22, 2013 the NIRB received AEM's revised DEIS submission for the Project and commenced an internal review of the materials to determine whether the submission conformed to the EIS Guidelines and the request for supplemental information identified in the Board's March 6, 2013 correspondence. On May 7, 2013 the NIRB confirmed that the DEIS conformed to the EIS Guidelines, accepted AEM's submission as a DEIS and commenced the technical review period. The DEIS was distributed to the public and interested parties with an invitation to submit IRs to the NIRB by June 6, 2013.

On June 6, 2013 IRs were received from the KHTO, a joint submission by KIA and the NTI, the GN, AANDC, DFO, EC, NRCan, and TC. The NIRB reviewed the IRs provided by these parties and on June 13, 2013 forwarded to AEM those IRs it deemed appropriate for that stage of the Board's Review. In addition, the NIRB requested that AEM provide the Board with an indication of its anticipated date for submitting an IR Response Package on or before June 27, 2013. On June 27, 2013 AEM indicated that they intended to submit a response to IRs by July 8, 2013; however, this timeline was later extended at the request of AEM.

On September 20, 2013 AEM submitted an IR Response package to the NIRB. On September 24, 2013 after conducting a preliminary completeness check to ensure that adequate information had been provided by AEM, the NIRB commenced the 60 day technical review period and tentatively scheduled the Technical Meeting and PHC. Parties were requested to review the DEIS and provide their technical review comments to the Board by November 22, 2013.

On October 4, 2013 public notice of the Technical Meeting (December 3-5, 2013), and the PHC (December 10-12, 2013) were published in the territorial and regional newspapers and posted in various locations in the Kivalliq communities. On October 18, 2013 and November 15, 2013 the NIRB issued further correspondence to more fully describe the process and expectations for both the Technical Meeting and the PHC.

From October 15-23, 2013 the NIRB facilitated public information meetings in the Kivalliq communities to discuss the information presented in AEM's DEIS. On November 19, 2013 the NIRB issued its *Public Information Meetings Summary Report* from these sessions as an information item.

The NIRB received technical review comments on or before November 22, 2013 from the KIA/NTI, GN, AANDC, DFO, EC, NRCan and TC. On November 29, 2013 the NIRB received AEM's overview response to the technical review comments which contained 163 commitments regarding the development of the FEIS (Appendix 1).

The Technical Meeting was held in Rankin Inlet from December 3-5, 2013 with participation from the following parties: AEM, NTI, KIA, KHTO, GN, AANDC, EC, DFO, and TC. Representatives from NRCan were also in attendance via teleconference. During the Technical Meeting, AEM made an additional 83 commitments to be completed for the FEIS or post-environmental assessment (at the licensing stage), 59 of which were revisions of its November 29, 2013 commitments. In addition, DFO and the GN each made one commitment (Appendix 2).

The PHC was facilitated by the NIRB's Chairperson, Elizabeth Copland and was held from December 10-12, 2013 in Rankin Inlet. Up to three community representatives from each of the communities of Arviat, Baker Lake, Chesterfield Inlet, Coral Harbour, Repulse Bay and Whale Cove were brought to Rankin Inlet to attend the PHC, with specific representatives from Rankin Inlet and general members of the public also having an opportunity to participate. In establishing the schedule for the PHC, the Board had consulted with the Proponent, the parties, the Hamlet and the community of Rankin Inlet to identify the best time for these sessions and had set the sessions for 9:00 am – 5:00 pm, with a possibility of evening sessions to take place only in the event that the meeting Agenda required such sessions. As the PHC progressed, it was determined that evening sessions would not be required. However on the final day of the PHC, the Board received a request to include an evening session in the meetings to enable community members from Rankin Inlet who were working during the day to attend the session. Although on such short notice the Board was not able to accommodate this request and no evening session was held on December 12, the Board has taken note of the request and commits to including an evening session in the schedule for the Final Hearing so that anyone unable to attend during the day is able to participate in an evening session.

During the Community Roundtable portion of the PHC, all representatives and members of the public were provided an opportunity to question AEM directly and to voice comments and/or concerns about the proposed Project.

The PHC was attended by the following parties: NTI, KIA, KHTO, GN, AANDC, EC, DFO, NRCan, TC and AEM. The PHC provided an opportunity for parties to present to the Board on

the issues that were resolved during the technical meeting and those issues which remained outstanding.

All documentation cited above and associated with the NIRB's Review of the Meliadine Gold Project can be accessed from the NIRB's online public registry using the following link:

http://ftp.nirb.ca/02-REVIEWS/ACTIVE%20REVIEWS/11MN034-AEM%20MELIADINE/2-REVIEW/.

Photo 1: Photo of Community Representatives at PHC

Photo 2: Photo of Interveners at PHC

Photo 3: Photo of AEM at the PHC

1.2 Project Description Overview[2]

The purpose of the proposed Project is to mine five gold ore deposits, process the ore on site through milling operations to extract the gold as gold bullion, and then to transport the gold bullion via air to the Royal Canadian Mint to be refined and sold on the global market. The proposed Project is located approximately 24 kilometres (km) northwest of Rankin Inlet and 80 km southwest of Chesterfield Inlet, in the Kivalliq Region of Nunavut. The expected 24 hour a day/365 days a year mine and milling operations are proposed to result in the daily extraction of approximately 8,500 tonnes of ore and up to 3.1 million tonnes of ore annually.

The geographic area of the Project includes the Tiriganiaq, Wesmeg, F Zone, Pump, and Discovery deposits, as well as the community of Rankin Inlet (see Figure 1). The major project components and associated project activities as proposed include:

- Tiriganiaq/Main mine site would serve as the main base of operations, including overburden removal, open pit and underground mining, blasting, ore transportation, dewatering and diking of water bodies, quarrying activities, ore processing, tailings disposal, warehousing, refuelling, power generation and heat recovery, administration, and personnel accommodations;
- Development of the other four mineral deposits/mine sites (Pump, Wesmeg, F-Zone and Discovery) would include overburden removal, open pit and underground mining,

[2] The project description overview has been adapted from Volume 2 of Agnico Eagle Inc.'s Draft Environmental Impact Statement received by the NIRB on April 22, 2013.

blasting, quarrying activities, ore transportation, dewatering and diking of water bodies (where required), and fuelling (where required);

- A spud barge or floating dock would be constructed at the Itivia harbour adjacent to the existing community sealift offload site to receive annual freight via sealift;
- The existing Itivia dock would be used for unloading and loading of sealift freight, including fuel and materials;
- A fuel tank farm to be constructed south of the Itivia port site in Rankin Inlet would receive and store the mine's annual fuel re-supply;
- A laydown yard area would be constructed adjacent to the proposed spud barge to act as short term storage of incoming and outgoing sealift freight;
- Quarrying activities, road maintenance, dust management, and traffic management would be undertaken for the AWAR, spur roads and bypass road;
- Mobilization and shipment of supplies, fuel and reagents to Rankin Inlet would occur either by ship or by air
- Transportation of Project employees to Rankin Inlet would occur via the Rankin Inlet Airport, with further transportation of mine employees to site via the AWAR; and
- Project abandonment, decommissioning and reclamation would include the removal of infrastructure and equipment from site, reclamation of disturbed areas and natural re-vegetation.

The ore extracted from all deposits would be transferred to the mill at Tiriganiaq via all-weather service roads which have been proposed to be constructed along with Phase 2 of the AWAR. During Phase 2 of the proposed AWAR development the Proponent proposes to:

- Widen the existing single lane AWAR to two lanes at a width of 8 metres (m);
- Construct a 9.4 km spur road connecting the Discovery deposit to the existing AWAR and the proposed community dock that would be constructed at the south end of Meliadine Lake;
- Construct a 20 km single lane haul road (16 m wide) between the Discovery and the Tiriginiaq sites, with 26 m wide passing zones at 500 m intervals. The haul road from the Discovery Deposit to Tiriginiaq site would run parallel to the spur road and AWAR and join up with the proposed haul road between the F Zone site to the mill site where it would follow a separate alignment to the primary crusher and ore stockpile location. The Proponent also proposes to construct a rock berm to separate the haul road(s) and the portion of the AWAR open to public;
- Construct a 6.1 km bypass road around the southern section of Rankin Inlet to connect the Itivia laydown area with the AWAR in order to avoid trucking of Project materials, fuel and equipment through residential areas; and
- Construct all-weather haul roads between the Wesmeg, F Zone and Pump deposits and the AWAR.

The Proponent has proposed that all mine haul roads would be closed to the public and that an unmanned gate would be installed on the AWAR just north of the road to the Iqalugaarjuup Nunanga Park for use when AEM determines it must close the road. Installation of an automatic gate on the Discovery spur road just past the community boat launch and a manned gate at the intersection of the AWAR and the haul road to the F Zone deposit have also been proposed.

The four general Project phases as proposed by the Proponent are as follows:

- Pre-Development Phase (approximately 3 years): Preliminary construction of Project infrastructure and site preparation; pre-development of the mining facility including stripping the overburden from the first open pits and developing the underground access ramp to the Tiriganiaq mine site; installing the spud barge and beginning construction on the fuel tank farm and laydown yard area at Itivia.
- Construction Phase (approximately 2 years): Construction of the Phase 2 bypass, access and spur roads; complete construction of mine infrastructure and facilities, fuel tank farm and laydown yard area; and construction of the tailings storage facility.
- Operational Phase (anticipated 13 years): Mining of gold from the deposit sites to commence in the following order: Tiriganiaq, F Zone, Wesmeg, Pump, and Discovery. For each deposit one or several pits will be mined and the expected years of operation for each pit varies. The potential development of additional deposits (e.g., the Wolf deposit) in the Project area may extend the operating life of the Project.
- Decommissioning (approximately 3 years) and Reclamation Phase (approximately 5 years): Decommissioning to include the close of the mine and the decommissioning, demolishing or removal of existing infrastructure. Progressive reclamation phase to be undertaken for the land and equipment no longer needed for the Project as well as the continuous management of hazardous wastes and contaminated soil to return the site to a physically and chemically stable condition.

The Proponent had noted that post decommissioning monitoring could last an additional 10 years. Decommissioning of the Project would include demolition of the site and the AWAR as well as reclamation of any contaminated areas. Closure of the tailings storage facilities would involve covering and then blending the final cover in with the existing topography. Mine rock piles would be covered and re-graded to promote vegetative growth and to provide wildlife access. The Proponent has acknowledged that decommissioning plans and financial security would be required for the Project but final details may not be available until the licencing stage or once the Project begins operations. AEM has committed to including as many details as possible in the FEIS and would update the NIRB as appropriate should the Project be approved.

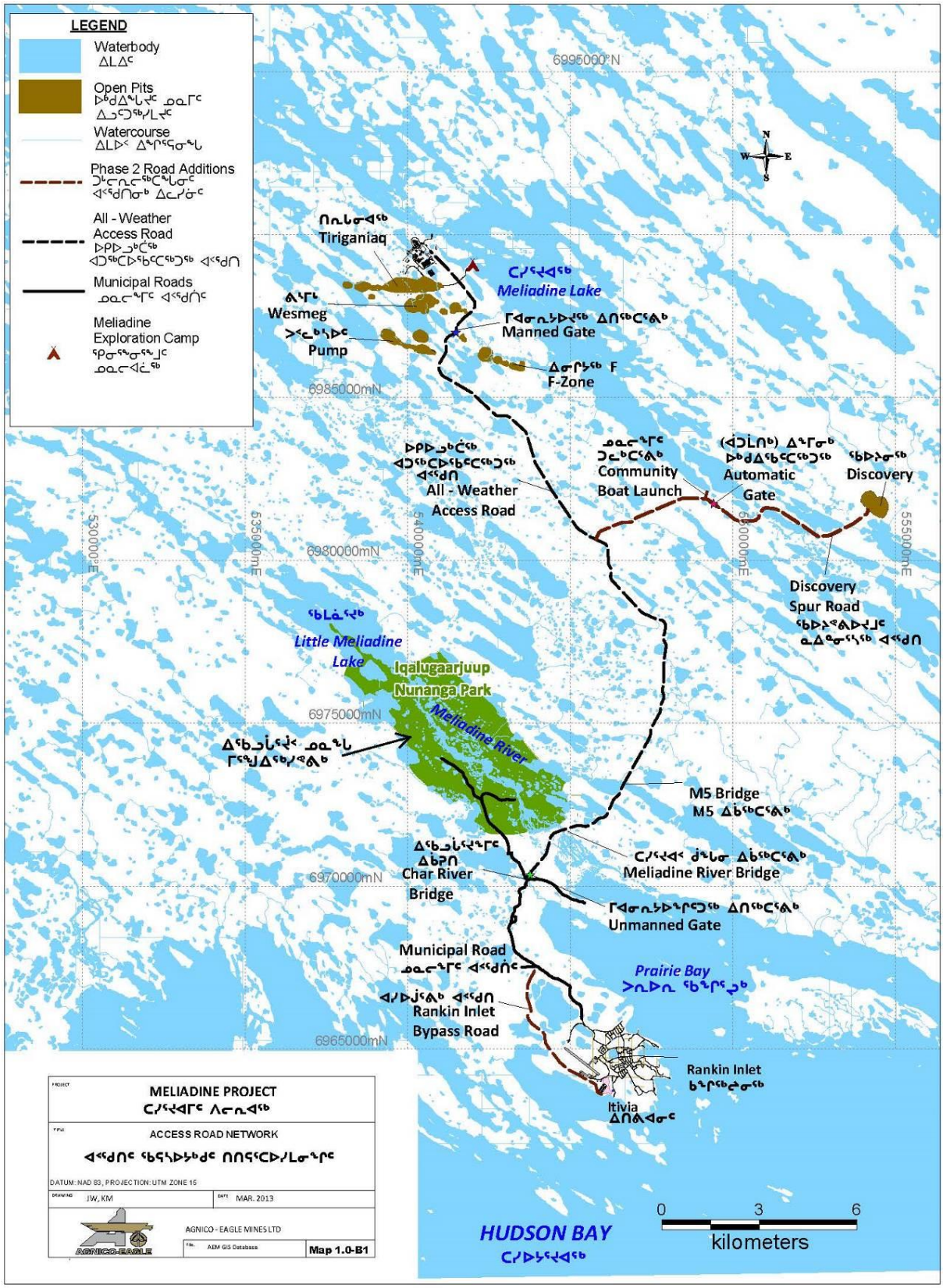

Figure 1: Proposed Project components (*from the Meliadine Gold project DEIS, Volume 1, Appendix B, Figure 1*)

2.0 SUMMARY OF THE SUBMISSIONS FROM PARTIES

2.1 Nunavut Tunngavik Incorporated (NTI)

NTI and the KIA conducted a joint technical review of the DEIS as well as a review of the IRs submitted by all interveners. Furthermore, the KIA and its consultants held a meeting with the Proponent on November 19, 2013 to discuss the Proponent's responses to the IRs submitted by the KIA. In addition, at the PHC NTI raised significant concern that a lack of participant funding associated with the NIRB processes may significantly and detrimentally limit the ability of the public and potential intervenors to participate fully in the process, including by retaining adequate technical expertise. This concern was echoed by the KHTO in the preamble to its IRs submitted for the Project.

2.2 Kivalliq Inuit Association (KIA)

The purpose of NTI/KIA's review was to ensure that the potential impacts and benefits of the proposed Project were comprehensively assessed through scientific, socio-economic and impact assessment best practices, and to ensure that Inuit Qaujimajatuqangit values were incorporated into impact determination, mitigation, project design, and monitoring programs. Fifty (50) issues were defined during this technical review, while thirty-seven (37) of these related to the Proponent's responses to IRs submitted by the KIA. An additional thirteen (13) issues were identified as part of the ongoing technical review. Twenty-six (26) of the 50 were categorized as requiring action by AEM prior to the Project proceeding to the regulatory and permitting stage. Twelve (12) of the issues were requiring clarification of wording and language, while the KIA accepted the response of the Proponent to the remaining twelve issues.

The overall observations of NTI/KIA in their technical review comments were as follows:

- With the exception of the effects assessment for caribou, Inuit Qaujimajatuqangit was not clearly or comprehensively incorporated into the DEIS;
- Inadequate consideration given to caribou in the Terrestrial Ecosystemic Monitoring and Management Plan;
- Lack of clarity on caribou and other wildlife population persistence, environmental significance and how these species were considered in the determination of significance of project impacts;
- Use of the CALPUFF model for dust deposition requires validation by way of comparing CAPUFF modelling to dust monitoring results at other mine sites (i.e. Ekati and Meadowbank);
- A significant potential for dust (or freeze dried fines in subzero conditions) to become airborne exists, and there is therefore a need to better identify dust or fines control measures across all weather regimes;
- Water quality and sediment parameters have identified contaminants including, in particular, cadmium, copper and lead, and the assessment of potential changes which these may cause to water quality alone is not adequately addressed;

- In respect of surface water quality and flow, changes to surface hydrology must be assessed for significance as the KIA disagreed with the Proponent's assertions that a magnitude of change in surface water quantity is only environmentally significant if it may lead to a detrimental effect to human health or aquatic health;
- The KIA reminded the Proponent that Article 20 of the NLCA requires that the Proponent enter into a water compensation agreement with the DIO for any loss or damage that may be caused by the changes in quality, quantity or flow of water, and that the FEIS must consider changes to water quality and quantity alone and not solely on the basis of harm to fish, aquatic habitat or another receptor; and
- The FEIS should consider water, waste water, solid waste, power, fire protection, search and rescue, recreation, the food sector, accommodations and tourism, the community freezer and community service clubs in Rankin Inlet as components of public infrastructure or services in Rankin Inlet which will be impacted by the Project.

At the Technical Meeting, AEM made several commitments in respect of the technical issues raised by the KIA (see Appendices 1 and 2). On this basis, the KIA confirmed at the PHC that it was satisfied with the responses and commitments provided by the Proponent and that there were no outstanding technical issues arising from the technical review comments that remained to be addressed prior to preparation of the FEIS.

2.3 Kangiqliniq Hunters and Trappers Organization (KHTO)

At the Technical Meeting, the KHTO clarified that it intended for the IRs submitted by the KHTO in June 2013 to be brought forward as its technical review comments. The Board notes that the KHTO prefaced its IR comments with a central concern that: *the interest of the KHTO in the review of the Meliadine Gold project's potential environmental impacts greatly outweighs the technical and financial resources placed at its disposal to take part in the process*.

During the Technical Meeting held by the NIRB prior to the PHC, the KHTO indicated that it shared similar concerns as had been expressed by the Beverly and Qamanirjuaq Caribou Management Board (BCQMB) to the NIRB in relation to the Kiggavik Uranium Mining Project Proposal, and in particular issues in relation to the effects on lands, waters and wildlife associated with:

- roads;
- powerlines;
- blasting;
- dust and waste stockpiles;
- cumulative impacts;
- consultation; and
- incorporation of traditional ecological knowledge.

With respect to project-specific KHTO concerns, its IR submission identified the following:

- The need for effective sewage treatment;

- Requirements for adequate treatment of mining effluent prior to any discharge into Meliadine Lake;
- Reassurance that the dams and dikes forming the tailings storage facility are sufficiently robust to prevent the release of contaminants into the environment is needed, particularly taking into account the effects of climate change on the active layer and permafrost dynamics.

The KHTO also identified that a lack of adequate and timely translation of materials limits the level and extent of involvement of the KHTO members in the review process.

In response to the issues raised by the KHTO both as IRs and directly at the Technical Meeting AEM made several commitments as set out in Appendix 2.

2.4 Community Members from Arviat, Baker Lake, Chesterfield Inlet, Coral Harbour, Rankin Inlet, Repulse Bay and Whale Cove

The communities of Arviat, Baker Lake, Chesterfield Inlet, Coral Harbour, Repulse Bay and Whale Cove were represented at the Community Roundtable held in Rankin Inlet during the PHC, with additional community members from Rankin Inlet also participating in these public sessions. Underlying many of the questions and comments expressed by the community members in attendance was a clear message that: *our wildlife, our water and our very being will be affected by the development of this mine and there are only a few thousand of us in the Territory who will be directly affected; we are not opposed if the mine is developed properly, but we will all need to work together throughout the life of the mine from start to finish to make sure that happens.*

Table 1 provides a summary of key comments provided by community members during the Community Roundtable sessions held on December 11 and 12, 2013.

Table 1: Key Issues Raised By Community Representatives During Community Roundtable

Topic	Issues/Concerns/Comments
Airstrip	Will AEM be constructing an airstrip or will AEM use the existing Rankin airport?
AWAR	Why was access to the AWAR restricted for harvesters and the public this year during hunting season; and will this be the way things will be in future?
	How did the blasting of the hills associated with the AWAR construction get regulatory approvals to proceed?
	What happened to the raptor nesting areas that were impacted when AEM undertook the AWAR construction last summer?
	Does the road have to be reclaimed and have all the culverts and bridges removed after the mine ceases operation, even if the community wishes for the road to remain open?

Blasting/Explosive Residue	Is the smoke, dust and explosive residue associated with blasting activities toxic or dangerous to people and animals?
	Will people out on the land still be able to drink water from the small ponds nearby areas that are being blasted, or will these water sources be contaminated by blasting activities?
	How will people on the land be warned about timing and extent of blasting so that they stay safe and are not affected by the dust?
Caribou	Mine is located in the middle of caribou migration route—how will the mining operations affect the route and what measures is AEM willing to take to limit these effects?
	Is AEM aware of all migration routes of different herds that may be affected by the mine site?
	Is AEM aware of all historical caribou crossings (as migration routes have changed recently, these more traditional routes may be reused again)?
	Has AEM observed that caribou migration routes have changed significantly already since exploration and other mining activities have commenced?
	How will AEM prevent illegal hunting of caribou by non-Inuit with access to the site?
	Will AEM commit to suspending all activities, including blasting during caribou migration?
Climate Change	Will climate change result in more water being present on-site than is currently accounted for?
Contingency/ Emergency Planning	What kind of contingency/emergency plans are in place to notify communities if their water sources have been impacted?
	How will accidents and vehicle break downs on the road be handled (i.e. who would be responsible for protecting the land and water from fuel)?
	Do the spill contingency plans associated with marine shipping include mitigation measures for sea mammals that have been impacted by the spill?
	Does AEM have plans in place for employees to return home on an urgent basis to attend to a family emergency or death?
Cultural Resources	How will AEM identify, preserve and protect cultural resources in the area from project-related impacts?
	Will AEM consult with Elders to ensure that AEM is able to identify all cultural resources in the area (there is concern that some areas of significance might not be recognized for their value)

Cumulative Effects	In ten years (10) what will be the potential cumulative effects associated with the increases to marine shipping associated with this Project when added to others in the same area?
Dewatering	Where will water from dewatered areas above open pits be stored?
	How is lake dewatering done before construction of tailings storage facility—are fish removed, where are berms placed, etc.
Discharge Criteria	Is there a mechanism that can be established to ensure that phosphorus doesn't increase in the lakes receiving discharge from the mine and camps?
Discharges of Sewage, Oily Water and Run off	Will sewage, oily water and run off that has contacted the ore stockpile be treated to ensure that contaminants are not being released into the environment?
Drilling	How many drills will be used on-site and how are those being monitored?
	How will salts in drilling be prevented from impacting water sources?
	How large are the drilling rigs?
	How far do they go into the earth?
	What additives are used for cooling drills as they go?
Dust control/dust suppression	What is going to be used for dust suppression on the AWAR and at the mine site? Recognizing that there are powerful winds in the area and that there is potential for the town to become blanketed in dust if it is not properly controlled
Fish	Dead fish have been seen around Meliadine River, does AEM have a system for advising people in the area when they should not eat the fish?
	Have any studies identified fish carrying diseases in this area?
Fuel Transportation, Use and Storage	Has AEM given any thought to using alternative forms of energy and thereby reducing the storage of so much fuel at the site?
	How would the integrity of the containment berms (including liner systems) around tank farms be maintained once constructed?
	Will a bypass road be used for fuel storage and transportation to the site or do the trucks have to go through town?
	What types of ships will be used to transport fuel?
Impacts on Wildlife	Is there any funding available to do further studies on wildlife (including caribou)?
	Have bird nesting areas been identified so that AEM construction activities can avoid these areas in future?

Impacts on Wildlife (cont'd)	How will AEM monitor for and then compensate for any effects on the total Allowable Harvest that can be linked to project-related effects?
Inspection and Enforcement	Do inspectors and other regulators have plans for visiting the mine site, inspecting the sites and conducting their own monitoring of the sites, and if so, how often would they visit?
Marine Shipping	Significant concerns regarding the effect of increased marine shipping on an already decreasing population of marine mammals and populations of seals, char, migratory birds that are already changing their migratory birds.
	How will people/communities get compensated for impacts on harvesting, quotas, water use, etc. associated with the Project?
	Significant concerns about how close shipping route is to shore of Marble Island which is very significant habitat for migratory birds and marine mammals and this area is very meaningful to marine mammal harvesters.
	How will marine mammals and other animals be affected by the noise from ships?
	What are AEM's requirements/plans with respect to conducting and clean up if an accident should happen along the shipping route?
	Where will the ships be anchored during loading/unloading and in particular during fuel transfer?
	Communities along the shipping route would like to have emergency response teams in each affected community before something bad happens.
	Would like to see all levels of government providing more information and a clearer vision regarding where additional research (that should be conducted by Government)
	Would like comparison between effects in the area now versus intensification of transportation, shipping and air traffic once the mine is up and running.
	How many summers will project shipping continue?
	Want AEM to ensure that shipping route avoids Coates Island.
	How do they ensure that materials being shipped and then stored at the port site do not get released (e.g. salt stored in bags got released into the inlet when the bags deteriorated)?
Monitoring	Are there any plans to monitor food sources (caribou, fish, mussels, clams, walrus, sea mammals, etc.)
Ore and Overburden Rock Piles	How big will ore and overburden rock piles be?

Permafrost	Will open pits be advanced through permafrost?
	Does AEM have any contingency plans in place to address climate-change-induced changes that may impact the permafrost in the next 20 years?
Reclamation	Once the Project is complete, will the structures be taken down and would the land be returned to its original state?
Security	Is there any Project bonding required at this stage?
Soapstone	What happens when soapstone deposits are found?
	How does AEM ensure soapstone is set aside so that carvers can come and retrieve it?
Socio-Economics	How will losses of cultural skills and cultural knowledge be recognized, valued and compensated?
	Would like to see this Project up and running if employment opportunities will be provided fairly to unilingual Inuit people
	Community members indicate that it is unacceptable that unilingual French employees may be able to work at the site but that unilingual Inuit employees are not given the same opportunities.
	Would like to see much greater emphasis on cross cultural awareness and understanding, as prior work experience for Inuit employees has not always been positive (including Inuit employees being prevented from or belittled by their co-workers for the use of Inuktitut on the job, on breaks, etc.
	How will AEM encourage Inuit young people to complete their educations before working at the mine?
	How will AEM ensure that Inuit are not only hired, but feel welcome to stay at the mine site—there should be an orientation program in advance and cultural exchange to ensure that all Inuit feel valued and supported at the mine site.
	Are royalties paid even when the company does not make money?
	What grade level is required for employment?
	Will unilingual Inuktitut speakers be at a disadvantage compared to unilingual French employees?
	Is it possible to have a pre-employment program put in place at Arctic College for those who have graduated from Grade 12 but might not have work skills?
	How will AEM plan for the sudden closure of a mine and how would AEM's outstanding regulatory obligations (e.g. fish habitat offsetting, compliance with the Terms and Conditions of any NIRB Project Certificate, etc. be dealt with during closure)

Socio-Economics (cont'd)	Has AEM and the GN addressed the potential for the Project to affect the availability and quality of housing in Rankin Inlet and communities where AEM will hire?
	Has AEM learned from the experience of Nunavut's mining past in terms of social effects such as family break up, family violence, substance abuse, etc.?
	Has AEM given any thought to allowing Rankin Inlet residents to come home at night rather than requiring them to live at the mine site?
	If mine workers get injured, how are they compensated?
	If Meadowbank mine workers want to transfer to Meliadine as Meadowbank winds down and Meliadine begins, would Meadowbank workers be able to apply at Meliadine?
Surface Water	Will surface water go into the open pits and eventually into the underground part of the mine?
	How will all the surface water that contacts waste rock facilities, ore stock piles, tailings, etc. be managed to ensure that it is collected, tested and does not get released into the environment until it meets the relevant criteria?
Tailings Storage Facility	How will this tailings storage facility be different than the one that just spilled into the Athabasca River from the coal mine in Hinton, Alberta?
	What if AEM's discovers more ore—will tailings storage facility continue to be big enough to accommodate significant change to Project size and increases in ore processing volumes?
	How will AEM make sure that cyanide levels in the tailings are limited?
	How will AEM prevent animals from contacting the water in the tailings storage facility?
	Has the performance of the liners in the rock wall containment structures for the tailings storage facilities been tested in an arctic environment?
Underground Mining	How does AEM ensure proper ventilation of the mine?
	When air circulated through the mine is released, where is the exhaust?
Waste Management	Where will the landfill(s) be located at the site?
	How close will the landfill be to the waters with fisheries? (And if located close to water containing fish) how will AEM prevent garbage and debris from getting into the water?
	How will wet/dry wastes by separated and managed?
	How will the landfill/dump site be closed/reclaimed?
	How will hazardous materials and contaminated soils to be shipped down south be managed on-site to prevent contaminants escaping? How will these materials be destroyed when down south?

Waste Management (cont'd)	What substances will be incinerated at the site and are there filters on the incinerator stacks? What is done with the ash?
Waste Rock Storage	Why is there no liner in the waste rock storage facility?
	Will waste rock generated from underground mining activities be brought to surface for storage?
	How high will the waste rock piles be when the mine ceases operations?
Water Use	Clarification sought regarding how much AEM plans to recycle water on-site.
Wildlife	How will AEM monitor for and then compensate for any effects on the total Allowable Harvest that can be linked to project-related effects?

2.5 Government of Nunavut (GN)

The GN provided technical review comments for the DEIS prepared by an Environmental Assessment Review Team sitting in two Committees: the Environmental and Human Health Assessment Committee and the Socio-Economic Assessment Committee.

The technical comments submitted by the GN included: the expression of significant concerns about the potential for project impacts on the contiguous Iqalugaarjuup Nunanga Territorial Park; and identified deficiencies that should be addressed in the FEIS including a detailed human-wildlife conflict management plan, an expanded habitat analysis for caribou, a detailed monitoring and mitigation plan for wildlife and the addition of accurate information about the Iqalugaarjuup Nunanga Territorial Park; a methodology for the safe disposal of brine concentrate; further discussion about the Project's climate change assessment; inclusion of grizzly bear, wolverine, muskox and arctic fox as Valued Ecosystemic Components (VEC); revised baseline information on the occurrence of polar bears in the marine environment; a detailed monitoring and mitigation plan that allows readers to properly assess the effectiveness of proposed monitoring and mitigation measures surrounding use of the road, including residual effects on wildlife harvesting; and additional information on raptors.

The comments also included further observations that the FEIS should include:

- A more thorough "effects analysis" to address the potential strain on the capacities and demand on the existing educational system in the Kivalliq Region and Nunavut;
- Clear statements respecting the educational levels needed by a job candidate; adjustments to the municipal boundary locations; and royalty projections which distinguish between the GN and NTI when making projections about royalty revenues in the Territory;
- Significant changes to Volume 9 involving a commitment to collaborative socio-economic planning with, but not limited to, conducting planning with the existing Kivalliq Socio-Economic Monitoring Committee (SEMC);
- Updating of the labour force analysis;
- A cross-impact matrix that clearly demonstrates the interactions between all VECs and Valued Socio-Economic Components (VSECs);

- Additional discussion of how significance criteria were specifically applied to the archaeological sites within the local study area;
- Residual effects assessment for cultural, archaeological, and paleontological resources;
- Revised predictions related to the housing situation in Rankin Inlet that are based on information from the AREVA Resources Inc.'s Kiggavik DEIS technical review;
- A discussion of the potential impacts of in-migration on housing demand in Rankin Inlet in terms of its potential health impacts;
- Consideration of rotational work and work related stress as an effects pathway, with corresponding significance determination for both physical and mental well-being as well as substance abuse; and
- The capacity of health facilities in Rankin Inlet to absorb 450 people over the next two years, and 538 people over the next fifteen (15) years.

AEM made several commitments in respect of the technical issues raised by the GN in advance of and at the Technical Meeting (see Appendices 1 and 2). On this basis, the GN confirmed at the PHC that it was satisfied with the responses and commitments provided by the Proponent and that there were no outstanding technical issues arising from the technical review comments that remained to be addressed prior to preparation of the FEIS.

2.6 Aboriginal Affairs and Northern Development Canada (AANDC)

AANDC conducted a critical review of the DEIS and of the Proponent's responses to IRs and made several "key recommendations" regarding enhancements that should be included in the FEIS, including:

- Surface water quality;
- Water treatment;
- The landfill and waste management;
- The tailings storage facility;
- Geochemical characterization of waste rock, ore, tailings and overburden;
- Geotechnical engineering and permafrost;
- Permafrost thermal regime baseline studies; and
- Socio-economic impact assessment.

AEM made a large number of commitments in respect of AANDC's issues in its response to the technical comments at the Technical Meeting (see Appendices 1 and 2). At the PHC, AANDC advised that AEM's commitments to provide additional information in the FEIS, as well as during the future licensing phase for the Project, addressed AANDC's at this point in the assessment and confirmed that it had no outstanding issues to be addressed prior to the preparation and submission of the FEIS.

2.7 Environment Canada (EC)

EC's technical review comment submission summarized its review of the DEIS as well as information provided by the Proponent during the IR process. While EC concluded that the DEIS was, in general, supported by the analysis, it nevertheless identified uncertainties in the EIS which needed to be addressed in areas such as modeling results for the tailings storage facility, effluent treatment, and monitoring.

EC submitted technical comments related to impacts on air quality, water quality, wildlife and species at risk. Its technical recommendations included:

- Adding a section on general mitigation measures for species at risk;
- Inclusion of Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessed species that are under consideration for listing within the FEIS;
- Communication of the commitment made by the Proponent for the shipping route to avoid Coates Island to all contracted shipping operators;
- Inclusion of an annual log and map of ship tracks in annual monitoring reports in order to assess the level of adherence to this commitment;
- More detail respecting mitigation measures applicable to marine birds;
- More detail respecting migratory birds and spill response;
- A description of mitigation measures to prevent the incidental take of migratory birds including plans for implementation;
- A commitment to the use of EC recommended setback distances to minimize disturbance to nests for different bird groups nesting in tundra habitat;
- Clearly establishing avoidance as the primary mitigation measure to avoid the incidental take of migratory birds;
- Development of deterrent measures, if necessary, to prevent water birds from using tailing ponds and thereby contacting contamination;
- An assessment of the Project's greenhouse gas contributions to Nunavut; and
- Provision of all input and control files used in the CALPUFF model and post processing utilities to generate the air quality predictions presented in the DEIS.

EC comments on the Proponent's responses to IRs identified outstanding questions respecting modeling results for the tailings storage facility; modeling results associated with predicted effluent quality and environmental fate and behavior of contaminants; comparison of predicted waste rock leachate concentrations to Canadian Council of Ministers of the Environment (CCME) guidelines for all parameters; clarification on the types of treatment which may be available as contingencies in the event tailings storage facility effluent quality is different than predicted; information on how predicted ammonia concentrations will be treated to levels suitable for discharge; inclusion of nutrient monitoring in effluent discharge; clarification on water license effluent quality criteria; and clarification on water treatment contingencies that are available in the event that discharge from attenuation pond AP01 does not meet criteria during

the open water season, or if the discharge duration extends to the shoulder months when water quality is poor.

AEM responded to the IRs and technical review comments provided by EC in its response to the technical comments and at the Technical Meeting including the development of related commitments (see Appendices 1 and 2). At the PHC, EC advised that the majority of its issues had been resolved by these responses.

2.8 Fisheries and Oceans Canada (DFO)

DFO reviewed the DEIS and AEM's responses to IRs with respect to the aspects of the Project with the potential to impact fish and fish habitat. DFO submitted technical comments outlining those areas where it sought clarification and further detail. These areas included: frequency of plankton monitoring; inclusion of mixing zone as an area impacted; the identification of fish that provide commercial, aboriginal and recreational fisheries value to Canada and those species that support the fisheries; species resiliency and adaptability to change in the environment; and duration of impacts. DFO concluded that the Proponent's assessment of impacts to fish and fish habitat relies extensively on the accuracy and precision of their models and assumptions; but that these models and assumptions will require continued refinement under the New Fisheries Protection Policy and as additional information, such as the results of monitoring programs, becomes available. DFO noted that it may also require an offsetting plan to be developed should serious harm to fish habitat remain during the construction and operation of the Project notwithstanding the application of appropriate mitigation measures, comprehensive adaptive management, and follow-up and monitoring programs.

AEM made a number of commitments in respect of DFO's requests for additional information in its response to IRs at the Technical Meeting (see Appendices 1 and 2). At the PHC, DFO advised that it was satisfied and that it had no outstanding issues.

2.9 Natural Resources Canada (NRCan)

NRCan conducted its technical review of the DEIS giving regard to manufacturing and storage of explosives, permafrost and geotechnical science, hydrogeology, and the potential for acid generation and metal leaching from mined materials. NRCan provided a number of recommendations respecting detailed design of tailings and waste rock storage facilities; numerous recommendations respecting hydrogeology issues with regard to the limited hydrogeological data presented and the hydrogeological challenges arising from the proposal to place a tailings storage facility within a lake basin believed to have an open talik beneath it and potentially having a direct hydraulic connection between surface water and sub-permafrost groundwater; several recommendations respecting dewatering of saline sub-permafrost groundwater associated with the underground mine; a recommendation that a saline water management plan be developed and which includes contingency or adaptive management measures to deal with saline inflows to the underground mine should they prove to be greater than predicted; noting that the FEIS should include full documentation of the borehole drilling, testing and installations, including descriptions of well development and hydraulic conductivity testing; and that the FEIS include a more complete schematic of the conceptual model that better

integrates the information that is known or inferred about the geology, permafrost depths, basal cryopeg, groundwater quality/density and the sub-permafrost groundwater flow.

In respect of acid rock leaching and waste rock management, NRCan recommendations included: that the Proponent's FEIS provide clarification, rationales, re-interpretation or justifications for several data sets in which discrepancies were identified by the NRCan review; that the Proponent consider that waste rock may require means to prevent oxidation; that the Proponent re-assess the potential for acid generation from the tailings and develop additional mitigation measures as necessary; and that the FEIS further consider and discuss the potential of arsenic leaching from the tailings and its implications.

NRCan participated in the Technical Meeting via telephone and on the basis of specific discussions with AEM, the Proponent and NRCan were able to include several commitments to address NRCan's issues as raised in both the IRs (see Appendices 1 and 2). NRCan attended the PHC, where it advised that it had no substantial outstanding technical concerns which had not been addressed through discussions at the Technical Meeting and AEM's commitments.

2.10 Transport Canada (TC)

TC conducted a technical review of the DEIS and of the Proponent's responses to IRs. This review focused on navigable waters, marine transportation safety and security, and transportation of dangerous goods. TC generally agreed with the conclusions presented in the DEIS, but nonetheless made a number of recommendations arising from the technical review which are associated with TC areas of responsibility. Specifically, TC recommended the following: *Navigable Waters Protection Act* applications should be provided for the boat launch, for each of the water crossing location, for any water intakes on navigable water bodies, for watercourses impacted by waste rock storage, for dewatering of watercourses, and for navigable water courses associated with water outfalls. Further, TC noted that in all cases, site visits during open water conditions would be beneficial.

TC also made a number of recommendations respecting oil spill response and recovery, particularly having regard to the remoteness of the site and the reality of attempting spill response and recovery in a region where there is no response organization and where Canadian Coast Guard resources are not readily available so that the vessel operator and the oil handling facility would be the primary responder. TC noted that there have been recent changes to the Regional Environmental Emergencies Team structure which the Proponent must consider.

TC also recommended that the Proponent prepare and submit to TC for review an updated Oil Pollution Emergency Plan reflecting compliance with part 8 of the *Canada Shipping Act* regarding subtending regulations & standards (in particular compliance with Vessel Pollution and Dangerous Chemical Regulations - Part 2 & 3).

Finally, TC recommended that the Proponent carry out consultation with regulatory bodies before considering use of dispersants and *in situ* burning as the primary methods of oil recovery in Arctic waters.

TC staff participated in the Technical Meeting in person and via telephone. In its response to IRs and at the Technical Meeting, AEM made commitments in respect of TC's issues (see Appendices 1 and 2). Subsequently, TC confirmed at the PHC that it had no outstanding technical concerns which had not been addressed by AEM's commitments.

2.11 Agnico Eagle Mines Ltd. (AEM)

In its responses to the DEIS Technical Review Comments, AEM made 163 commitments regarding the development of the FEIS (see Appendix 1). At the Technical Meeting, AEM made an additional 82 commitments (see Appendix 2) which, as the Board heard during the PHC, resolved issues that had been raised by parties during the technical review of the DEIS. During the PHC, AEM also responded and directly addressed many questions posed by community representatives and local residents.

2.12 Submissions on Procedural Issues

Prior to the close of the PHC, the Proponent, the parties and community representatives were given an opportunity to provide their input into the following seven issues:

1. Anticipated date for submission of the Final Environmental Impact Statement.
2. Date, time and location of the Final Hearing.
3. Timetable for the exchange of documents and information requests prior to the hearing.
4. Formulation of issues for the hearing.
5. Procedures to be followed in the hearing.
6. Equipment, language, interpretation, translation and transcript requirements.
7. Other matters that may aid in the simplification of the hearing.

AEM advised the Board that it anticipates filing the Meliadine Gold Project FEIS by April 15, 2014.

With respect to the date, time and location of the Final Hearing, the Proponent, parties and community representatives agreed that the location of the Final Hearing should be Rankin Inlet, with opportunities being given to the community representatives from Arviat, Baker Lake, Chesterfield Inlet, Coral Harbour, Repulse Bay, Rankin Inlet and Whale Cove to attend in person. With respect to timing of the Final Hearing, assuming AEM meets a mid-April submission date, it was suggested that the Final Hearing should be held in early August 2014. In addition, as requested on the last day of the PHC, the Board has also noted that at least one evening session should be held during the Final Hearing to ensure that community members who are unable to attend proceedings during the day have an opportunity to ask questions and provide their input to the Board.

With respect to the timetable for the exchange of documents and information requests prior to the Final Hearing, AEM requested that the Proponent be given an opportunity to provide a

written reply to the final written submissions of the parties, with such a reply to be filed at least two weeks in advance of the commencement Final Hearing.

The Proponent and parties agreed that the formulation of issues for the Final Hearing should be based on the IRs and technical review comments provided by the parties, AEM's response to the IRs and technical comments and the commitments developed at the Technical Meeting and included as Appendices 1 and 2 to this Decision. The Proponent and parties also agreed that the NIRB's existing Rules of Procedure should govern the Final Hearing.

Regarding the equipment, language, interpretation, translation and transcript requirements, the PHC participants were advised that the NIRB would be following the Board's general practices in this regard unless a special request to deviate from these practices is received. With respect to translation specifically, it was identified by the KHTO that delays in providing translated materials seriously limits the KHTO's ability to conduct its review and may hamper its ability to prepare final written submissions. On this basis, the KHTO requested that all translations be provided at the same time as the original materials are provided to the parties.

With respect to other matters that may aid in the simplification of the Final Hearing, the Board noted that a site visit would be useful to establishing the relative locations of mine infrastructure, the scale and scope of existing and proposed development at the site and the existing and proposed development of the AWAR. Consequently the Board polled all parties including community representatives from the Kivalliq communities regarding whether a site visit just prior to or during the Final Hearing would be useful. The Proponent and all parties present at the PHC agreed that a site visit would be useful and should be organized to coincide with the Final Hearing.

3.0 NUNAVUT IMPACT REVIEW BOARD ANALYSIS AND DECISION

3.1 Jurisdiction of the Board

The NIRB conducted the PHC under the authority of Article 12, Part 5 of the NLCA.[3] The purpose of the PHC was to inform the NIRB's development of additional directions to AEM regarding the preparation of the FEIS, to hear from AEM about the anticipated date of submission of the FEIS, and to hear from all of the parties and the communities most likely to be affected by the Project, regarding outstanding technical and procedural issues in order to establish the expectations of the participants at the Final Hearing and to promote the efficient use of time at the Final Hearing.

3.2 Final Environmental Impact Statement

3.2.1 Preparation of the Final Environmental Impact Statement

The NIRB believes that, in preparing the FEIS, AEM is in a position to address the technical issues raised by parties following their review of the DEIS by:

a. Complying with the specific direction and implied intention of the EIS Guidelines;

b. Fully meeting its commitments as set out in Appendices 1 and 2 of this Decision; and

c. Complying with the Board's additional requirements as set out below.

The Board accepts the Commitment Lists as set out in Appendices 1 and 2 as amended by the Board's requirements set out below, and notes that the fulfilment of these commitments is a key part of the FEIS requirements. In preparing its FEIS for this Review, the Board encourages AEM to continue to work with parties to address the additional issues identified during the PHC.

The Board also believes that the commitments set out in Appendices 1 and 2 will assist in addressing many of the questions and concerns raised by Rankin Inlet residents and representatives of the Kivalliq communities during the Community Roundtable portion of the PHC. For example, AEM made a number of commitments to further explain and to provide additional consideration of potential acid generation from tailings materials within its FEIS. It also committed to clarify dust suppression and control measures within its FEIS, which may help to address concerns raised by community representatives from Baker Lake, Chesterfield Inlet and Rankin Inlet. Further, in response to questions and concerns raised by representatives from many communities regarding Inuit employment and retention and efforts to facilitate cultural awareness amongst site employees, AEM committed to bring cultural awareness training programs from its Meadowbank operation to the future potential Meliadine mine, and committed to looking for ways to ensure Inuit employees maintain employment. AEM also committed to visiting Kivalliq communities following submission of its FEIS in order to explain the information presented and to give residents an opportunity to speak with AEM in their own

[3] Section 12.5.3 states "*NIRB may conduct its review by means of correspondence, public hearings or such other procedures as it deems appropriate to the nature of the project and the range of impacts.*"

communities about information within the FEIS. The Board expects that, in fulfilling its commitments, AEM will take into consideration the issues highlighted at the Community Roundtable.

The Board appreciates the level of investment required in a resource development project of the magnitude of Meliadine, and understands that many internal and external factors will influence the decision to proceed, as well as the timing of the Project. The Board trusts that AEM is aware that its decisions will affect the lives of many Nunavummiut over the coming years, particularly youth in the Kivalliq communities, and encourages AEM to be as clear and transparent as possible in the FEIS about the development strategy, the on-going results of internal pre-feasibility studies and the trigger(s) for making the decision to proceed with the Meliadine Gold Project.

The Board notes that reliance on "best practices" to mitigate effects may not in some circumstances be acceptable or sufficient. The Board requests that AEM carefully review its use of best practices as a mitigation measure in the FEIS. Further, AEM's reliance upon pathway analysis to rule out potential impacts and affected ecosystemic components has resulted in significant uncertainty with respect to its assessment of potential impacts and as such, the Board has included specific requests for AEM to improve or substantiate the information to be provided within its FEIS.

Based on the submissions of the parties and the NIRB's consultation with potentially affected communities, in addition to AEM's commitments as set out in Appendices 1 and 2, the Board requires AEM to address the following within its FEIS:

1) Baseline Data – In addition to AEM's specific commitments to update information, the FEIS must include:
    a. Given that effluent is proposed to be discharged into Meliadine Lake, further consideration for the potential impacts to water quality, sediment quality and aquatic organisms for Meliadine Lake must be demonstrated within the FEIS and collection of additional data may be necessary to support AEM's determination of insignificant adverse effects, as well as to establish the required baseline conditions for potential monitoring requirements.
    b. AEM's determination that grizzly bears, wolverines, muskoxen and Arctic fox be eliminated from the assessment as VECs requires further justification given the potential for patterns of habitat use and species distribution to change. AEM's plans for verifying impact predictions through proposed future monitoring should also be highlighted within the FEIS. The inclusion of incidental wildlife observations for these species and subsequent consideration of this data through proposed monitoring programs should be outlined within the FEIS.
2) Regulatory Framework – AEM's FEIS must include the most current information and guidance from DFO and TC on the application of the *Fisheries Act* and the *Navigable Waters Protection Act* to the Project. If it appears likely that any approvals or authorizations will no longer be legally required, this change in legal requirements should be expressly addressed in the FEIS, including, but not limited to references as to how any gaps in expected licence requirements will be addressed in the development of the Project. The FEIS must also include a listing of navigable waters that will be subject to licensing by TC post-Environmental Assessment (EA);

3) Mitigation Planning – where possible, procedures and protocols for environmental monitoring and mitigation should be presented within draft mitigation and monitoring plans within the FEIS, rather than providing general descriptions of mitigation measures only. Specifically, the Board requires that draft versions of the following plans be included within the FEIS:
    a. Roads Management Plan;
    b. Wildlife Mitigation and Monitoring Plan(s), to include at a minimum, more fully developed proposed measures for caribou and marine mammals;
    c. Dust Monitoring and Mitigation Plan which considers traffic from the Tiriginiaq site to Rankin Inlet via the AWAR, as well as the by-pass road proposed to connect the AWAR with infrastructure at Itivia Port site. The draft Dust Monitoring and Mitigation Plan and FEIS should address anticipated increases to traffic levels along the AWAR from members of the public accessing cabins and the Meliadine Lake area, as well as potential indirect effects of increased private wealth and vehicular ownership within the community of Rankin Inlet compounding potential dust generation and associated ecosystemic effects. The FEIS must also identify any consideration given to assisting the Hamlet of Rankin Inlet with additional dust-related issues created by the increase in vehicular traffic within the municipality, both directly as may result from mine-related traffic, as well as indirectly as may result from increased passenger transits at the Rankin Inlet airport;
4) Visual aids – the FEIS should include visual representations of the scale of the proposed Meliadine Gold project components, including 3-D schematics or artistic renderings of the waste rock pile(s), tailings storage facilities, and other major site infrastructure. The Board strongly encourages AEM to consider developing a scale model to assist in facilitating discussions during community visits and the Final Hearing.
5) Address in the FEIS the Kivalliq communities' concerns with increased marine traffic associated with the Project, specifically related to marine safety, the need for adequate spill response equipment and training both onboard vessels and in communities, and noise and disturbance of marine mammals.
6) Include in the FEIS a comprehensive discussion of community-level impacts for Rankin Inlet for all aspects of the socio-economic environment studied, and provide a description of analysis of other communities in the Regional Study Area to better support conclusions on impacts to those communities.
7) Clearly identify potential site accommodation and transportation options for employees from Rankin Inlet and other Kivalliq communities, with options for allowing and/or promoting daily transit of employees to Rankin Inlet following the end of workday/shift. A discussion of potential and planned security measures that would in place to ensure the on-site safety and well-being of employees and visitors to the site must also be provided.
8) Cumulative Effects Assessment – The assessment of cumulative effects, particularly as relating to caribou and marine mammals should be updated within the FEIS in the following areas:
    a. Incorporate in quantitative terms the available information on past, present and reasonably foreseeable future mineral exploration activities within the RSA, and derive estimates of individual project footprints (square km) and range of effects from project activities such as helicopter usage and aeromagnetic surveys on valued ecosystem components. Consideration for the potential cumulative effect

of habitat fragmentation across the range of caribou herds from regional activities should also be demonstrated; and

b. Reconsider cumulative effects as related to marine shipping, including consideration for shipping to be undertaken by AEM during its two (2) year[4] decommissioning of the Meadowbank Gold Mine as well as potentially ongoing operations at the Kiggavik project as anticipated for fourteen (14) years[5].

9) Provide a more comprehensive analysis of labour force projections, using the most recent labour market analysis, which includes a clear delineation of Project development phases and anticipated Inuit employment levels at each phase of the Project, the required efficacy of training programs and estimated turnover rates. The FEIS must also include, where possible, the number of people employed and unemployed within the Kivalliq region, as well as an initial labour market analysis within the Kivalliq region and Nunavut as a whole.

10) Recognizing that the Inuit Impact Benefits Agreement (IIBA) cannot be finalized until the conclusion of the NIRB's process, AEM should provide in the FEIS an update of all relevant non-confidential information pertaining to the draft IIBA.

3.2.2 Anticipated date for submission of the Final Environmental Impact Statement

AEM informed the NIRB that it intends to file its FEIS for the Meliadine Gold project by April 15, 2014. The Board understands that the FEIS will be a fully revised and a stand-alone EIS document, not an addendum to the DEIS.

AEM indicated that the matters set out in the commitments listed in Appendices 1 and 2 will be addressed within the FEIS. The Board notes that AEM is responsible for ensuring that, in satisfying its commitments in the FEIS, it addresses the issues raised during the technical review of the DEIS that were the basis for the commitments, and reminds AEM of those commitments which were made during its responses to IRs; the Board expects that AEM will also honour those responses and looks forward to seeing this information presented within its FEIS.

The Board also notes that, in accordance with Section 4.2 of the EIS Guidelines, the FEIS must contain a concordance table directing reviewers to the location where specific information addressing the EIS Guidelines may be found in the FEIS. The Board requests that AEM also provide a concordance table directing reviewers to the location where specific information addressing the commitments listed in Appendices 1 and 2, as well as the Board's requirements as set out above, may be found in the FEIS.

3.3 Procedures Following Submission of the Final Environmental Impact Statement

Once filed, the FEIS will be subject to a minimum 60 day technical review period. Within 15 days of filing, the NIRB will undertake a review for compliance with the EIS Guidelines and this

[4] Cumberland Resources Ltd. 2005. Meadowbank Gold Project FEIS. Volume 1, page ii.
[5] AREVA Resources Canada Inc. 2012. Kiggavik Project DEIS. Volume 1, page 2.

PHC Report. The NIRB at this time does not anticipate soliciting IRs as part of the technical review of the FEIS. AEM will be provided with a minimum of 14 days to respond to the parties' final written submissions, and in keeping with the Board's Rules of Procedure, AEM's response to the final written submissions must be filed at least 14 days prior to the start of the Final Hearing. The NIRB reserves the right to extend the technical review period if the Board finds that additional time is necessary to deal with issues arising through the technical review of the FEIS (see **Figure 2** for a process map).

The NIRB also reserves the right to schedule another meeting of technical experts (i.e., a technical meeting) and/or another PHC prior to the Final Hearing, if determined to be necessary.

3.3.1 Location of the Final Hearing

The NIRB notes that all participants at the PHC, including representatives from other communities in the Kivalliq that may be affected by the Project, agreed that the Final Hearing should be held in Rankin Inlet. On this basis, the Board has decided that the venue for the Final Hearing will be the community of Rankin Inlet. The Board is, however committed to taking steps to ensure that representatives from the communities of Arviat, Baker Lake, Chesterfield Inlet, Coral Harbour, Repulse Bay and Whale Cove are brought to the venue in order to participate in the Final Hearing.

3.3.2 Timing of the Final Hearing

The Board acknowledges that submission of the FEIS on April 15, 2014 necessarily implies that the Final Hearing can be held no earlier than July 2014. At this time, the Board is not in a position to schedule the date of the Final Hearing as it is highly dependent on the actual date of the filing and acceptance of a complete FEIS submission. The Final Hearing date will be scheduled following the NIRB's compliance review and acceptance of the FEIS and upon initiation of the technical review period. At that time the Board will also consider the scheduling of the Final Hearing in coordination with its other ongoing assessments.

The Board acknowledges the submissions from all participants that, should AEM meet its targeted mid-April date for submission of the FEIS, the preferred timing for the Final Hearing would be early August 2014. The Board understands that an earlier date for the Final Hearing (such as July) may make it more challenging to ensure full and active participation by potentially affected communities, as many community members may be engaged in traditional activities during this time. Therefore, when the Board confirms the Final Hearing date, it will take into consideration Section 12.2.27 of the NLCA[6].

3.3.3 Formulation of issues for the Final Hearing

During the technical review of the FEIS, the Board will define the issues for the Final Hearing. Parties will be advised of the issues in the context of further procedural directions.

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[6] Section 12.2.27 states *"All necessary steps shall be taken by way of notice, dissemination of information, and scheduling and location of hearings to provide and promote public awareness of and participation at hearings."*

3.3.4 Procedures to follow for the Final Hearing

The Board acknowledges AEM's consent to adopt the Board's Rules of Procedure which came into effect before the Meliadine Gold proposal was filed with the NIRB in 2011.

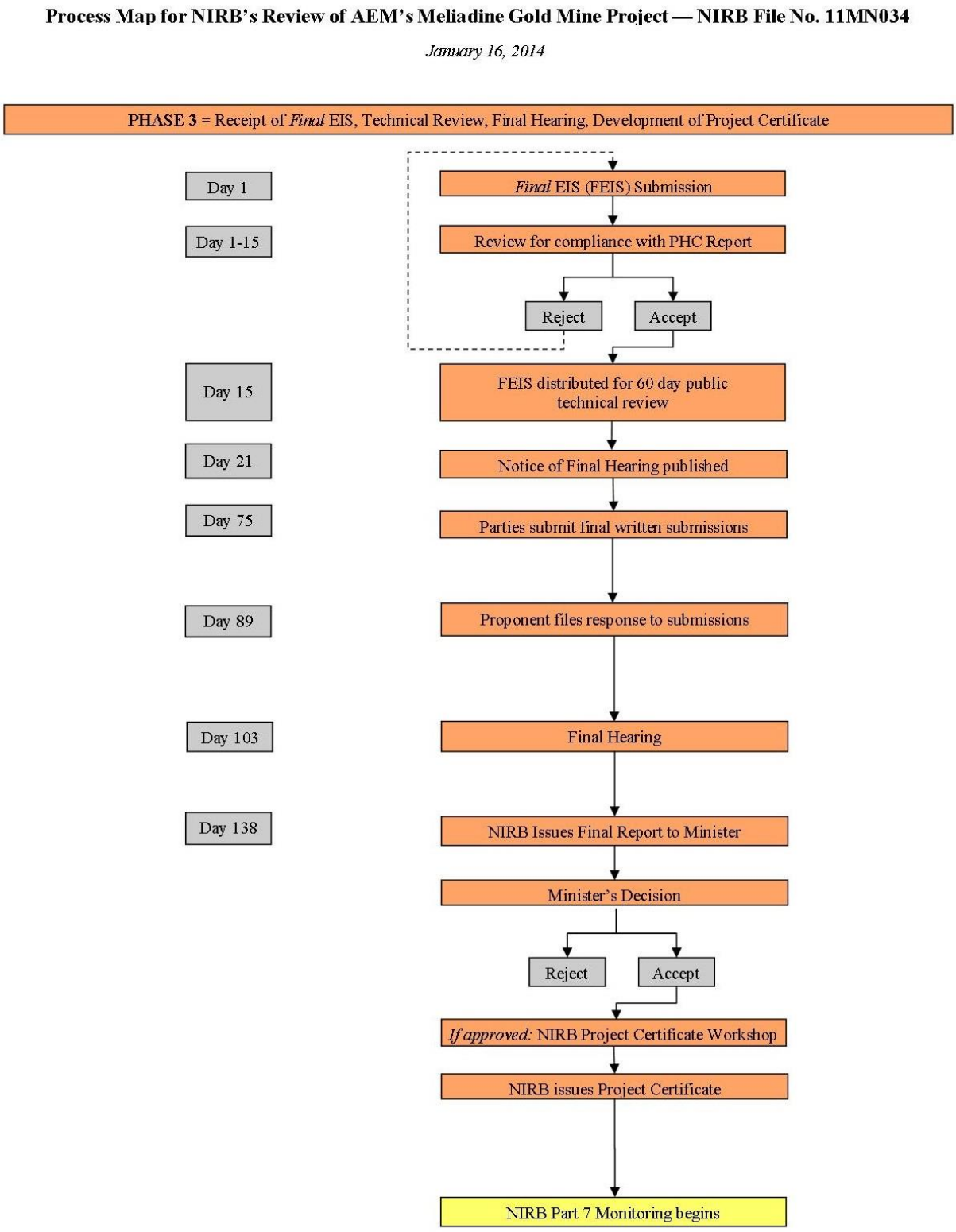
Subject to further procedural directions, the Final Hearing will proceed generally in accordance with the NIRB Rules of Procedure, dated September 3, 2009. The Board has decided to vary Rule 18.2 to shorten the notice provided in advance of a meeting of technical experts, should one be required, to the Proponent and Project distribution list to 30 days before the technical meeting rather than 60.[7] Similarly, the Board has decided to vary Rule 20.1(b) to also shorten the notice required if the Board determines that a PHC is required to 30 days before that PHC.[8]

As is the Board's normal practice, the Final Hearing will commence with formal technical presentations organized by subject. Informal community roundtable sessions will be held during the Final Hearing, following the technical presentations. All parties are required to ensure sufficient technical expertise is available for both the formal technical component and the community roundtable portion of the Final Hearing.

In addition, the Board's Rules of Procedure will apply with respect to participants who wish to participate as formal interveners at the Final Hearing.

[7]The notice period is set out in the Rules as 60 days.
[8]The notice period is set out in the Rules as 60 days.

Figure 2: Process Map and Anticipated Timeline for NIRB's Review of AEM's Meliadine Project



3.3.5 Equipment, language, interpretation, translation and transcript requirements

With the exception of the KHTO's request to ensure that translated copies of submissions are provided without delay in order to facilitate the review of community members and the KHTO, no submissions were made by parties regarding equipment, language, interpretation, translation and transcript requirements. The Board will establish these requirements closer to the Final Hearing date.

3.3.6 Other matters that may promote an effective Final Hearing

In light of the expected passage of time between the PHC and the Final Hearing, and to mitigate a potential loss of momentum in the EA process, the Board requests that AEM hold additional community information sessions in all potentially affected communities prior to the Final Hearing.

The Board encourages each government reviewer involved in the NIRB's process to date to ensure that corporate knowledge is appropriately transitioned in the event that a different reviewer is assigned to the review of the FEIS or to subsequent steps in the Review, including the Final Hearing.

The Board encourages AEM and the GN to meet with the Hamlet councils and social service providers in potentially affected communities to discuss the socio-economic impact assessment and related mitigation and monitoring plans prior to the Final Hearing. The Board also encourages AEM and the GN to engage the Council of the Hamlet of Rankin Inlet on infrastructure and servicing issues associated with the Project. The Board further encourages the KIA to engage the Rankin Inlet Hamlet Council to discuss the process and progress on negotiating the IIBA.

In addition, while the Board recognizes that much of the substance of the IIBA will be considered confidential, as the KHTO and community representatives questioned the mechanism or process that would be available for a community to file a claim for wildlife compensation for potential loss of harvesting access, diversion of harvested species and direct wildlife mortalities associated with Project interactions, the NIRB considers the issue of availability of compensation to adversely-affected parties relevant to the NIRB's Review. To this end, the Board requests that the KIA provide an indication of progress that has been made in formulating a process for filing claims for wildlife/harvesting compensation, and that the KIA and AEM update the Board on this matter prior to the deadline for filing final written submissions.

The NIRB also requested during the PHC that AANDC clarify how it currently applies the results from caribou related research made available by the GN-DOE when considering issuing licenses in the Kivalliq region. The NIRB requested that AANDC clarify whether this information affects its application of the Caribou Protection Measures or consideration of effects on caribou. The NIRB also asked AANDC whether there were any plans to update the Caribou Protection Measures and maps developed in the 1970s from information provided by the Beverly and Qamanirjuaq Caribou Management Board. The NIRB posits that this information is important to its understanding of what has informed those measures, and requests that AANDC

confirm there are no pending updates to either the Caribou Protection Measures or related maps and that this update be provided prior to the deadline for filing final written submissions.

Recognizing the concerns raised by community representatives, the KHTO, and NTI regarding insufficient technical expertise being available for communities to assist with understanding potential impacts of the proposed Project, the Board feels additional efforts may be necessary by AEM, the NIRB and parties to ensure that affected groups and individuals are effectively engaged. In addition to the need for ensuring community-level engagement through public meetings and discourse, the NIRB notes that the timely provision of documentation in plain language and Inuktitut should be prioritized by all parties for the final stage of this assessment. The NIRB also strongly encourages AEM to exceed minimum translation requirements for the FEIS to the extent possible.

On the basis of the request of community representatives and as established in Rule 27.1 of the NIRB's Rules of Procedure, the Board has determined that scheduling a site visit to coincide with the Final Hearing would be beneficial. When the timing of the Final Hearing is confirmed by the Board, further details regarding the schedule and logistics for the site visit will be provided, but in the interim, the Board confirms that when scheduling a site visit, it will ensure that community members and parties to the Review have an opportunity to visit the same parts of the site as the Board and staff, and that the agenda, activities and views while at the site are all agreed to in advance with the Proponent, parties and the Board. Further, a public summary of the site visit will be attached as an Appendix to the Final Hearing Report.

Finally, the Board urges all parties to maximize efforts to collaborate with other parties during the remainder of the NIRB's Review process.

4.0 CONCLUSIONS OF THE BOARD

The Board facilitated a PHC in Rankin Inlet on December 10-12, 2013 to hear from the parties on outstanding issues with the DEIS for the Meliadine Gold Project prepared by AEM, and on matters pertaining to logistics and procedures for the future Final Hearing. Prior to the PHC, AEM made a number of commitments to the parties and Board regarding the preparation of its FEIS. The Board has accepted those commitments and, after considering the submissions from the parties, has imposed an additional 10 requirements on AEM regarding preparation of the FEIS.

AEM advised the Board that it plans to submit its FEIS for the Meliadine Gold Project by April 15, 2014. Once submitted, the FEIS will be subject to a technical review period, including a 60 day period for parties to submit final written submissions, after which AEM will have 14 days file its written response to the parties' final written submissions. In keeping with the Board's Rules of Procedure all written submissions and written responses must be filed at least 14 days' prior to the commencement of the Final Hearing. The Final Hearing will be held in Rankin Inlet, possibly in early August 2014. The Board has made a series of recommendations to promote an effective Final Hearing and will issue further procedural directions for the Final Hearing during the technical review period associated with the FEIS.

Signed this 16th day of January, 2014.

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Elizabeth Copland
Chairperson
Nunavut Impact Review Board

Appendix 1: AEM's Commitments based on Technical Review Comments [November 29, 2013]

Appendix 1: AEM's Commitments based on Technical Review Comments submitted November 29, 2013*

Technical Review Comment- Agency & Number	Comment	Initial Comments
KIA-IR-01	1. The proponent's response is to defer until the FEIS is prepared. The KIA could facilitate the transfer of IQ to the proponent but waiting on this to be completed in the FEIS makes it very difficult to adequately assess the DEIS. 2. Oblique references to IQ were made regarding impacts to migration routes (Volume 6, Section 6.6.4.2, pages 6-215 and 6-225). The background IQ used for improved access for harvesting is more complete. However, how IQ was actually used in significance determination remains vague. An example of this can be found in Volume 9, Section 3.1.5.1.1 regarding large numbers of caribou passing through the study area in August 2011. This information was only casually addressed in the terrestrial environment report, which only states "Caribou observations were also recorded in the Meliadine Exploration Camp Wildlife Observation Log in August and September 2011" (pg 6-225). The traditional caribou crossing located northwest of the mine site should be re-affirmed in the documents. KIA again requests that the proponent should more clearly clarify how IQ was used in significance determination. This should include the explicit steps taken and be presented in a clear and transparent manner. This concern is reiterated in KHTO-IR-07. **The KIA recommends that the proponent includes more details on the following:** **1) monitoring and mitigation for caribou in the TEMMP for the FEIS.** **2) More information on the objectives, approach, methods and timeline of anticipated outcomes of IQ being incorporated into the FEIS.** **3) Better integration of TEK and IQ from volume 9 is needed to impact analysis. The synergies and differences between IQ and the VEC's discussed in vol. 9 need to be more clearly identified with respect to scientific evidence in vol. 6.** **4) Greater detail is needed on the methods by which IQ and TEK were analyzed for details about significance, for examples were certain areas, species, seasons considered of lesser or greater importance; and how IQ and TEK were analyzed in comparison to scientific evidence on significance.**	AEM agrees to provide more details in the FEIS
KIA-IR-02	**1.** The offered linkage diagram would be a useful addition to the FEIS. The Proponent should understand that the mitigation and monitoring portions of this project are arguably the most important programs for actual reduction of potential impacts to wildlife resulting from the Project, and are essential to assess the validity of the residual effects conclusions. **2.** Details such as those outlined in the response to this IR need to be fleshed out and added to the TEMMP prior to the FEIS (and preferably prior to the technical hearings). No specific details on mitigation by design are presented (e.g., making the AWAR caribou friendly; methods for monitoring whether the road deflects caribou movement and becomes a partial barrier or filter to movement, etc.). More innovative techniques (e.g., height of land surveys, remote cameras, track surveys) are required to better assess and monitor potential Project effects. These need to be detailed in the TEMMP to provide assurance that monitoring is conducted that will actually address the prediction in question. **3.** The mobile Caribou Protection Measures proposed by the Proponent do not adequately address minimizing disturbance to cows with calves. The documents provide no references to justify selection of 50 or more caribou and within 5 km from site activities as the thresholds for implementation of work suspension protocols. When large groups of caribou approach the mine site or road from the northeast or east, an implementation distance for work suspension of greater than 5 km should be considered. Protocols to minimize disturbance to cows and calves are lacking and should be provided.	AEM agrees to add more detail in the TEMMP for the FEIS, as appropriate

Technical Review Comment- Agency & Number	Comment	Initial Comments
KIA-IR-03	While it is encouraging that AEM has acknowledged the limitations in the raptor baseline data, and that Arctic Raptor Project conducted surveys in 2013 (data not presented), data provided prior to 2013 are not adequate for robust depiction of baseline conditions prior to development, and thus add uncertainty. The emphasis for raptors appears to be on identifying nest sites that require mitigation. Here again the TEMMP is lacking in details for what criteria will be used to identify nests requiring mitigation (e.g., distance to infrastructure), and what form of mitigation could be applied (e.g., minimize disturbance early in the nesting period, etc.). **The KIA recommends that the proponent include more details on raptor management, mitigation and monitoring in the TEMMP for the FEIS.**	AEM agrees to add more detail in the TEMMP for the FEIS. Arctic Raptor Project data from 2013 will also included in the FEIS. AEM has committed to provide support to and work with the Arctic Raptor Project as the Project proceeds.
KIA-IR-04	The proponent references "Incorporating Climate Change Considerations in Environmental Assessment: General Guidance for Practitioners, Prepared by The Federal-Provincial-Territorial Committee on Climate Change and Environmental Assessment (FPTCCCEA)". That document advises the incorporation of climate change data into short duration projects stating that "climate change parameters will not change appreciably for projects of short duration". However, the document does not define a short duration. We agree that changes resulting from climate change are unlikely for projects less than 5 years but assert that operations during the project duration may be impact by climate change. The FPTCCCEA guidance document also suggests that the proponent *"review available information on how regional climate change may affect these parameters to which the project is sensitive and on the level of confidence of the information and forecasts."* We accept that the proponent's assumption (*"incorporating updated climate inputs in the hydrology models is not expected to change the conclusions of the DEIS"*) may be accurate but require updated water balance modeling to confirm the conclusion. This will provide assurance that the watershed can acceptably accommodate climate change in addition to project activities. *The KIA reasserts the original IR: Please generate climate change models for the near future (~2010-2040) and incorporate relevant predictions in to the water balance models.*	At this stage, and as stated in the response to the original IR, AEM does not believe that additional modelling is required. AEM agrees to provide rationale as to why the existing historic record was used for the assessment in the FEIS. A comparison between the historical record and the 2020s model predictions will be provided. Depending on the results of this comparison, AEM will determine if modification to the assessment is required for the FEIS.
KIA-IR-07	The KIA accepts the proponents assessment that a map showing both years and seasons would be visually complex. The updated table 7.4-3 provides an excellent summary of the necessary information to assess the completeness of baseline water and sediment quality sampling, addressing our IR. The new table highlights a deficiency in the baseline sampling conducted in the lakes – Meliadine Lake and the Peninsula Lakes. No spring samples have been collected at any point between 1997 and 2011. Spring samples capture changes to water quality associated with the freshet. This is particularly worrisome as future runoff from the mine site will likely have a different chemical composition than has historically been the case. Lake sediments provide are more stable year round and do not require sample collection associated with seasonal changes. As such we accept that sediment samples have only been collected in the summer. **The proponent should provide rationale for why spring samples have not been collected in the lakes thus far and bolster the baseline assessment by collecting water quality in the spring of 2014 as the freshet occurs.**	AEM agrees to provide the requested rationale in the FEIS. The lack of baseline data for May to June does not impact the assessment results

Technical Review Comment- Agency & Number	Comment	Initial Comments
KIA-IR-08	The KIA accepts that the proponent's assumption ("*Resulting effects from changes in temperature and precipitation due to climate change on the Project for the near future (2010-2040) are… not expected to deviate significantly from natural variability*") may be accurate but require modeling showing the worst case scenario for the near future to demonstrate it. A discussion of each project phase relative to climate change in the near future may not be necessary once modeling for the near future is included as part of section 5.4 of the DEIS. Please include a comparison between the historical data and the worst case scenario ICPP model of the 2011-2041 period (2020s model). **The proponent should provide regional modeling outcomes for the near future (~2010-2041) for temperature and precipitation changes based on IPCC models. Also discuss how changes in temperature and precipitation has the potential to affect Project activities during the mine's life.** Please also see the KIA response to the proponent response to IR 04.	At this stage, and as stated in the response to the original IR, AEM does not believe that additional modelling is required. AEM agrees to provide rationale as to why the existing historic record was used for the assessment in the FEIS. A comparison between the historical record and the 2020s model predictions will be provided. Depending on the results of this comparison, AEM will determine if modification to the assessment is required for the FEIS.
KIA-IR-09	The KIA accepts that "Long Term Water Quality (Year 26+)" indicates that the summer average between 2028 through 2040 will be below CCME guidelines. However DEIS Volume 2, SD 2-6, Table C-2.2 indicates that copper will exceed the CCME guideline during January. Copper is modeled to be found at the highest yearly concentration in January from 2020 onward. Modeling showing summer average concentrations in year 26+ will not capture this under ice exceedances. Chloride has been modeled showing a similar trend. The lowest yearly modeled concentration of chloride is in June for most years. Adaptive management is seen as an accepted industry standard for closure planning. However elevated copper, chloride and pH have been modeled as higher risk contaminants now. Mitigations proposed for closure should be sufficient to reduce these parameters below the threshold of exceedances. Adaptive mitigation should be adopted if modeling proves inaccurate and parameter concentrations are higher than expected. Adaptive management should not be used as an alternative to a current closure plan which reduces the parameters of concern to acceptable concentrations. **The proponent should extend water quality modeling past 2028 for AP01. Note that a focus should be given to modeling in the winter months when parameters of concern are currently shown to be at the highest concentrations.** **This will provide confidence of conclusions when treatment of impacted waters will no longer be required. Also indicate treatment options for AP01 discharges if water quality guidelines are not met at the end of pipe in the discussion of mitigation measures.**	AEM agree to include modelling results for the closure period beyond 2028 in the FEIS
KIA-IR-10	The KIA accepts the proponent's response.	No response required. The FEIS will be updated as appropriate

Technical Review Comment- Agency & Number	Comment	Initial Comments
KIA-IR-13	The KIA accepts the proponent's response regarding primary pathways. **The KIA suggests that a similar discussion should occur for pathways where no linkage is predicted. This will provide confidence that these pathways between mine activities and surface water have been effectively cut off through "*environmental design features and mitigation*".**	Discussion on no linkage and minor pathways was provided in the DEIS. AEM will review to confirm that none were missed.
KIA-IR-15	The proposed amendment to sect. 4.5.2.4 p.4-22 is acceptable to the KIA. See also KIA IR-15 response by Aurora Wildlife and concerns regarding use of the 85% vs the 95% volume contour. The terrestrial assessment states that "The post-calving range of the Qamanirjuaq Caribou Herd was delineated using collar data from 1998 to July 2011. This was modified using an 85% volume contour to create the CESA for caribou and wolf (Figure 6.1-3). A percent volume contour is typically used to delineate animal home ranges (Laver and Kelly 2008) and represents the boundary of the area that contains x% of the volume of a probability density distribution.") (Vol. 6, Section 6.1.1.3, pg 6-5). No justification is provided for why a 85% volume contour was selected. Laver and Kelly (2008) do recommend use of contours for delineation of ranges, but suggest that a 95% contour be used for consistency. An 85% contour would be a fair bit smaller than a 90% or 95% contour. The Proponent should justify their selection of an 85% contour for determination of the CESA, and whether use of an 85% contour would exclude other developments compared with those covered by a 95% contour.	AEM will provide justification for the 85% contour in the FEIS and indicate whether use of 85% versus 95% made a difference on what projects were included in the cumulative effects assessment. If necessary, the cumulative effects assessment will be updated.
KIA-IR-17	There is data available comparing CalPuff modelling to dust monitoring results at other mines and these should be used to validate predictions. The KIA is concerned about dust and the response that it is "likely" that the Meliadine model "represents an overprediction" is unsubstantiated. If the model is inaccurate then the conclusions in the DEIS may also be. The KIA recommends that the proponent provide a statement of certainty forthe conclusions of the CalPuff modeling predictions.	AEM agrees to provide additional rationale as to why the models results are considered to be valid. However, in order to validate modelling results against other models and/or monitoring from other sites in any great details, additional information on the modelling monitoring and modelling completed would be required. For example, for the others sites, would have to correlate the actual activity data in the inventory to match the meteorological conditions in which the monitoring took place, would have to review modelled concept versus monitored conditions for consistency, would need to review operation and monitor protocols. This type of study is extremely expensive to conduct and does not add value to the assessment completed. Within the DEIS, AEM has committed to ongoing monitoring and adaptive management.
KIA-IR-18	The proponent's response is acceptable pending detailed review of implications to MAEC.	No response required. the FEIS will be updated as appropriate

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KIA-IR-22	Although sewage will form a small part of the effluent load, the effluent will also contain ammonia and associated oxygen demand. The response appears logical but is not informed by simple assessment, such as comparison of the oxygen demand to the volume of water available for dilution within the mixing zone and near field assimilation areas. Detailed assessment will be necessary to set effluent BOD/NOD limits in the Water Licence. We recommend that AEM: **a) provide a mass balance/dilution assessment of oxygen response to effluent discharge sufficient to demonstrate no significant adverse effects on dissolved oxygen for the FEIS and** **b) prepare a detailed assessment and modelling in support of the Water Licence application.**	Discharge criteria for the Project will be set during the water licensing phase. Technology required to treat the effluent will be dependent on this discharge criteria. However, proven sewage water treatment technologies are available on the market that will reduce BOD and NOD to very low levels in Arctic environments. Ammonia is also present in other water sources (e.g., as a result of blasting activities). BOD can be estimated from the ammonia concentration in the effluent water and this corresponds to an estimated average and maximum BOD at the effluent discharge of 32 and 320 mg/L, respectively, and a maximum effluent BOD at the edge of the mixing zone of 2.5 mg/L. As a result, oxygen depletion rate is expected to be low or negligible beyond the mixing zone. AEM commits to completing a mass balance assessment of oxygen depletion within the mixing zone for the FEIS; however a detailed assessment and modelling is not considered to be required at this time. As described in SD 2-14 Explosives Management Plan (to be further completed for the FEIS with additional information from EC IR-117), AEM is committed to reducing ammonia at source to the extent practical through its explosives handling and blasting practices.
KIA-IR-24	The proponent has not addressed this IR. The IR was not concerned with TSS in water or guidelines which address that – it was concerned with accumulation of COPCs in sediments at the point of discharge. The concern could be addressed by: **a) modelling sediment accumulation in the mixing zone, with no need to model the entire lake, or** **b) providing data from other mines, as was requested.** **The KIA wants reassurances from the proponent that during the mine life conditions will not be created that will pose a problem to re-colonize post mine closure.**	AEM agrees to provide a summary of available data from other mine sites, and if appropriate, use these data to supplement the assessment in the FEIS. The diffuser will be placed in a deep basin within Meliadine Lake where fish habitat is of low quality. The diffuser is located within the expected main channel of the lake, not within a bay where effluent and fish could be trapped. The mixing zone is small by comparison with the size of the lake; therefore, there is room for fish movements. In addition, the assessment of potential impacts to sediment in the mixing zone was conducted assuming that the sediment was saturated with contact water. Based on the above, AEM believes that the assessment of potential impacts are conservative and additional modelling is not required. Water and sediment monitoring will be in place during operations to identify the need for adaptive management.
KIA-IR-26	**The response makes the proponent's preferred approach clear but does not address the request for an enhanced GHG reduction strategy as part of the project description.**	A study will be completed to look at different options for GHG reduction but this will not be available for the FEIS. AEM will include commitment in the FEIS to complete the study.
KIA-IR-27	The 2012 information provided by the proponent should be integrated with the results and discussion from previous years as part of the FEIS. However the data provided is sufficient for the technical review phase.	Very few small body fish were collected in 2012. AEM believes that this information was incorporated into the impact assessment in the DEIS. If not, AEM will review the effort required to incorporate the data in the FEIS as requested, but considering so few numbers of fish were caught, AEM do not believe that this is critical to assessing potential impacts from the project.
KIA-IR-28	The table provided by the proponent will provide resolution to assess if fish and fish habitat are adequately characterized spatially and temporally throughout the LSA. The KIA notes that fish contaminant data from 1997 and 1998 needs to be updated to provide a recent project baseline. **A summary table identifying the waterbodies and streams affected by the project footprint, where they are located, when and how they were sampled, and the results is needed to assist in the effects assessment phase of the review.**	AEM agrees to provide the requested table in the FEIS

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KIA-IR-29	The proponent has not provided a clear response addressing the use, suitability, and limitations of comparing data collected 15 years ago, at different frequencies, and different intensities. The comparison of results from selected lakes in the study area, while insightful for the lakes provided, does not account for inter-annual variability in lakes that were only sampled once over the baseline studies. The proponent has compared detection limits from 1997/1998 to 2012 to determine if historical fish tissue analyses are valid for the current analysis. They have identified only 5 parameters in which the 1997/1998 detection limits were higher than 2012 detection limits. A cursory review of the detection limit ranges provided finds that 14 parameters in which the lower bounds of the 2012 detection limits are lower than the 1997/1998 detection limits. In addition 15 year old data of fish contaminants is not adequate to define the project baseline. **A summary table identifying the waterbodies and streams affected by the project footprint, where they are located, when and how they were sampled, and the results (as stated in IR28) is needed to assess if the data collected is sufficient for the effects assessment conducted.**	AEM agrees to provide the requested table in the FEIS
KIA-IR-30	1. Table 1 (Population by Gender and Age) – provided under IR #30, provides breakdown of population for each community in LSA by gender and age. 2. Some additional data in relation to language use (by gender for each community in the LSA) can be found in the report “Socio-demographic and economic sector analysis - Kivalliq Community Profiles” 2008 (Nunavut Planning Commission) 3. The KIA accepts the proponent's response.	AEM agrees to review additional data referenced, and include as appropriate in the FEIS
KIA-IR-31	Information about labour force – participation rate, employment and unemployment rate - (broken down by community, Aboriginal / non-Aboriginal, and gender) can be found in the report “Socio-demographic and economic sector analysis - Kivalliq Community Profiles” 2008 (Nunavut Planning Commission). Also, NBS provides data (employment and unemployment) for all the communities and regions in Nunavut, broken down by Inuit and non-Inuit 15 years and older. Data is provided for 2001 and 2006. The KIA recommends that this information be included in the FEIS.	AEM agrees to review additional data referenced, and include as appropriate in the FEIS

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KIA-IR-32	Overall the information could be referenced / re-organized in order to allow for more efficient review. In The Guidelines for the Preparation of the EIS, under section 8.2.6, sub-section 8.2.6.1, second bullet point, it is stated: "Local and regional economy characteristics in term of relation to traditional land use and wage incomes:". The information provided on page 9-81 (under sub-section "Wage economy" up to sub-section 9.3.1.6.3 (page 9-86) is manly related to the formal economy and less to the land-based one. Part of the information provided under sub-section "Informal economy" (page 9-113) could be more appropriate in here. Also information provided under sub-section "Land based economic activity" (page 9-134) could be provided in here. Some basic information on the importance of the land-based economy can be found at the web-site of the Inuit Knowledge Centre.	AEM agrees to reorganize the discussion in the FEIS, and include the reference provided, as appropriate
KIA-IR-33	Please include in the final EIS the data on the capacity of the local educational capacity.	AEM agrees to undertake additional data collection (i.e., telephone interviews with education officials), and information gathered on existing education capacity will be incorporated into the FEIS
KIA-IR-34	Information about education level – education attainment, major fields of study - (broken down by community, Aboriginal / non-Aboriginal, and gender) can be found in the report "Socio-demographic and economic sector analysis - Kivalliq Community Profiles" 2008 (Nunavut Planning Commission). The KIA recommends that this information be included in the FEIS. The Northern Food Basket is community specific whereas the CPI is calculated only for Iqaluit. Information on the northern Food Basket can be found on the following website: http://www.aandc-aadnc.gc.ca/eng/1100100035983/1100100035984.	AEM agrees to review additional data referenced, and include as appropriate in the FEIS
KIA-IR-35	NBS provides data on the number of secondary school graduates by community, region and territory for the period 1999 – 2011.	AEM agrees to review additional data referenced, and include as appropriate in the FEIS
KIA-IR-37	The KIA requests that the proponent discuss the additional community infrastructure that will be required in Rankin Inlet in the baseline and impacts sections of the FEIS. In particular, i) Power (both generator and fuel tanks); ii) Search & Rescue; iii) Fire department; iv) Water; v) Waster water; vi) Solid waste; vii) Fuel storage (diesel, gasoline, etc.); and Community freezer.	The assessment considers the effect of the limited indirect and induced population growth on key infrastructure and services identified through previous experience and EIS process. Additional interviews with key informants in Rankin Inlet and with the GN to establish the existing capacity of the infrastructure noted in KIA-IR-37 will be conducted and resulting information included in the FEIS. The effects analysis for infrastructure and services will be revisited accordingly, and, if needed, updated to reflect demand for these additional infrastructure.
KIA-NEW-01	1. The Proponent should define the terms persistence and maintenance of wildlife populations as used in significance determination in the EA. 2. The Proponent should justify why persistence of caribou (or other wildlife) is the metric used to determine significance, instead of sustainability and resilience that could better address harvesting.	AEM will review and update the FEIS as appropriate
KIA-NEW-02	1. The Proponent should clarify the definition of environmental significance. 2. The Proponent should provide an example of a significant environmental impact.	AEM will review and update the FEIS as appropriate
KIA-NEW-03	1. The Proponent should clarify how wildlife management at Meliadine can be assured to minimize attraction to the project and removal or destruction carnivores. Greater detail should be provided in a fleshed-out TEMMP.	AEM agrees to add more detail in the TEMMP for the FEIS.
KIA-NEW-04	1. The Proponent should better clarify what significance a doubling of the Rankin Inlet caribou harvest will have on a declining Qamanirjuaq herd.	AEM will review and update the FEIS as appropriate

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KIA-NEW-05	Use of the word “intensive” to describe the main process of the gold circuit cyanidation is inappropriate. The main cyanidation process is a low concentration of cyanide with about 0.6 kg/t used in the main CIL circuit. The term intensive is used to describe the closed circuit batch processes within the process to leach the gravity gold concentrates or for elution of the loaded carbon where higher concentrations of cyanide are used.	Wording will be changed in the fact sheet of FEIS; intensive cyanidation will effectively be restricted to gravity circuit (gravity concentrate) as described at p. 148 of PD. Remaining ore will be subject to cyanidation circuit.
KIA-NEW-06	The plan to transport uncrushed underground ore and waste on rubber conveyors will be difficult and is not standard industry practice. Although there are rock breakers provided at the underground dump points, control of oversize that may jam the conveyors is not assured and can lead to major damage and repairs to the planned rubber conveyor belting. As the conveyance is lifeline to the mine production it could contribute to major interruptions. The standard practice is to crush all rock before loading it on a conveyor or mine hoist. AEM has discussed this with the KIA and AEM will have an underground crusher to ensure that the all material transported by rubber conveyors will be crushed.	AEM will take this comment into consideration during the feasibility study and design phases of the project but will not be part of the FEIS.
KIA-NEW-07	Stockpile freezing will be an issue both in the open pit stockpiles and in the crushed ore pile that supplies the mill. The mixture of underground rock with open pit sub-zero rock and thawed rock will create a host of issues in keeping the ore flowing to the mill on a continuous basis. The mine scheduling will not allow for much seasonal control of periods when the more difficult blending is necessary. AEM has discussed this with the KIA and based on AEM's experience at Meadowbank there will be no mixing of underground and open pit ore. The Meadowbank experience has also shown that ore stockpiles can be left for 3 to 4 months without requiring additional drilling and blasting due to freezing conditions.	AEM will take this comment into consideration during the feasibility study and design phases of the project but will not be part of the FEIS.
KIA-NEW-08	It should be noted that the process will add 2.5kg/t of calcium carbonate to the main process stream that is the final process stream reporting to the TMF. Although the various ore types do not present any real concerns about ARD it is helpful to point out that the tailings ph is considerably elevated (10 to 11) by the limestone addition which will contribute a buffering capacity to any potential acid generating tailings.	AEM will take this comment into consideration during the feasibility study and design phases of the project but will not be part of the FEIS.
KIA-NEW-09	The plan to develop the Meliadine Mine and Milling site as a self-contained facility that is only 25 km away from the long established community of Rankin Inlet is questioned. The development and operating plan only sees Rankin Inlet as a transshipment point for fuel and mine supplies and transportation link for mine personnel with no expressed plan to locate any of the mine related facilities or activity in the community. It is believed that Rankin Inlet has some unused development and infrastructure from previous mining installations that may be available to AEM. The following are seen as possible ways to reduce costs and better integrate the project into the existing community and possible develop infrastructure of more redeeming value at the end of the mine life: **1)** The high interest in employment by the northern communities and the high turnover experienced at Meadowbank and other northern operations with northern employees may present an opportunity to utilize the proximity of Rankin Inlet to experiment with more acceptable work cycles for locally based employees and allow for the cost savings of increased percentage of a northern based workforce. **2)** Some of the mines administrative functions could be located in Rankin Inlet which could include human resources, purchasing, expediting, training, etc. AEM has discussed with the KIA that these general operating concepts will be reviewed as part of the ongoing Feasibility Study and if feasible will become part of the FEIS.	AEM will take this alternative into consideration during the feasibility study for the project but will not be part of the FEIS.

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KIA-NEW-09 continued	**3)** Warehousing of major components, insurance spares, major motors, switchgear spares, high volume consumables, etc., that require covered storage could reduce the warehouse space that otherwise would have to be developed at Meliadine. It is often the case that spare mill drive components that are required for insurance reasons never are installed in the operation. **4)** A portion of the mine site workforce could make the daily commute to the mine from Rankin Inlet without much risk to the operation. This could be the portion of the workforce not required for regular shift duty cycles in the continuous 24 hour mine and mill operations. This arrangement may be more compatible with the lifestyle of northern employees and contribute to fewer turnovers and a more stable workforce. AEM has discussed with the KIA that these general operating concepts will be reviewed as part of the ongoing Feasibility Study and if feasible will become part of the FEIS.	
	5) A major presence of AEM in Rankin Inlet would promote a stronger local service sector that could reduce the mine site requirements at site for routine maintenance of equipment components, some equipment overhauls, etc. **6)** The substantial increased accommodation required for the mine construction above the operating requirements could be better handled by development or utilization of accommodation in Rankin Inlet. This could also serve future contractors to AEM or members of the workforce that want to relocate to Rankin Inlet. AEM has discussed with the KIA that these general operating concepts will be reviewed as part of the ongoing Feasibility Study and if feasible will become part of the FEIS.	
KIA-NEW-11	The development plans will create a large surface area that will be elevated above the normal surface profiles and void of any vegetation for long periods. This will lead to periods of dehydration that will result in air born dust during higher wind conditions from road surfaces, stockpiles, dams, waste rock piles and disturbed areas in general. It will be necessary to water these areas down in these periods to stabilize the dust. This may also be necessary in the event of freeze dried fines in sub-zero conditions that can also become air born and the need for special surface binders to control. AEM has discussed with the KIA that evaluation of dust suppression techniques and special surface binders will be reviewed as part of the ongoing Feasibility Study and will become part of the FEIS.	AEM will evaluate dust suppression techniques and special surface binder during the feasibility study but will not be part of the FEIS.
KIA-NEW-13	The draft EIS includes Information on household incomes, however the draft EIS does not include information related to income sources and composition of income. The proponent should include information for both indicators, which may be found on Stats Canada website under Community profiles and Aboriginal community profiles. AEM has discussed this with the KIA and this will be included in the baseline for the DEIS.	AEM agrees to review additional data referenced, and include as appropriate in the FEIS
GN-1	The Proponent should develop a management plan that addresses the potential creation of unauthorized trails/access routes from the AWAR into the Iqalugaarjuup Nunanga Territorial Park.	In the FEIS AEM will present a proposed method of how it will work to prevent any unauthorized trails or access routes being developed by its contractors, employees or other parties off of the Meliadine AWAR into the Iqalugaarjuup Nunanga Territorial Park. We suggest this be imbedded into the Meliadine Roads Management Plan (SD 2-9), rather than create any new plan. It should be noted that under the AWAR land lease held by AEM from the KIA, AEM's use of land is restricted to the AWAR road corridor.
GN-2	Should helicopters need to be used, the Proponent must consult with DOE- NP&SP regarding flight plans and associated activities to avoid or limit planned flights over Iqalugaarjuup Nunanga Territorial Park.	AEM commits to avoid flight over the park. Regular helicopter use for the project not anticipated and therefore was not included in the EIS.
GN-4	In the EIS, the Proponent should state that the Thelon and Kazan Rivers have been designated as Canadian Heritage Rivers which further increases their importance to tourism culture and conservation initiatives for the region.	AEM agrees to update for the FEIS

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GN-5	The EIS should contain consistent and accurate information about the Iqalugaarjuup Nunanga Territorial park. DOE encourages the Proponent to work closely with our offices to ensure that information about Iqalugaarjuup Nunanga Territorial Park is complete and accurate.	AEM agrees to review and update in the FEIS as appropriate
GN-6	Given the close proximity of the AWAR to the Iqalugaarjuup Nunanga Territorial Park southern park boundaries, DOE requests to also be included in any discussions relating to unrestricted access to the AWAR.	As requested by the community, the proposal in the DEIS is to have a public access road for the phase 2 of the road. AEM will include DOE in the discussion for the access of the road.
GN-7	The GN-DOE should be included in discussions regarding the migration of caribou through the area of Iqalugaarjuup Nunanga Territorial Park. Supporting	AEM will notify DOE of the coming migration and the action taken to avoid disturbances along the road
GN-8	DOE would like specific information on how the Proponent plans to operate the AWAR during all forms of closures (whether temporary, indefinite, or permanent) as this could potentially impact Iqalugaarjuup Nunanga Territorial Park.	AEM agrees to add this information into the FEIS. AEM suggests that this be added into the Roads Management Plan (SD 2-9). It should be noted that AEM has committed to decommission the AWAR once mine reclamation has been completed and the site no longer requires ongoing care and maintenance. However in its consultation activity AEM has consistently heard from the community of Rankin Inlet, including the HTO, that the community wants this AWAR to remain open to allow public access with minimal restriction. Consequently AEM has proposed in its submission to the NIRB that the AWAR be operated as a privately operated road with unrestricted public access. AEM would continue to operate the AWAR under these conditions for as long as it has a physical presence at the Meliadine site. Once the physical presence is gone then AEM would not be able to provide maintenance or emergency services along the road and the road would thus have to be closed to cars and trucks, as AEM could then no longer guarantee public safety. Consequently AEM expects that during a short term or temporary minesite shutdown the road would remain open, however during a long term or indefinite shutdown the road would likely be closed.
GN-9	A proven methodology for the safe disposal of brine concentrate should be developed and presented in the final EIS.	A discussion on technologies for brine concentrate disposal will be developed for the FEIS. Final option for disposal to be selected at feasibility study stage and design submitted to Water License application.
GN-10	Provide a rationale in the FEIS for excluding the 2020s from the project's climate change assessment or expand the analysis to include the 2020s, and update the climate risk matrix for the project accordingly (Vol. 5, Sec. 5.4.4, p71).	AEM commits to providing rationale for excluding the 2020s and explanation that this will not affect the assessment in the FEIS
GN-12	GN-DOE requests that the Proponent revise the DEIS citing relevant sections of the Wildlife Act (Nunavut) and regulations including prohibitions and licensing requirements. Furthermore GN-DOE requests that the DEIS clearly demonstrates how the Proponent will comply with the relevant legislative provisions and regulations.	AEM will ensure the FEIS clearly demonstrates how the Proponent will comply with the relevant legislative provisions and regulations.
GN-14	The final EIS should contain revised baseline information on occurrence of polar bears in the marine environment in particular known summer time concentrations along the shipping route. Stapleton et al. (2012) GN file report. 17pp. Peacock et al. (2013). Journal of Wildlife Management 77:463-476 Durner et al. (2011). Polar Biology 34: 975-984. Pagano et al. (2012). Canadian Journal of Zoology 90: 663-676.	AEM will review the references provided, and include in the FEIS if appropriate

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GN-16	The Proponent should provide a rationale for use of an 85% contour for defining the caribou effects study area.	AEM will provide justification for the 85% contour in the FEIS and indicate whether use of 85% versus 95% made a difference on what projects were included in the cumulative effects assessment. If necessary, the cumulative effects assessment will be updated.
GN-18	It is suggested that the text in this section be revised to incorporate the clarification that Atkinson et al. (2012) provides a point estimate of current abundance for this population but does not estimate trend.	AEM agrees to review and update in the FEIS as appropriate
GN-19	The final EIS should include a detailed monitoring and mitigation plan that allows readers to properly assess the effectiveness of proposed monitoring and mitigation measures surrounding use of the road, and the likely residual effects on wildlife harvesting.	AEM agrees to add more detail in the TEMMP for the FEIS, as appropriate. It should be noted that the current project description has the road decommissioned and scarified in closure. Should infrastructure be transferred to another party, potential impacts of the maintaining the road would need to be assessed at that time and by other party
GN-20	The final EIS should provide additional details regarding methods used for raptor nest surveys including intensity and allocation of sampling effort. Additional baseline data on the location and occupancy of raptor nest sites are required as part of the final EIS. A revised impact assessment for raptors, incorporating additional baseline data, is required as part of the final EIS.	Additional details regarding methods for raptor nest surveys will be provided in the FEIS. Arctic Raptor Project baseline data from 2013 will also included in the FEIS
GN-21	Additional baseline data on location and occupancy of raptor nest sites are required as part of the final EIS. A revised impact assessment for raptors, incorporating additional baseline data, is required as part of the final EIS. The Proponent is reminded of the regulatory requirements under Nunavut Wildlife Act and Migratory Birds Convention Act relating to destruction of nests. The final EIS should contain more information on the content of nest specific management plans to demonstrate how such plans will be effective in mitigating effects on raptors.	AEM agrees to add more detail in the TEMMP for the FEIS. Arctic Raptor Project data from 2013 will also included in the FEIS
GN-22	The Final EIS should include a detailed human-wildlife conflict management plan.	Similar to TC KIA-NEW-03. AEM agrees to add more detail in the TEMMP for the FEIS.
GN-24	The Proponent should provide a rationale for exclusion of these species from the EIS. Pending review of this rationale, additional baseline data and impact analyses may be required in the final EIS.	There was editorial error in the DEIS. The species listed are not found in the study area. This error will be revised for FEIS

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GN-25	Given the reliance on monitoring and mitigation measures in reaching conclusions in the DEIS about the significance of project effects, GN-DOE is of the opinion that a detailed monitoring and mitigation plan for wildlife must be presented as part of the final EIS. Amongst other things, this plan should provide monitoring details in the following areas: o Early detection of wildlife approaching project infrastructure to facilitate proactive mitigation such as road management measures and work stoppages. (It is noted that section 3.3 of the current draft Terrestrial Environment Management and Monitoring Plan Deals with monitoring of wildlife in the immediate area surrounding the project. The plan does not include monitoring to detect approaching wildlife at greater distances that may be necessary to provide lead-time for implementation of mitigation measures such as road closures. o Trends and patterns in use of the AWAR such as traffic studies. o Harvest study design. o Rapture nest occupancy and breeding success. Amongst other things, this plan should provide details of mitigation measures in the following areas: o Road management measures to reduce effects on wildlife harvesting. o Human-wildlife conflict management. o Nest specific management plans for raptors and species-at-risk. o Management plans for den sites of fox, wolf, bear or wolverine. o Work stoppages in response to presence of sensitive wildlife at project sites. (Volume 6, section 6.6.4.2 of the DEIS states that "the TEMMP (SD 6-4) specifies that during migration of 50 or more caribou, AEM will implement work suspension protocol when the caribou herd is moving in the direction of the activities and crosses the 5 km mark from the site activities. Work suspension will include suspension of helicopter flights, drill operations, and circulation of vehicles." Neither this statement nor details of a work suspension protocol can be found in the draft TEMMP.)	AEM has agreed to include more detail in the TEMMP Similar comments made by KIA
GN-26	The Department suggests that a more thorough "effects analysis" is conducted to address the potential strain on the capacities and demand on the existing educational system in the Kivalliq Region and Nunavut. The Proponentshould use the data from Meadowbank and how the mine impacted the educational infrastructure that exists in the communities. The Proponent may infer from the data how Meliadine will impact the educational infrastructure in the future in the local study area, the region and Nunavut as a whole. The Department of Education can provide data and analysis on regional and community and individual school level enrolments, attendance and school utilization rates that may be relevant to further understand the impacts the Project has on school capacities. However, the Department does not keep data on teacher retention; therefore the Proponent could not provide details about this piece in their Impact Statement. Nunavut Bureau of Statistics - http://stats.gov.nu.ca/en/Social%20education.aspx	In response to KIA-IR-33, AEM has agreed to additional data collection on education capacity (i.e., telephone interviews with education officials), and incorporating information on existing education capacity into the FEIS.
GN-27	The Proponent should clearly address and state the educational levels needed for a job candidate and to reflect this within the Impact Statement itself. Furthermore, this clarification should be reflected in the Human Resources Plan because the current plan does not outline educational levels requirements.	AEM commits to provide more clarity on this within the FEIS. Most of the jobs at Meliadine will not require a high school graduation diploma. AEM has found that a Grade 10 education is typically adequate for most of the employment opportunities that will be available. Grade 10 typically ensures sufficient literacy and numeracy skills to enter on-the-job training opportunities at the project. However High school diploma and/or Post High School education will be required for job opportunities requiring specialized skills such as maintenance personnel, technical jobs and many administrative functions. AEM will add in additional information SD 9-2 Socioeconomic Management Plan to help provide this clarity on what level of education is required by job type. To the best of our knowledge employees at Meadowbank have upgraded skills by taking advantage of skills upgrade training offered by AEM but none have requested assistance to upgrade basic education levels.

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GN-28	We recommend either redrawing the municipal boundaries to the correct spatial dimensions (please see included reference material) or changing the label from "Municipal Boundary" to "Built-up Area" (or a similar appropriate label). (1) Order In Council P.C. 1997-755 (2) Scan of provisional survey mylar: "Administrative Map Plan of the Exterior Boundary of Order In Council 1997-755 and Municipal Boundary of the Hamlet of Rankin Inlet, Nunavut" (NRCan Item No. 2012-20-032; not yet registered at Land Titles)	AEM will revisit this boundary in Volume 9 and adjust in accordance with guidance provided by the GN
GN-30	The above statement is not accurate and all significance evaluations of the Projects impact on community infrastructure should be revised to reflect this.	AEM will commit to re-word to say it is GN's current responsibility to provide a wide range of infrastructure and services but is at times struggling to keep pace with the infrastructure given the growth of the population. It should be noted that this is an intro statement, and no assessments/significance ratings are based on it.
GN-31	Distinguish between the Government of Nunavut and NTI when making projections about royalty revenues in the Territory.	AEM agrees to review and update in the FEIS as appropriate
GN-32	Please remove all reference to a separate socio-economic impact assessment (SEIA) for closure planning from Volume 9 of the DEIS and replace with a commitment to collaborative socio-economic planning with, but not limited to, the Kivalliq SEMC. Include the provision that for final closure, the 'trigger' for final planning should be no less than two years before the expected date of closure. If and when a premature (temporary or final) closure occurs, it is recommended that the Proponent continue to participate in collaborative monitoring with the Kivalliq SEMC as a means to address any negative socio-economic impacts of the closure	AEM agrees to review and update in the FEIS as appropriate
GN-33	Update the labour force analyses in Sections 9.4.3.3.1 and 9.4.3.3.2 with: LSA labour supply projections based on the 8 factors presented in 9.4.3.3.1 LSA labour supply by community based on current participation and future projections Work force requirements Table that identifies how many jobs will be available by job type Potential labour competition from other mining projects proposed in the LSA Potential labour competition from other industries, based on available growth trends	AEM agrees to review and update in the FEIS as appropriate
GN-35	Include a cross-impact matrix in the FEIS that clearly demonstrates the interactions between all VEC's and VSEC's. The level of detail should include a consideration for each measurement endpoint included in Table 9.1-2: Valued Socio-Economic Components (See Kiggavik DEIS for one example). For each interaction the evaluation criteria should include the impact direction, magnitude, geographic extent, duration, reversibility, and frequency (same as in Table 9.1-3: Definitions of Criteria Used in the Assessment). There should be an associated discussion of the relevant management plans that will address the outlined impacts through mitigation measures and monitoring/follow-up. Kiggavik Draft Environmental Impact Statement, Volume 9, Section 4.2, Page 4-9, Table 4.2-1 http://ftp.nirb.ca/02-REVIEWS/ACTIVE%20REVIEWS/09MN003-AREVA%20KIGGAVIK/2-REVIEW/06-DRAFT%20EIS%20%26%20CONFORMITY%20REVIEW/02-DEIS%20SUBMISSION/Vol%2009/	The Kiggavik EIS will be reviewed, and this matrix will be considered for inclusion in the FEIS, as appropriate. A social management plan was provided as SD 9-2 of the DEIS
GN-36	Provide additional discussion of how the significance criteria were specifically applied to the archaeological sites within the LSA's.	Tables 9.11-2, 9.11-3, 9.11-4 assigns significance to each site. For the FEIS, AEM will review and update the text as appropriate to provide additional clarity on how significance was applied. If necessary, AEM will contact the Territorial Archaeologist to obtain further guidance

Technical Review Comment-Agency & Number	Comment	Initial Comments
GN-37	Provide definition and geo-localization information for each of the following terms: Mine infrastructure, mine infrastructure footprint, site infrastructure, Project footprint, mine footprint, the Project, the Project development area. Redundant terms should be eliminated and overall terminology should be standardized where possible. Provide a detailed description of all Project components and their localization. A map and a table clearly defining what is what and where would be useful. The different components referred to in Appendix 9.11-A should be identified on Figure 9.11-1 and a similar figure could have been provided in the Appendix 9.11-A. Provide details on road (s) management (e.g., spur trails, bridges; culverts; borrow sources; gravel pits; equipment parking; equipment maneuvering areas, etc). If existing features such as roads are going to be impacted by any components of the Project, they should be the object of a thorough archaeological assessment. Buffer zones will also need to be adjusted accordingly.	AEM commits to review terminology used and update for the FEIS is appropriate. There are several locations in the DEIS where specific project activities are defined and labeled. AEM commits to review the figures in Volume 9 and add additional labels if necessary. All road ways, culvert etc. have been subject survey. A main road survey was conducted in 2008 and as project has developed all areas associated with proposed disturbance have been subject to complete AIA with 500 m associated buffer (see pg 9-ix).
GN-38	Provide clarification on: What field assessments were/will be conducted for each study area? What types of mitigation was/will be proposed for each study area? What type of monitoring and follow-up was/will be proposed for each study area?	A column will be added to tables 9-11-2,-3 and 4 in the FEIS to assist with clarification
GN-39	The final EIS should provide information regarding whether the 7-km buffer zone around the Iqalugaarjuup Nunanga Territorial Park is meant to make the Proponent accountable for impacts that may occur beyond the limits of the Project lease? The final EIS should also provide as clarification as to whether any buffer zone was applied in relation to the Park? Culture and Heritage advise that the Proponent collaborate with Nunavut Parks and Special Places to provide close monitoring of the site and bridge structure yearly, especially in the spring time. If the Park is flooded again in 2014, we recommend that a thorough assessment of the site and factors contributing to the flooding be done in order to develop an effective, long-term solution. Additionally, the final EIS should provide details on road operations around the park boundaries. For example, how will the Proponent prevent spur trails from the road into the Park?	AEM agrees to provide the following information in the FEIS. Over all archaeological resources in the Canadian Arctic are dispersal located. This is particularly the case for more inland locations; excluding micro environments where subsistence resources can be relied on such as char runs and caribou crossings. The Park and Meliadine Lake are two such locations where resources based on the archaeological record could be moderately relied upon. If the Park was not included in the RSA it would have presented a bias view of the cultural history of the immediate area. The inclusion of the Park in the RSA does not, in EIS precedent, mean that the proponent is taking responsibility for the whole area. The monitoring plan for the watercourse crossings along the AWAR is presented in SD 2-9 Roads Management Plan. As committed to in the response to technical comment GN-1, AEM will also present in SD 2-9 a proposed method of how it will work to prevent any unauthorized trails or access routes being developed by its contractors, employees or other parties off of the Meliadine AWAR into the Park.
GN-40	No flight plan should be approved to fly in the airspace above Iqalugaarjuup Nunanga Territorial Park.	AEM commits to avoid flights over the park; however, regular helicopter use for the project is not anticipated and therefore was not included in the EIS.
GN-42	We recommend the use of: will be affected or impacted and will not be affected or impacted. The recommended change will assist to clarify the archaeological feature that will be impacted or will not be impacted by proposed Project development.	AEM agrees to include for the FEIS
GN-43	Define minor impact more explicitly.	AEM agrees to review the definition and expend on it necessary for the FEIS
GN-46	NHC recommends that the Proponent review and revise predictions related to the housing situation in Rankin Inlet that are based on information from the AREVA Kiggavik DEIS Technical Review. AREVA Resources Canada Inc. Responses to Technical Comments May 8, 2013	This information will be reviewed and updated in the FEIS as appropriate
GN-47	NHC recommends that the Proponent review and revise predictions related to the housing situation in Rankin Inlet that are based on information from the AREVA Kiggavik DEIS Technical Review.	This information will be reviewed and updated in the FEIS as appropriate

Technical Review Comment-Agency & Number	Comment	Initial Comments
GN-48	It is recommended that AEM reevaluate the social housing situation in the Kivalliq region considering new public housing allocation, and its potential subsequent effects on Public Housing waiting lists. NHC's New Housing Allocation System (NHC, 2013)	This information was not available when the DEIS was prepared. It will be reviewed and incorporated in the FEIS as appropriate.
GN-49	The Department of Health recommends that potential impacts of in-migration on housing demand in Rankin Inlet be discussed in terms of its potential health impacts and included in table 9.6-18.	Potential impacts of in-migration on housing demand in Rankin Inlet will be discussed in terms of its potential health impacts and included in FEIS as appropriate.
GN-50	Department of Health recommends that thefinal EIS include a brief description of expected project impacts on distances travelled in order to conduct on-the-land activity and include this as an effect pathway in table Table 9.6-18: Residual Impacts for Individual, Family and Community Wellbeing.	AEM commits to review the results of the TLU assessment where access is discussed, and update Table 9.6-18 as appropriate.
GN-51	The Department of Health recommends that proponent include rotational work and work related stress as an effects pathway, with corresponding significance determination for both physical and mental well-being as well as substance abuse.	AEM agrees to review rotational work and work related stress as an effects pathway and update the FEIS as appropriate. It should be noted that there have been some studies on rotational work but these are NWT based. In the FEIS AEM will provide a discussion of its experience with employees at Meadowbank who report/experience stress from the 2 week on – 2 week off rotational schedule.
GN-52	Department of Health Recommends that section 9.7.4.3 discuss in greater detail, of the specific capacity of the health facilities in Rankin Inlet to absorb 450 people over the next two years, and 538 people over the next 15 years, as well as well as consider the project's other health impacts as factors that will increase demand on health services. This would include the impact of this population growth on housing overcrowding, family and community cohesion, as well as the project's direct impact on factors such as physical and mental health and safety.	Additional interviews with key informants in Rankin Inlet and with the GN will be conducted to establish the existing capacity of the health care services noted in GN-52, and resulting information will be included in the FEIS. The effects analysis for infrastructure and services will be revisited accordingly, and, if needed, updated to reflect demand for these additional services as a result of population growth.
DFO-1	As Agnico is likely proposing similar sampling frequency as at Snap Lake Mine (3 monthly samples per year), there is concern that in addition to the climate, hydrological, biological and chemical variabilities, additionally, there is potential for sample error as at Snap Lake Mine further reducing the available plankton data. For consideration, perhaps Agnico could create an adaptable monitoring program that begins with an initial increased frequency of monitoring.	AEM will take this into consideration in the preparation of the detailed AEMP design. Detailed AEMP design will be determined following consultation with communities and regulatory agencies, and will be included in the AEMP design document during the water licensing process.
DFO-2	DFO asks that the Proponent include the mixing zone effluent as an impact to fish and fish habitat for the above stated reasons. DFO asks that the Proponent provide information as to fish habitat use at the location of the proposed outfall in Lake Meliadine.	AEM requests a discussion with the interested party for further clarification on including the mixing zone effluent as an impact to fish and fish habitat. AEM agrees to provide the information as to fish habitat use at the location of the proposed outfall in Lake Meliadine.
DFO-3	Can Agnico provide evidence to justify not including species such as, but not limited to, Ninespine Stickleback, Threespine Stickleback and Slimy Sculpin in the EIS and detail how they are not valued for their support of Canada's commercial, recreational and Aboriginal fisheries? It is equally important for Agnico to assess the effects of the Project on the populations of forage fish species and their contribution to the commercial, recreational and Aboriginal fisheries. Please outline how species such as Cisco, Round whitefish, Burbot, Nine and Threespine Stickleback and Slimy Sculpin are not important in the ecosystem process; and, how would their removal from the project area's affected waterbodies not be considered a component of the overall, cumulative impact of the mine?	AEM commits to provide the requested information and/or update the assessment in the FEIS, if appropriate

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DFO-4	How is the Proponent confident that fish will not be affected, effects are negligible and the hydrology will return to baseline levels post closure all the while stating the uncertainty with future global climate effects? Effects should be compared at a much more geographically logical and realistic scale and not minimize the impacts the project will have on fish and fish habitat by comparing such impacts at a global climate change scale. Under the New Fisheries Act, the Proponent must consider serious harm to the commercial, recreational and Aboriginal fisheries, and those species that provide support to the fisheries (e.g. forage fish). Revision is necessary to more accurately describe temporal impacts of the project currently described as ‘temporary’, or ‘short duration’ when referencing impacts of the project which is proposed to have an approximate 25 year lifespan. If impacts to particular waterbodies are intended to be shorter in duration, please make this clear for each waterbody.	AEM agrees to review the new fisheries act changes and policies and update the assessment in the FEIS, as appropriate. It should be noted that the term "short-duration" was mistakenly used in AEM's response to IR DFO_79. DEIS Volume 7, Section 7.5.5.2, Page 7-381, first paragraph, last sentence read: "Effects to waterbodies, including Lake C6, will be of medium duration given that water yields will be similar to baseline at post-closure". This will be corrected for the FEIS.
DFO-5	The Proponent utilizes reference to long-term duration in Volume 1 page 1-125 when referencing the all-weather road as lasting longer than 10 years, though effects to fish habitat are considered short duration when encompassing 25 years? Please explain. There should be consistent use of terminology when referencing duration of impacts. Agnico’s definitions are not placed within a temporal frame of reference, but rather assumptions of reversibility. Throughout Volume 7 of the EIS, the Proponent will need to revise considerations of impacts which are currently identified under the old Fish Habitat Policy in terms of Harmful Alteration, Disruption or Destruction (HADD). The Proponent has many references to temporary disruptions throughout various phases of the project. Please review the New Fisheries Protection Policy (2013) and revise considerations of impact in terms of serious harm to fisheries.	AEM will review the terminology used and update in the FEIS, as appropriate
DFO-6	DFO would like Agnico Eagle to include more than two reference lakes.	DFO's preference is noted. The AEMP will be developed in consultation with relevant agencies. The number of reference lakes will be a point of discussion and agreement with DFO and others, and will be decided during the development of the AEMP beyond the conceptual stage. Detailed AEMP design will be determined following consultation with communities and regulatory agencies, and will be included in the AEMP design document during the water licensing process.
DFO-7	Will Agnico Eagle apply monitoring data already gathered from Meadowbank pit lake construction to Meliadine on the success/failure of end pit lake enhancements?	AEM will apply monitoring data from Meadowbank to assist in informing decisions related to end pit lakes.
DFO-10	Why has the Proponent considered all 145m of natural channel which is to be harmfully altered to be a Habitat Gain?	The harmful alteration to the natural channel was considered a loss, whereas the engineered channel was determined to be a gain as it will be designed for fish use and passage. AEM commits to provide this clarification in the FEIS, if appropriate
DFO-11	a) The habitat units lost are intended to be replaced via reflooding, though it is not clear how this restoration is considered a ‘gain’ when considering temporal loss of habitat during construction and operations phases when this habitat will be unavailable – disrupted and altered. b) It is not clear what gain is associated with restoration works such as this, as there is a temporal loss to consider and if successful, at best this is likely a 1:1 ratio rather than a gain. Please explain the rationale. c)Please explain the rational for considering the alteration of channels B46-59, A2-2a, A2a-3, A3-4, A4-5, A6-7 and A7-8 as a gain.	AEM commits to provide additional rationale in the FEIS
DFO-12	Out of all the compensation/offsetting options presented including the creation of end pit lakes, Basin C Lake and Arctic Char access at Pistol Bay, which option is preferred by the local harvesters?	The local HTO members prefer that multiple offset projects are developed and agree with the concepts presented in the conceptual NNL plan (see November 7 HTO, DFO consultation notes). During the authorization phase, AEM will work closely with local harvesters to determine the best offsetting options.

Technical Review Comment-Agency & Number	Comment	Initial Comments
EC-1 (shown as 126 on submission)	EC recommends the following general mitigation measures for species at risk: a) Measures to avoid or lessen any adverse effects on the project on species at risk, regardless of 'significance' of effects; b) Measures to monitor adverse effects on species at risk, regardless of 'significance' of effects; c) If species at risk, their dens or their nests and eggs are encountered during project activities or monitoring programs, the primary mitigation measure for each species should be avoidance. Monitoring should be undertaken to ensure that mitigation measures are successful and the results of monitoring should be provided to the relevant agency with management responsibility for each species; d) The Proponent should ensure that mitigation and monitoring strategies are consistent with any applicable status reports, recovery strategies, action plans and management plans that may become available during the duration of the project and should consult with the Government of Nunavut and EC adaptive management strategies should they be required. EC recommends that, further to requirements under Subsection 79(2) of SARA, COSEWIC assessed species that are under consideration for listing should be considered in project environmental assessments. EC recommended setback distances are discussed below in #5 and mitigation measures for marine birds are requested in further detail in #2.	AEM agrees to consider and add more detail in the TEMMP, as appropriate, for the FEIS
EC-2 (shown as 125 on submission)	EC appreciates the commitment made by the Proponent for the shipping route to avoid Coats Island, specifically the 30 km radius offshore areas that has been identified as a key marine habitat site for Thick-billed Murres and other seabird species that nest on the island. EC recommends that this commitment be communicated to all contracted shipping operators and should be included in the SD 8-1 Shipping Management Plan. EC also recommends that an annual log and map of ship tracks should be included in annual monitoring reports in order to assess the level of adherence to this commitment. EC notes that in Volume 8 Table 8.3-7, it states that there are mitigation measures regarding marine birds in the SD 8-1 Shipping Management Plan. EC finds reference to marine birds and mitigation measures lacking in this referenced document and recommends further detail be included. Finally, EC notes that there is no discussion regarding migratory birds and spill response in the SD 8-1 Shipping Management Plan and suggests that this gap in response preparedness be addressed. Although it is indicated on the map the Proponent does not list the Button Islands as an important bird area (editorial comment).	The shipping routes shown in the SD 8-1 Shipping Management Plan depict the approximate position of the established shipping lane past Coates Island commonly used by shipping companies today. Deviations from the shipping lane are possible if conditions dictate – pans of floating ice being one. AEM is but one of the companies and communities contracting ships for the delivery of its annual supplies. It is not reasonable that AEM alone be required to meet the requirement of providing an annual shipping log and a map of ship tracks in its annual report. AEM encourages Environment Canada to work with Transport Canada in having all ships provide this information directly to Environment Canada. AEM will add mitigation measures related to birds to the Shipping Management Plan. The Shipping Management Plan will be provided to the shipping companies AEM will contract and could lead to enhancements to their standard operating procedures and environment management plan(s). Button Islands will be added to the SD 8-1.
EC-3 (shown as 124 on submission)	The Proponent has provided clarification on the Project's relative contribution to existing ship traffic levels (incremental and cumulative) in Hudson Strait and in the vicinity of Southampton/Coats Island. EC appreciates the updated assessment of current and future shipping traffic. EC recommends that this updated assessment be included in the FEIS (Volume 1 – Main Document, Section 2.3.7 Marine Shipping or another appropriate volume of the FEIS).	AEM will add the updated assessment of current and future shipping traffic to the FEIS.
EC-4 (shown as 130 on submission)	EC recommends that mitigation measures to prevent the incidental take of migratory birds that nest on these water bodies be discussed in detail in Document SD 6-4 Terrestrial Environment Management and Monitoring Plan. Waterbirds (Pacific Loon, Figure 6.7-7 and Tundra Swan, Figure 6.7-7-9 of Volume 6 – Terrestrial Environment) nest on some of these water bodies and use them for brood rearing. Mitigation measures, such as dewatering outside of the nesting and brood rearing season, should be described and implemented.	AEM agrees to consider and add more detail in the TEMMP, as appropriate, for the FEIS.

Technical Review Comment-Agency & Number	Comment	Initial Comments
EC-5 (shown as 130 on submission)	EC recommends the following setback distances to minimize disturbance to nests for different bird groups nesting in tundra habitat (see footnotes for adjustments to setbacks for sensitive species and species at risk) and therefore recommends that the proponent use these values as a threshold of investigation for additional mitigation measures as noted to be determined in Subsection 3.7.2: Species Group Pedestrians /ATVs (m) Roads / Construction / Industrial Activities (m) Songbirds 30 100 Shorebirds 50[a] 100[a] Terns/Gulls 200[b] 300[b] Ducks 100 150 Geese 300 500 Swans/Loons/Cranes 500 750 [a] If project activities are within the breeding ranges of American Golden Plover or Ruddy Turnstone, these setbacks should be increased to 150 m for Pedestrians/ATVs and 300 m for Roads/Construction/Industrial Activities respectively. If project activities are within the breeding ranges of Black-bellied Plover, Whimbrel or Red Knot (a Species at Risk), these setbacks should be increased to 300m for Pedestrians/ATVs and 500m for Roads/Construction/Industrial Activities. If field crew are trained in the identification of these species then these higher setbacks need only apply to these more sensitive species, and lower setbacks can be used for the remaining shorebird species. In areas where several species are nesting in proximity, setbacks for the most sensitive species should be used if they are present. [b] If project activities are in proximity to breeding colonies of Ross's Gull (SAR) or Ivory Gull (SAR) these setbacks should be increased to 500m Pedestrians/ATVs and 750m for Roads/Construction/Industrial Activities.	AEM agrees to add more detail in the TEMMP, as appropriate, for the FEIS.
EC-6 (shown as 130 on submission)	EC recommends that avoidance should be the primary mitigation measure to avoid the incidental take of migratory birds, except when nest locations are previously identified, active nest searches are generally not recommended given that searchers may disturb or stress nesting birds and in most habitats the likelihood of detecting all active nests in a given area is known to be low. In the event that clearing cannot be scheduled outside the breeding season, areas should be thoroughly surveyed for active nests within four days of destruction/clearing activities by an avian biologist or naturalist with experience with migratory birds and migratory bird behavior indicative of nesting (e.g. aggression or distraction behavior; carrying nesting material or food). Nest surveys should be carried out using a scientifically sound approach. If nests containing eggs or young of migratory birds are located or discovered, all activities in the nesting area should be halted until nesting is completed (i.e. the young have left the vicinity of the nest). Any nest found should be protected with a buffer zone appropriate for the species and the surrounding habitat until the young have left the nest.	AEM agrees to add more detail in the TEMMP, as appropriate, for the FEIS.
EC-7 (shown as 130 on submission)	EC recommends that the SD 6-4 Terrestrial Environment Management and Monitoring Plan and/or the SD 2-6 Site Water Management Plan include detailed measures to deter waterbirds from using these ponds to prevent the potential risk of contamination. EC recommends that the Proponent commit to monitoring of the ponds, to document waterbird use of these areas and if monitoring suggests use of these areas by birds, the Proponent should consult with EC to determine if deterrent measures are required.	AEM agrees to add more detail in the TEMMP, as appropriate, for the FEIS.

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EC-8 (shown as 133 on submission)	Annual Nunavut GHG emissions are presented in Table A11–26 1999-2011 GHG Emission Summary for Nunavut in the National Inventory Report (NIR) 1990-2011: Greenhouse Gas Sources and Sinks in Canada. The NIR is available from the following web link: http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/7383.php In the FEIS, Table 5.4-9 should be updated to include a comparison of project GHG emissions to Nunavut's GHG emissions, as directed in Guideline #640. EC recommends that the Proponent provide an assessment of the Project's GHG contributions to Nunavut.	AEM thanks EC for the reference; this was not available at the time the assessment was completed. The reference will be reviewed and the data included in the FEIS if applicable.
EC-9 (shown as 137 on submission)	EC requests that the Proponent provide all input and control files used in the CALPUFF model and post processing utilities to generate the air quality predictions presented in the DEIS. All files should be in a format that can be used directly into CALPUFF. Please include all output files in the raw CALPUFF format.	AEM agrees to provide air quality data used in the modelling process and to provide an overview of the scaling process that was used to estimate maximum concentrations. However, AEM does not agree with providing the modelling files themselves as quality control of the model and its results cannot be maintained. There is no requirement for AEM to provide raw modelling files under the guidelines. Using the data provided, the interested party may choose to build their own model if required for their review purposes.
EC-10 (shown as 99 on submission)	EC thanks AEM for their response and notes that the information provided in the IR response should be included in the final Alternatives Assessment.	Will include for FEIS
EC-24 (shown as 114 on submission)	The dissolved portion of a metal is typically the most bioavailable form, and comprises varying proportions of the total concentration that is present, depending on factors such as pH, available ligands, and particulate matter in the environment. Consequently, the most conservative approach is to assess total concentrations of parameters, as the dissolved fraction may vary with conditions. There are also questions with the modeling results for the TSF. Mercury, silver and thallium do not appear to have been modeled. Also, predicted nitrate levels do not appear to incorporate degradation products of cyanide and ammonia, and do not match up with the nitrate + nitrite predictions. Another concern with the modeling exercise for developing edge of mixing zone concentrations are the estimated effluent quality used (Table 24). A number of the effluent parameters listed do not have guidelines, or are not regulated, and the predicted end-of-pipe concentrations are well above levels which would be of concern for discharge. In this case, the predicted concentrations at the edge of the mixing zone can be seen as conservative, as actual end-of-pipe concentrations would need to be considerably lower. In addition, there may be contributions to surface runoff from the waste rock piles. AEM has recently done a comparison of predicted leachate concentrations to CCME guidelines for all parameters, and EC requests this information. EC requests that the technical sessions include discussions on modeling results and on predicted effluent quality and environmental fate and behaviour of contaminants. Please provide the comparison of predicted waste rock leachate concentrations to CCME guidelines for all parameters.	AEM to confirm SSWQO memos have been issued to EC CP: this request is also looking for modeling of fate and behavior of contaminants in Meliadine Lake - reference to KIA-19, KIA-22, EC-26 It is not possible to predict suspended solids content with accuracy because they are affected by the design of the water conveyance system (their hydrodynamics). Thus, dissolved parameters were modelled with a commitment that AEM will respect TSS limits at the effluent discharge point. Mercury, silver and thallium were not modelled because they are not of considered to be of concern. All static leaching tests were below analytical detection limit for mercury (analytical detection limit was lower than CCME-AL). For thallium and silver, most static leach test concentrations below analytical detection limits with few exceptions, the concentrations of these were well below CCME-AL. The cyanide degradation pathways considered are abiotic (biodegradation is not considered because of site conditions, climate), thereby, producing HCN (volatilization), cyanate (CNO) and thiocyanate (CNS), rather than ammonia to nitrate. Surface water runoff from the waste rock piles, if any, will be collected and managed within the mine contact water system. AEM will seek clarification from Environment Canada regarding comments on CCME.

Technical Review Comment-Agency & Number	Comment	Initial Comments
EC-25 (shown as 115 on submission)	There is the potential for unknowns to arise with respect to geochemical, environmental, process-related factors, which may invalidate the modeled conclusion of minimal treatment being required. It has also not been established that MMER criteria would be sufficiently protective of the receiving environment, and that there are not other parameters which would pose a risk to the environment, and that should be managed. The proposed treatment plant would be based on pH adjustment (SD 2-6 Section 7.6.1) and this could address metals which may be amenable to this treatment. Other parameters such as ammonia, sulphate, and major ions may be of concern. EC seeks clarification on the types of treatment which may be available as contingencies in the event TSF effluent quality is different than predicted. Information on how the predicted ammonia concentrations will be treated to levels suitable for discharge is requested.	Information on contingency for water treatment will be developed for FEIS. Information on potential ammonia treatment will be provided.
NRCan-1	1. NRCan recommends that AEM consider additional site specific geotechnical investigations in areas of sensitive terrain along the road alignment to support detailed design and implementation of mitigation techniques to reduce terrain impacts such as ground movements, drainage changes and erosion.	AEM will consider additional geotechnical investigation along the road alignment during the feasibility study and the final design but will not be part of the FEIS
NRCan-2	NRCan offers the following recommendations for consideration in detailed design of tailings and waste rock storage facilities: 2. NRCan recommends that the Proponent conduct the more detailed thermal analysis as proposed by Golder to support detailed design of the dikes and the tailings storage facility including seepage and stability analysis. A 2-D thermal analysis is recommended which includes realistic scenarios for tailings deposition (including effects of pore water expulsion within the tailings and foundation) and considers the range of ground thermal conditions that occur within the area to be encompassed by the TSF. The analysis should also be supported by additional laboratory analysis as proposed by Golder to characterize strength and creep properties of ice-rich foundation materials. 3. NRCan recommends that additional analysis be considered to determine the extent of talik at B7 which considers the effect of nearby water bodies and the Proponent utilize this information to support the thermal analysis for the TSF design. 4. NRCan recommends that thermal analysis utilizing site specific conditions be conducted to support detailed design for the WRSF to determine that the proposed cover thickness is adequate to maintain the active layer in the NAG cover. 5. NRCan recommends that an effective monitoring program for TSF and WRSFs (including dikes) be implemented that includes elements proposed by the Proponent to monitor the thermal condition and stability of these facilities (including deformation of the cover), to determine whether adjustments are required during operation to ensure the facilities perform as intended.	AEM will consider these recommendations during the feasibility study and the final design but will not be part of the FEIS
NRCan-3	6. NRCan recommends that full documentation of the borehole drilling, testing and installations be included as an appendix to Volume 7 within the Final EIS. This reporting should include descriptions of the methodology and results as well as a figure of the borehole log showing the geology as well as the installations of the Westbay instrumentation within the borehole. 7. NRCan recommends that descriptions of well development and hydraulic conductivity testing (both before and following installation of the Westbay system) within borehole M11-1257 be provided in the FEIS, along with all hydraulic testing data as well as interpretative plots.	AEM commits to providing the requested information in the FEIS

Technical Review Comment-Agency & Number	Comment	Initial Comments
NRCan-4	8. At the appropriate project development stage, when validations of the conceptual and numerical models are required, NRCan recommends that AEM document its methods for monitoring of hydraulic head and re-collect reliable head measurements. To assist with obtaining reliable data and for interpretation purposes NRCan's also offers the following recommendations: - Water pressure measurement procedures be presented in detail. The timing of water measurements with respect to the purging of the Westbay ports may be important and thus it is recommended they be documented. Purging of the borehole to remove drilling water may also be required to collect reliable head measurements. - Actual pressure measurement results and measurement procedures should be documented for the Westbay monitoring well. NRCan recommends that water level measurements from other monitoring wells (e.g. M09-860, GT-09-19) should also be presented in the FEIS. - Purging and sampling all Westbay ports in M11-1257 would provide a better salinity and density profile within the sub-permafrost zone. A better salinity profile may allow better interpretation of the vertical component of groundwater flow in the subpermafrost zone.	AEM commits to providing the requested information in the FEIS and will consider NRCan's recommendation. Data from Westbay sampling completed in 2013 will also be provided, as appropriate.
NRCan-5	9. NRCan recommends that AEM conduct detailed monitoring of saline groundwater inflows into the underground mine as it is constructed as this would greatly assist saline water management (7.2.4). Monitoring of groundwater inflows should allow better estimation of the hydraulic conductivity of various geological units and/or fault zones. These improved estimates should then allow better calibration of the numerical model and ultimately a better prediction of saline groundwater inflows for the mine as a whole. If seepage data suggests that the hydraulic conductivity of the competent bedrock or fault zones is higher than used in the numerical groundwater flow model or that the conceptual model requires revision, then NRCan recommends that the numerical model be corrected and re-run (and/or re-calibrated) (7.2.4).	This comment will be integrated as development occurs, but cannot be completed for FEIS. AEM commits to complete hydrogeological models and re-run as necessary once more data is available
NRCan-7	14. NRCan recommends that AEM consider developing, for its Final EIS, a saline water management plan to address saline water for the entire project. This would specifically discuss the management, storage, containment and disposal of saline water originating both from drilling water and groundwater inflow to the underground mine. Sufficient storage capacity of saline water should be available in the event of desalination plant failure or excessive saline groundwater inflows particularly following the removal of saline water from pond B4. Saline water balance should be measured as the project proceeds to ensure that adaptive plans or measures can be implemented to manage saline water fluxes which will fluctuate according to saline groundwater dewatering, drill water use and recycling, and desalination rates. 15. NRCan also recommends that the proponent consider whether there are adaptive management methods to reduce saline groundwater seepage into the mine (e.g., is grouting a plausible option?).	AEM will develop, for FEIS, a Saline Water Management Plan to be integrated as a section of SD 2-6, Water management Plan.

Technical Review Comment-Agency & Number	Comment	Initial Comments
NRCan-8	16. NRCan recommends that AEM, for the Final EIS, provide a clarification and rationale for the discrepancy between the actual number of samples tested (Table 4) and the recommended sampling frequency (Table 3). 17. NRCan recommends that AEM, for the Final EIS, provide a justification for the make-up of the large columns testing F Zone and Discovery deposits (Table 12; SD6-3) as the iron formations do not appear to be represented.	IR 16: AEM agrees to provide a clarification and rationale for the discrepancy between the actual number of samples tested (Table 4) and the recommended sampling frequency (Table 3) in the FEIS. IR17: The selection criteria for bulk column tests was 1) the most represented rock type for each deposit, 2) to define the bulk weathering characteristics for the element of interest in that deposit (arsenic in all deposits) and 3) for the overall project, that each major rock type be represented. The weathering of other rock types is represented by the standard size (1kg) humidity test cell. Iron formation is the lesser rock type present in F Zone (8%). This rock type is represented by the standard 1-kg humidity test cell targeting samples that are PAG rather than a large column where PAG samples would be mixed with higher NP and lower AP rock that would further delay any occurrence of ARD, if ARD was to develop. Similarly for discovery, it represents 30% of the waste to be generated but , although some samples are PAG and uncertain, most of the samples and the bulk of Discovery IF is non PAG. Smaller scale testing of the ARD potential on targeted samples is expected to provide better indication of the actual acidification potential of samples that are PAG (rather than mixing these samples in a more neutralizing mass). This justification will be included in the FEIS.
NRCan-9	18. NRCan recommends that AEM, for the Final EIS, reinterpret the ABA results by (1) using the more conservative CaNP values in cases where NP is greater than CaNP (2) taking into account the presence of ankerite and siderite and (3) using total S instead of sulphide S.	AEM agrees to recalculate the NPR based on Carbonate NP. However, sulphide sulfur is the appropriate specie of sulphur to be used to determine the potential to generate acidity because this can oxidize to produce sulphate, while sulphate present in most samples and contributing to total sulphur, will not oxidize further. At Meliadine, the appropriate S species to use to evaluate acid potential is sulphide sulphur.
NRCan-10	19. NRCan recommends that AEM, for the Final EIS, recalculate the percentage of waste rock classified as PAG, uncertain and NAG using CaNP (calcite) and total S values and describe how the updated values may impact the design of the waste rock storage area for the Discovery deposit and associated mitigation measures.	AEM agrees to calculate the proportion of anticipated PAG, uncertain and NAG rock based on Carbonate NPR. However, at Meliadine, sulphide sulfur is the appropriate specie of sulphur to be used to determine AP, thus the CaNPR will be made using sulphide AP (see NRCan IR-18 response).
NRCan-11	20. NRCan recommends that AEM, for the Final EIS, update its plan for the management of waste rock as necessary, to address the potential for oxidation/acid generation and metal leaching from waste rock for the FEIS.	commitment to update SD 2-8 if necessary for the FEIS

Technical Review Comment-Agency & Number	Comment	Initial Comments
NRCan-12	21. NRCan recommends that AEM, for the Final EIS, reassess the potential for acid generation from the tailings. If reassessment of the tailings characterization data and perhaps further testing indicate that the tailings have the potential to generate acidity, the proposed tailings storage facility design and closure plans will need to be revisited and additional mitigation measures developed. 22. NRCan recommends that AEM, for the Final EIS, further consider and discuss the potential of arsenic leaching from the tailings and its implications in terms of water treatment needs and tailings management options. 23. NRCan recommends that AEM, for the Final EIS, provide the details of the iron or aluminum coprecipitation for the removal of arsenic from the feed into the tailings storage facility. In addition, information about the composition, stability and disposal options of the iron/aluminum precipitates containing arsenic should be provided. 24. NRCan recommends that AEM, for the Final EIS, provide additional information on the chemical and physical characteristics of the sludge and the plan to dispose the sludge produced from water treatment in the tailings storage facility.	21: AEM believe tailings testing is adequate and sufficient to evaluate their long term potential to generate acid. Annual and cumulative assessment of ARD potential for bulk tailings deposited in the impoundment, based on the current mining plan, shows tailings are net buffering for most of the mine life, NAG to uncertain (depending on the criteria used) for three years, and again NAG with excess buffering capacity for the last 3 years of production. The last 3 years of production will make up a meters-thick permanent surface of the tailings disposal facility. The interim years of NAG to uncertain bulk ARD characteristics are not considered to be of concern given the high tailings deposition rate that will see the tailings surface continually covered with fresh tailings, the process lime addition that will provide readily available buffering capacity and the slow reactivity of all tailings, including the PAG discovery tailings that, in accelerated kinetic weathering tests, produced neutral pH, low sulphate and conductivity leachate over 30 weekly cycles of testing. 22: AEM believes the arsenic leaching potential is adequately evaluated. Arsenic is expected to be present in tailing contact water. Water treatment is planned for process water and tailings surface management is expected to minimize leaching from tailings surface in the long term. 23. AEM will detail water treatment related processes during the feasibility study and subsequent design. Information will be provided at the Water Licensing stage, but not for FEIS. 24. AEM will detail water treatment related processes during the feasibility study and subsequent design. Information will be provided at the Water Licensing stage, but not for FEIS.
	25. NRCan recommends that AEM, for the Final EIS, provide the target discharge level of Total CN to the tailings storage facility and discuss the stability of the solids from the water treatment plant containing cyanide species. Additionally, NRCan requests that AEM discuss any storage options that have been developed for these solids.	25. AEM is committed to respecting the International Cyanide Management Code (ICMC). Cyanide destruction is planned for tailings materials in order for the process solutions impounded into TSF to respect the ICMC (50 mg/L WAD). Cyanide destruction is planned to be done on tailings material which will then be directed to the TSF, such that any precipitate would be disposed of within the tailings materials. Any remaining total cyanide would be treated at final effluent, if necessary, to respect effluent discharge criteria (MMER and Water License). Sludge from water treatment is planned to be disposed of in the TSF. As mentioned for No. 23 and 24 above, AEM will further detail water treatment related processes during the feasibility study and subsequent design. Information will be provided at the Water Licensing stage, but not for FEIS. Also, water treatment optimization will be an ongoing process as predicted water quality will be verified against monitoring data during operations, and the treatment will be adjusted through an adaptive management process.

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TC-1	The Proponent will need to provide information on any impacts and their assessment of the area is to be determined. This would include all information pertaining to the watercourse such as width, depth, dock construction elements and expected activities for use of the dock, etc. This information will be required to determine the impacts for any form of approval or navigational impact assessment. Transport Canada recommends that a NWPA application with all applicable watercourse information is required for the boat launch.	The community dock at Itivia will be used by AEM. No dock is expected to be built at Meliadine Lake. Boats will be launched from the beach. However, should a dock be built, legal requirements under the NWPA will be adhered to and Transport Canada - NWPA contacted.
TC-2	Dedicated haul roads versus shared public and mine roads – watercourses to be identified and NWPA applications if required. AEM provide a list of watercourse crossings and NWPA applications for each crossing location. A site visit during open water season would be beneficial.	AEM did provide such a list of water crossings for the Phase 1 AWAR and requested a navigability determination for each. A similar request will be prepared for other water crossings.
TC-3	Determine water bodies for Sec. 22/23 Order in Council (OIC). Navigational assessment details for each water body will be required. AEM provide NWP with an application for watercourses impacted by waste rock storage. A site visit during open water season would be beneficial.	AEM will provide a list of water bodies for Sec. 22/23 Order in Council. The navigational assessment details for each water body will also be provided.
TC-4	The Proponent is to provide navigational assessments for water bodies impacted. NWPA applications are required for intakes on navigable water bodies. A site visit during open water conditions would be beneficial.	AEM will provide navigational assessments for water bodies impacted and submit NWPA applications as required for intakes on navigable water bodies.
TC-5	The Proponent is to provide navigational assessments for the water bodies impacted. NWPA applications are required for dewatering of watercourses. A site visit during open water conditions would be beneficial.	AEM will provide navigational assessments for the water bodies impacted and submit NWPA applications as required for dewatering of watercourses.
TC-6	The Proponent is to provide navigational assessments for the water bodies impacted. NWPA applications are required for stream diversions to complete navigational impact assessments. A site visit during open water conditions would be beneficial.	AEM will provide navigational assessments for the water bodies impacted and submit NWPA applications as required for stream diversions. The DEIS reference is unclear.
TC-7	The Proponent is to provide navigational assessments for the water bodies impacted. NWPA applications are required for navigable water courses associated with water outfalls (discharge to Meliadine Lake). A site visit during open water conditions would be beneficial.	AEM will provide navigational assessments for the water bodies impacted and submit NWPA applications as required for navigable water courses associated with water outfalls (discharge to Meliadine Lake). The DEIS reference is unclear.
TC-8	Proponent response is satisfactory. AEM to notify Transport Canada of who was awarded the contract for shipping services required for the start-up of the Meliadine project, as soon as possible, preferably one year before operations commence.	AEM will notify Transport Canada who will be awarded the contract for shipping services required for the start-up of the Meliadine project. This will be done as soon as possible, preferably one year before operations commence. The DEIS Reference provided is not clear.
TC-9	The TDGA established the classes of dangerous goods as per the schedule in the TDGA. Transport Canada recommends that AEM consult the TDGA and regulations as they relate to their operations and comply with all applicable requirements, as necessary.	AEM will adhere to the requirements of the TDGA and regulations as they relate to its operations and comply with all applicable requirements, as necessary.
TC-10	Refer to Part 3 of the TDGR for the consignor and carrier responsibilities and the required information on a shipping document.	AEM will adhere to the requirements of the TDGA and regulations as they relate to its operations and comply with all applicable requirements, as necessary.
TC-11	Refer to Part 8 of the TDGR for the Proponent reporting requirements.	AEM will adhere to the requirements of the TDGA and regulations as they relate to its operations and comply with all applicable requirements, as necessary.
TC-12	The transportation of dangerous wastes may be subject to the TDGR	AEM will adhere to the requirements of the TDGA and regulations as they relate to its operations and comply with all applicable requirements, as necessary.

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TC-13	The transportation of containers previously containing dangerous goods may be subject to the TDGR	AEM will adhere to the requirements of the TDGA and regulations as they relate to its operations and comply with all applicable requirements, as necessary.
TC-14	Refer to Part 5 of the TDGR for the means of containment requirements with regards to transportation of fuel from Rankin Inlet storage site to Meliadine site.	AEM will adhere to the requirements of the TDGA and regulations as they relate to its operations and comply with all applicable requirements, as necessary.
TC-16	Refer to Part 5 of the TDGR for the appropriate means of containment with regards to dangerous goods in transport.	AEM will adhere to the requirements of the TDGA and regulations as they relate to its operations and comply with all applicable requirements, as necessary.
TC-17	Transport Canada will need to conduct an assessment of water bodies involved with tailings deposition.	AEM committed to follow Section 22 and 23 of the NWPA in IR response to TC-148. NWPA is referred to in Volume 2, Section 1.3, Table 1-2. The NWPA, regulations and any other applicable requirements will be adhered to by AEM, as necessary.
TC-19	AEM is advised to carry out the necessary consultation with regulatory bodies before considering use of dispersants and in situ burning as the primary methods of oil recovery in Arctic waters. The SOPEP and Voyage planning in the Arctic should take into consideration remoteness and reality of operations, particularly in regard to responding to a spill and seeking outside assistance. Please note there are no RO's (Response Organizations) in the Arctic. In the event of a spill, the vessel operator and the OHF are responsible for containing and cleaning up the spill. Transport Canada highly recommends that AEM consult with the CCG with respect to their plans to utilize CCG response gear and with Environment Canada in regards to recent changes to the REET structure.	AEM commits to not use dispersants or in-situ burning of petroleum hydrocarbons resulting from spills entering sea water at its Oil handling Facility. It will also contact CCG on the use of its spill response equipment located at Rankin Inlet and EC on changes to the REET structure.
AANDC-1	AANDC requests that the Proponent commit to providing statements in the summary and main body of the text that are consistent with the actual conditions and/or predicted conditions for surface water quality.	Thanking you for cross checking between sections. For the final EIS, we will review the text in both the popular summary and the water quality assessment chapter, check for consistency, and, if necessary, include additional text for further clarity.
AANDC-7	AANDC requests that the Proponent commit to continued consultations with communities to provide satisfactory responses to the questions and concerns raised during previous consultations.	AEM makes a commitment to do so in the response to IR 12
AANDC-8	AANDC requests that the Proponent commit to providing additional and alternative post closure plans in the FEIS that take into considerations potential failure of the geomembrane system and potential thawing of the tailings. These plans should address the long-term potential effects of seepage water on the environment.	AEM commits to considering and providing additional and alternative post closure plans, as appropriate, in the FEIS
AANDC-10	AANDC requests the Proponent commit to including alternative closure measures for the Tailings Storage Facility.	AEM commits to considering and including additional closure measures for the TSF as appropriate in the FEIS
AANDC-11	AANDC requests that the Proponent commit to providing specific and defined adaptive management strategies for each VEC/VSEC identified in the FEIS. AANDC further requests the proponent provide a plan and schedule for monitoring specific components included in the adaptive management strategy.	AEM commits to review for FEIS and, if necessary, provide additional detail on adaptive management plan.
AANDC-12	AANDC requests that the Proponent provide a document map for the EIS in all volumes.	AEM will provide a document map for the FEIS in all volumes.

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AANDC-13	AANDC requests that the Proponent commit to providing a scheduled timeline relating to stages of the NIRB's review process or the later licensing/regulatory processes to define when outstanding information will become available to complete the individual monitoring and mitigation plans in the FEIS.	AEM's IR response does provide an overall scheduled timeline on when the plans will be further developed. A schematic representation of the scheduled timeline described in the response can be prepared for the FEIS if necessary. However,-a detailed schedule is not feasible at the current time as it is dependent upon participation and input from interested parties including regulatory agencies.
AANDC-14	AANDC requests that the Proponent commit to including a table of contents and annotated outline of the Environmental Management and Protection Plan in the FEIS. The Table of Contents should include sections dealing with potential changes in environmental, climatic and economic conditions of the mine before, during and after operation.	The EMPP will be updated for FEIS to include this information.
AANDC-15	AANDC requests that the Proponent commits to include the level of detailed information, as noted in the response to IR 46, which describes the potential surface water effects from the proposed widening of the All Weather Access Road into the FEIS.	Commitment to include details in FEIS.
AANDC-16	AANDC request that the error mentioned in the response to IR3 be corrected and incorporated into the FEIS.	AEM commits that the error mentioned in the response to IR3 will be corrected and incorporated into the FEIS where appropriate.
AANDC-24	AANDC requests the Proponent commit to including an inspection and blockage removal schedule and procedures in the Surface Water Management Plan as well as identify potential risks associated with missed blockages and overflows (as noted in the response to the Information Request).	Details on watercourse crossings inspection and maintenance have been included in SD 2-9 Roads Management Plan. This information will be reviewed and updated if appropriate for the FEIS
AANDC-25	AANDC requests that the Proponent include in the FEIS information, as noted in the response to IR 49, on the potential for increased frequency of significant storm events, and a discussion of proposed mitigation mechanisms in the event of increased extreme storm events.	AEM agrees to provide additional details in the FEIS on the potential for increased frequency of significant storm events, and a discussion of proposed mitigation mechanisms in the event of increased extreme storm events. However, AEM request clarification from the interested party as to what they consider to be a "significant" storm event.
AANDC-26	AANDC requests that the Proponent include in the FEIS the discussion on modeling, as noted in the response to the Information Request	AEM agrees to provide the requested information in the FEIS as appropriate
AANDC-27	AANDC request clarification of what management measures for surface waters are considered. If release to the environment was to be considered, then potential effects on the environment and mitigation should be described in the emergency response plans.	Emergency scenarios related to the pits, TSF pumping capacity from dewatering, dike failure and pipeline breakage are covered in the draft ERP. Additional information will be added relating to emergency water release. It should be noted that SD 2-15 will be updated once the project is further defined during the feasibility study and will include a complete risk analysis (through AEM's Responsible Mining Management System).
AANDC-28	AANDC requests that the Proponent commit to including alternative MMER guidelines for the design of the water treatment facility and that the Proponent commit to adjusting treatment accordingly to any new regulations and guidelines implemented by the MMER. AANDC also requests the Proponent commit to including alternatives for water treatment in the design of the water treatment system, particularly the use of a ferric based reagent for arsenic, rather than copper-sulphate.	Feasibility study is currently underway and the design considerations presented by the intervener will be considered during this process. Results of the feasibility study will be presented during the Type-A water licensing process.
AANDC-29	AANDC requests that the Proponent commits to include paragraph two of their response for IR10 in the FEIS	AEM will include in the FEIS

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AANDC-30	AANDC request that the Proponent commit to providing an estimated volume of Discovery ore expected in the temporary stockpiles in the final EIS. Furthermore, AANDC request that the Proponent provide a detailed explanation of estimates of the heat rate (unit, W/h/m cu) that is expected to be released by ore in temporary stockpiles and tailings in the FEIS. AANDC further requests that the Proponent provide a plan to monitor heat generated by the temporary ore stockpiles.	AEM agrees to provide the estimate volume of Discovery in the FEIS. However, AEM does not agree that a detailed explanation of estimates of the heat rate is required because it is a low sulfur system. Three samples of iron formation were subjected to weathering test using the standard humidity test cell method. One sample was PAG and contained 75th percentile sulphide content, another sample had an uncertain ARD potential with an average sulphide content and the third was non PAG. All samples generated neutral drainage with <10mg/L de sulphate (sulphide oxidation product), low conductivity, low calcium during the 20-week testing period. This testing period is longer than the expected storage time at Discovery. Oxidation of sulphides from the discovery ore pile is not expected to be measurable during the period of temporary storage, and neither is heat generated from sulphide oxidation.
AANDC-31	AANDC requests that the Proponent commits to include the monitoring commitments and timelines for development (as noted in the response to the Information Request) in the FEIS.	AEM commits to include the monitoring commitments and timelines for development as noted in the response to the AANDC Information Request 11 in the FEIS.
AANDC-32	AANDC requests that the Proponent commits to include a statement regarding the potential changes to the WRSF cover design (as noted in the response to the Information Request) in the FEIS.	AEM will review statement regarding the potential changes to the WRSF cover design and include in the FEIS as appropriate.
AANDC-33	AANDC requests that the proponent commit to providing a communication strategy such that the public using the AEM roads have a means to communicate back and forth with AEM in case of an emergency.	AEM commits in the FEIS to add into the Roads Management Plan (SD 2-9) a communication strategy on how the public using the AWAR can communicate with AEM in the event of an emergency. AEM is hoping that it will be able to establish full cell phone service along the full length of the AWAR and if so then AEM needs to provide signage along the road with information on how public can contact AEM by phone in the event of an emergency.
AANDC-34	AANDC requests that the proponent commit to providing more up to date consultation findings on the management of the roads and the routing of the roads in the FEIS. Such consultation records should identify public's comments and concerns with the proposed plans.	AEM is of the opinion that it provided this type of information in Section 7 (Table 7.1) of SD 3-1. However AEM has held additional meetings with the KIA and HTO over how public access will be managed to the AWAR in the Phase 1 period (the period before the NIRB Project Certificate is issued). AEM has also held/participated in several community meetings since the DEIS was submitted at which the public have raised concerns over access to the Meliadine AWAR. AEM is willing to update this information in SD 3.1 as part of its FEIS submission.
AANDC-37	AANDC requests that the proponent commit to providing in the FEIS a description of procedures for maintaining the roads in the winter, should there be icing conditions.	AEM will add this information into the Roads Management Plan (SD 2-9) for the FEIS. It will be via an expanded Section 7.2 on winter maintenance. At Meadowbank, the AWAR is periodically closed under bad icing conditions until the road can be graded and/or sanded. AEM does have road sanding equipment at its Meadowbank operation to address icing road conditions. Similar procedures will be used on the Meliadine AWAR.
AANDC-38	AANDC requests that the proponent commit to providing information on specific sedimentation control measures detailed in Section 2.6.4 of the DEIS for construction and operations phases in Road Management Plan sections of the FEIS.	AEM has committed to include such information in the FEIS. See also response provided to IR46 (AANDC-15 above).

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AANDC-40	To ensure clarity AANDC requests that proponent provide in the FEIS information on the plan for managing leachate for the proposed landfill. This plan should include leachate management considerations for the potential reopening of the landfill for additional use, maintenance, or other development related requirement after being closed.	AEM committed to update FEIS as described in the response to IR35. Potential re-opening should not change the management as only inert materials will be stored. Leachate management associated with re-opening by potential users other than AEM would be the responsibility of those users.
AANDC-41	AANDC's Mine site Reclamation Guidelines for the Northwest Territories at section 2.11 indicates that "[c]conventional landfill designs using an impervious liner may be more appropriate than utilizing frozen ground conditions to encapsulate the waste." AANDC requests that the proponent commit to clearly stating in the FEIS the reasons why a liner is not appropriate for this landfill. AANDC further requests that the proponent commit to include in annual reports to NIRB a waste generation section clearly detailing the type and quantity of waste (hazardous and non-hazardous); deposited in the existing landfill; deposited in the proposed landfill located in the B7 East Waste Rock Management Facility; incinerated; diverted from landfill to a recycling program; sent off-site for disposal or recycling; and AP-01 influent analytical quality results. In keeping with the NIRB EIS Guidelines (9.4.7), this information will enable regulatory review of the project waste management performance in relation to existing and future adopted waste management guidelines. AANDC requests that the Proponent commit to providing in the FEIS a clear statement on landfill monitoring methods, schedules and reporting strategies as noted in the response to the Information Request.	AEM committed to update FEIS as described in the response to IR36. AEM will commit to include a waste section in the annual report submitted to regulators. Reason for no liner is provided in the IR response.
AANDC-43	For clarity, AANDC requests that the proponent commit to including an explanation as to reasons how and why the Meadowbank Gold Mine serves as a good surrogate for waste generation rates in the FEIS.	AEM committed to update FEIS as described in the response to IR38.
AANDC-45	AANDC requests that the proponent commit to providing in the FEIS a full detailed description of the existing landfill; a timeline of when the proposed landfill in the B7 east Waste Rock Management Facility will be opened and closed in relation to mine operations including dismantling of the incinerator.	AEM don't have a landfill onsite. If we construct a landfill during exploration, the as-built will be sent to the regulators as requested in the License B. AEM will detail the timeline of when the landfill for the project will be constructed and when it will be closed.
AANDC-46	AANDC requests the Proponent commit to clearly stating in the FEIS details on responsible parties for the landfill operations and maintenance, inspection protocols, access control, and detailed training requirements for the operators of the landfill site in the detailed LWMP.	AEM commits to clarify in the FEIS on responsible parties for the landfill operation and maintenance.
AANDC-55	AANDC requests that the Proponent describe any intentions to engage adjacent jurisdictions outside of the NSA, where relevant and provide a summary of any discussions.	As indicated in SD 3-1, Section 6-10, AEM sent letters to a number of aboriginal organizations located in the NWT, Manitoba and Nunavik as identified early in the process by the NIRB to inform them of the Meliadine Project and of the EA process currently underway. Only response received was from the North Slave Metis Association. AEM will summarize this contact (consultation attempt) within the FEIS.
AANDC-56	AANDC recommends that the Proponent provide additional information on where and how community concerns were taken into account in the assessment of Project impacts. This could be achieved through adequate references to the content of SD 3-1 Public Engagement and Consultation Baseline Report in appropriate sections of the DEIS (i.e. especially in sections on impact analysis) or through the production of a summary table on the incorporation of community perspectives into Project design and impact assessment. This summary table could describe: (1) community concerns expressed during consultations, (2) the agencies or types of audience that expressed these concerns, (3) how the Proponent adapted the Project to address these concerns, and (4) references to the relevant impact analyses sections where these issues are addressed (if applicable).	The DEIS conformity table identifies where community concerns were taken into account in the DEIS. AEM will commit to preparing an additional summary table in the FEIS to explicitly identify where and how community concerns were taken into account by AEM in the environmental assessment and where project changes were made accordingly or not. A similar request was made by KIA for IQ (see KIA-IR-01).
AANDC-57	AANDC requests that the proponent commit to providing detailed information in the FEIS on the selection and inclusion of alternative noise criteria for comparative purposes of noise monitoring results.	AEM agrees to provide additional detail on proposed noise criteria in the NAMP for the FEIS.

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AANDC-59	AANDC requests that the Proponent commits to include on the thickness of ice for various lakes in size, depth, and with/without snow on ice surface be used to assess project impacts on ice condition (as noted in the response to the FEIS.	Wording of the technical comment is not clear; however the interested party states the "Proponent's response satisfies the information request." AEM interprets this technical comment as a request to include the data presented in the IR in the FEIS, and AEM agrees to do so.
AANDC-61	AANDC requests that the Proponent commit to providing a detailed explanation as to why the Baker lake data will not be used for the Meliadine mine site if there are apparent similarities in landforms, terrain and vegetation. AANDC requests that the Proponent commit to providing information on soil composition, moisture content and ground vegetation type in Table 23. AANDC requests that the proponent provide information on the active layer thickness for identified terrain units over the mine site.	AEM agrees to provide explanation as to why the Baker Lake data is not used. Clarification on Table 23 is required. Table 23 occurs in Section 4.2.5 of the document, and relates to the background thermistor installed in 1998. It is interpreted that the reviewer is referring to Table 13 in Section 2.5 of the document which relates to the CALM site. General information on the soil types as obtained from the CALM web site were provided with IR 24. There are no other data available. The value of trying to link active layer thickness directly to the terrain units across the site is questionable. The active layer thickness is generally consistent between about 1 m and 2 m depth, averaging about 1.7 m with maximum thickness of about 3 m based, on the available data.
AANDC-64	AANDC requests that if no calculation of the geothermal gradient was done, then the Proponent should change the term “extrapolated” mean annual surface temperature to “estimated” mean annual surface temperature in the FEIS.	AEM agrees to make the requested change
AANDC-68	AANDC requests that the proponent rephrase sections of the report for consistency. AANDC further requests the Proponent commit to evaluating the role of dilution for the Primary Containment pond, including catchment area, and the relative proportions of runoff from the Operations Pad and ‘clean’ surface water from off site.	AEM commits to review the report and rephrase for the FEIS if appropriate. AEM requires clarification from AANDC on the technical comment.
AANDC-69	For clarity, AANDC requests that the Proponent include a description of the regulatory context of the Terrestrial Environmental Management and Monitoring Plan in the FEIS, as noted in the response to the Information Request.	AEM has made the commitment to include the IR response in FEIS
AANDC-70	AANDC requests that the proponent commit to providing references to the relevant section in SD 8-1 of Vol.8 (Shipping Management Plan), where appropriate measures to avoid or reduce effects on marine mammals are discussed, and/or other appropriate sections of the Draft EIS.	Volume 8 provides references for the effects analysis of the Project and its activities on marine mammals. Also, the proposed measures to avoid or reduce effects on marine mammals stem from IQ, and Areva and Baffinland EISs. AEM will add the references in the final EIS.
AANDC-71	AANDC requests that the proponent commit to providing mitigation measures for noise abatement in the Terrestrial Environment Management and Monitoring Plan (SD 6-4) and to cross-reference with the appropriate sections in the final Noise Abatement and Monitoring Plan (SD 5-2 and relevant sections of Vol.2 (Project Description).	AEM agrees to add more detail in the TEMMP, as appropriate, for the FEIS
AANDC-72	For clarity, AANDC requests that the proponent commit to cross referencing Sec.10 of SD 2-9 (Roads Management Plan) in Sec 2.1/3.2 of SD 6-4.	AEM will cross-reference applicable sections in the FEIS
AANDC-74	AANDC requests that the Proponent include a clear statement as to the rationale for not using groundwater as a VEC and ensure consistency in reference and discussion of groundwater issues across the various volumes of the FEIS.	AEM agree to review and update to provide greater clarity where required for the FEIS
AANDC-75	AANDC requests that the Proponent include a clear discussion on the potential effects associated with water control and containment measures in the FEIS as noted in the response to the Information Request.	include response to IR48 in the FEIS where applicable

Technical Review Comment-Agency & Number	Comment	Initial Comments
AANDC-76	AANDC requests that the Proponent commit to providing preliminary monitoring site locations in the FEIS, and that these sites be clearly indicated on maps in the documents.	AEM requests clarification as to what is meant by clearly indicated. Preliminary monitoring sites have ben provided within the AEMP. Detailed AEMP design, including final monitoring site locations, will be determined following consultation with communities and regulatory agencies, and will be included in the AEMP design document during the water licensing process.
AANDC-77	AANDC requests that the Proponent commit to including in the FEIS the information provided in the response to IR 53.	AEM commits to including the information provided in the response to IR 53 in the FEIS where appropriate.
AANDC-78	AANDC recommends that the Proponent include documented TK, IQ and local concerns into their discussion on potential socioeconomic impacts arising from shipping on marine species of cultural significance to local residents. For example, the Proponent could use results from the Meliadine Gold Project Traditional Knowledge, Marine Approaches to Rankin Inlet Report (Appendix 9.3-C) and other available sources of IQ described in Volume 8 in order to discuss and assess potential socio-economic impacts on harvesting.	AEM commits to review the referenced sections and update in the FEIS as appropriate
AANDC-82	AANDC recommends that the Proponent provide an evaluation of the training program planned, the associated challenges and the likelihood of success of trainees to satisfy the Project needs and regional economic development initiatives with consideration of the cultural and language barriers. AANDC also recommends that the Proponent include relevant information from the Meadowbank Project.	Discussed with Linda Havers and information will be sent by Larry from Meadowbank regarding the info necessary.
AANDC-83	AANDC recommends that the Proponent discuss all potential effects related to the closure of the mine on education and training in the Kivalliq Region.	Potential effects related to the closure of the mine on education and training in the Kivalliq Region will be included in the FEIS.
AANDC-84	AANDC recommends that the Proponent provide information related to the interactions between VECs and VSECs in the Effect Analysis of Volume 9. Specifically a matrix in Appendix 4.1-A showing these interactions would assist reviewers in understanding the interactions between these components.	This will be considered in the FEIS as appropriate
AANDC-87	AANDC recommends that the Proponent provide a summary or overview of its current Life Skills Training Program modules delivered at the Meadowbank Mine to all reviewers as confidential and nonconfidential material, as well as any evaluations or feedback on the program to date. AANDC also recommends that the Proponent provides non-confidential material to the general public for consultation. AANDC recommends that the Proponent include details in the FEIS of its Work Readiness Training once it is completed. The Proponent should also provide evidence in the DEIS that the effectiveness of the Work Readiness Program will be monitored, and that monitoring outcomes be shared with the Kivalliq Socio-Economic Monitoring Committee.	AEM will provide a summary of this information in the FEIS and has already committed to provide updates on these programs to the Kivalliq SEMC along with a discussion on the effectiveness as it becomes available from experience.
	*The Proponent's entire submission includes additional columns and rows which have been removed from this table where such do not list specific commitments. Note that the original submission is available from the NIRB's online public registry at: http://ftp.nirb.ca/02-REVIEWS/ACTIVE%20REVIEWS/11MN034-AEM%20MELIADINE/2-REVIEW/07-IRS%20%26%20TECHNICAL%20REVIEW/05-RESPONSE%20TO%20TECHNICAL%20COMMENTS/.	

Appendix 2: Commitment List from Technical Meeting and post-Technical Meeting

Appendix 2: List of Commitments from Nunavut Impact Review Board's Technical Meeting for Agnico Eagle Mines Ltd.'s Meliadine Project (NIRB File No. 11MN034)

1) Please note that any commitments requiring submission of materials prior to the Final Environmental Impact Statement (FEIS) are also to be included within the FEIS where applicable.
2) Where it is requested that data be provided, it is expected a related discussion will also be included within the FEIS.
3) Where no timelines are indicated, Agnico Eagle Mines Ltd. (AEM) is to provide as per requests by the party.

Commit-ment #	Party	Reference (relevant IR or TRC)	Commitment
DEIS Organization, Conclusions and Methodologies			
1	Rankin Inlet HTO		AEM commits to facilitate access to the bay [Melvin Bay] near the tank farm and laydown area, and to include increased representation of the access trails within a figure that is to be included within the FEIS.
2	KIA	IR 23	AEM commits to provide a discussion of ice and water content in the overburden that would be included in the waste rock piles and also AEM commits to including rationale for not storing overburden for reclamation within the FEIS.
3	KIA	TRC 10, 12	AEM commits to provide a discussion regarding the flow of [site] water into Meliadine Lake including contact water(s) and will ensure that all contact water and total suspended solids will be treated until it can be demonstrated that these water can be released without treatment with discussions provided within the FEIS.
4	KIA and other parties		Where AEM's response to parties' technical review comments indicates incorporations into the FEIS "as appropriate" or "as applicable", AEM further commits to provide discussion and summaries as requested by parties' technical review comments within the FEIS and, where not included, AEM will provide a rationale clearly stating why the information was omitted.
Alternative Assessment including Geology, Geotechnical Information and Waste Management			
5	Rankin Inlet HTO		AEM commits to provide a summary of discussions with the Hamlet of Rankin Inlet on any developments that would occur in assisting community facilities and infrastructure within the FEIS.
6	KIA	DFO 13 & GN 9	AEM commits to include a discussion on alternatives and an assessment of their feasibility for the disposal of any treatment of water brine in excess of that which is needed for drilling operations within the FEIS.
7	AANDC	AANDC TRC 2	AEM commits to elaborate on details regarding the geotechnical conditions around underground workings and ensure the information provided will address the interested parties' concerns within the FEIS.
8	AANDC	AANDC TRC 68	AEM commits to clarify within the FEIS that the containment pond water quality was not used in the site water quality prediction modelling. Further AEM commits to describe the laboratory leaching data that was used to derive waste rock contact water quality.
9	AANDC	AANDC TRC 39, 40 and IR 32	AEM commits to provide within the FEIS a detailed description of the materials required for the construction of the berm at the landfill and to provide more information to ensure impacts from potential leachate are adequately mitigated and that the impact analysis is complete.
10	AANDC	AANDC TRC 39 and IR 32	AEM commits to include in the FEIS a commitment to undertake an assessment of the berm and subgrade stability during the design phase to be presented during the Type A water licensing process.
11	AANDC	AANDC TRC 39 and IR 32	AEM commits to provide a conceptual design of the cover layer on the landfill, including material composition and thickness within the FEIS.
12	AANDC	AANDC TRC 41	AEM commits to provide further rationale within the FEIS that supports its assertion that the landfill would not impact groundwater.
13	AANDC	AANDC TRC 58, 61, 62 and 63	AEM commits to compile existing information presented in the draft EIS (DEIS) relating to snow thickness, soil composition, moisture content, permafrost temperature and ground vegetation into a dedicated section within the FEIS.
14	AANDC	AANDC TRC 30	AEM commits to provide within the FEIS, an estimate of ore volume from the Discovery pit that is expected to be in a temporary ore stockpile prior to it being transported to the Meliadine site for processing and to provide an estimate of heat generated from sulphide oxidation predicted to be released by the ore in the temporary stockpile.

Commit-ment #	Party	Reference (relevant IR or TRC)	Commitment
15	AANDC	AANDC TRC 65	AEM commits to revise the wording in section 4.4, supporting document (SD) 6-1 describing the basis for the selection of the surface temperature wave used for calculation of depth of zero annual amplitude for the FEIS.
16	AANDC	AANDC TRC 3	AEM commits to include within the FEIS a dedicated section that compiles the available site date relating to ice content, active layer thickness and terrain mapping; including data on the thermal conditions of waste rock facilities at Meadowbank (and other relevant sites if available); and provide rationale as to why additional modelling of waste rock facilities and foundations is not required.
17	AANDC	AANDC TRC 67	AEM commits to provide depletion calculation rates for sulphide and neutralization potential (NP) in potentially acid generating humidity cell tests (HCT) to support the conclusion of the analyses within the FEIS.
18	AANDC	AANDC TRC 67	AEM commits to provide within the FEIS, a description as to why the 30 week duration of the chemical leaching rate tests was sufficient to deplete carbonate NP, and to include a discussion on the tailings testing duration.
19	AANDC	AANDC TRC 66	AEM commits to providing additional clarification to section 5.1 of the permafrost baseline report to describe the methodology used to calculate the depths at which permafrost 'opens'. AEM also commits to providing a discussion of the limitations of the methodology.
20	AANDC	AANDC TRC 39 and IR 32	AEM commits to update the FEIS with its response to AANDC IR 32 as related to details on materials as part of AANDC's original request.
21	AANDC	AANDC TRC 44 and IR 39	AEM commits to present the proposed monitoring of landfill condition (frozen or unfrozen) in the FEIS as stated in the response to AANDC IR 39.
22	NRCan	NRCan TRC 18	AEM commits to do an additional interpretation of acid-base accounting (ABA) results based on carbonate neutralization potential (CaNP) and total sulphur, taking into consideration the presence of ankerite and siderite and to provide the interpretation within the FEIS.
23	NRCan	NRCan TRC 19	AEM commits to do an additional, alternative calculation of the percentage of waste rock samples classified as potentially acid generating (PAG), uncertain and net acid generating (NAG) using CaNP and total sulphur values and describe how the updated values may impact the design of the waste rock storage area for the Discovery deposit and associated mitigation measures if necessary and provide the information within the FEIS.
24	NRCan	NRCan TRC 20	AEM commits to update its plan for the management of waste rock as necessary, to address the potential for oxidation/acid generation and metal leaching from waste rock for the FEIS.
25	NRCan	NRCan TRC 21, 22 and partially 23 to 25	AEM commits to do an additional interpretation of the potential for acid generation from the tailings based on mineralogy and available buffering capacity, and reassess tailings management options as necessary and to provide the information within the FEIS.
26	NRCan	NRCan TRC 22 to 25 and EC TRC 24	AEM commits to provide details on the effluent water treatment options and constituent concentrations that may be achieved at end-of-pipe within the FEIS.
Atmospheric Environment including Climate, Air Quality, Noise and Vibration			
27	KIA	KIA IR 17	AEM commits to provide additional rationale within the FEIS to support the Meliadine air quality model results for dust dispersion including a review of dust modelling and monitoring results from the Meadowbank mine site as well as to provide a discussion of any results that it deems are not relevant to the proposed Meliadine project and rationale for excluding these.
28	EC	EC TRC 8 and IR 133	AEM commits to review the reference provided by EC in IR #133 and to include information on greenhouse gases (GHG) that are applicable to the Meliadine site within the FEIS.
29	EC	EC TRC 9	AEM will commit to provide EC with the requested input and control files used in the CALPUFF model and post processing utilities used to generate the air quality predictions presented in the Meliadine DEIS.
30	NIRB		AEM commits to review its rationale regarding modelling scenarios for air quality and to provide a summary within the FEIS to explain why 2 pits operating concurrently was not included as a boundary condition.
31	NIRB		AEM commits to provide justification for its differentiation of the operations fleet used during weekday versus weekend and frozen vs. unfrozen periods, within its analyses of air quality for the all weather access road including consideration of potential public use of the [AWAR] road within the FEIS.

Commit-ment #	Party	Reference (relevant IR or TRC)	Commitment
32	NIRB		AEM commits to provide clarification within the FEIS regarding its road management plan and specifically to clarify dust control measures that would be undertaken.
33	KIA	KIA IR 26	AEM commits to provide an enhanced GHG reduction strategy as part of the project description within the FEIS.
Aquatic Environment including Water Management, Freshwater Environment, Hydrology, Hydrogeology and Mine Rock Characterization			
34	KIA	KIA IR 13	AEM commits to review pathway analyses where no linkage is predicted and confirm prior to the FEIS that none were missed in the EIS document. If any linkages were missed, AEM commits to providing discussion within the FEIS to ensure that pathways between mine activities and surface water have been effectively cut off through "environmental design features and mitigation".
35	KIA	KIA IR 4 and 8.	AEM commits to provide a rationale within the FEIS as to why the existing climate historic record was used for the near future climate assessment and to include a comparison between the historical record and the 2020s climate model predictions. Depending on the results of this comparison, AEM will determine if modification to the conclusions and assessment is required for the FEIS.
36	KIA	KIA IR 5 and 6	AEM commits to provide within the FEIS, a rationale for not having provided a standalone significance determination of change in water quality and quantity in Volume 7.
37	HTO		AEM commits to ensuring that water monitoring plans [are] included within the FEIS and that they are put in place as described, should the [Meliadine Gold project] be allowed to proceed.
38	GN	GN TRC 3	AEM commits to conduct water quality monitoring in Meliadine River and to include this information along with baseline water quality data within the FEIS. Further, AEM will also include in the FEIS a commitment to consult with regulatory agencies in determining reference waterbodies (lake(s) and river(s)) to be used for the aquatics effects monitoring plan for the Type A Water Licence.
39	NIRB		AEM commits to review and include additional 2013 water quality data for Meliadine Lake within the FEIS or to provide a rationale as to why additional baseline for Meliadine Lake is not included in FEIS.
40	AANDC	AANDC TRC 23	AEM will include in the FEIS a commitment to consider the potential impacts of permafrost or thawing in the design of contact water ponds for the Type A Water Licence.
41	AANDC	AANDC IR 5 through 9 and TRC 18 through 22	AEM commits to provide its responses to AANDC IRs 5 through 9 as presented in responses to technical review comments 18, 19, 20, 21 and 22 within the FEIS.
42	EC	EC TRC #24	AEM commits to providing a review of candidate effluent water treatment options that may be used to achieve reductions in concentrations of parameters of concern at end-of-pipe, including but not limited to, major ions, sulphate, cyanide and metals within the FEIS.
43	NIRB	Related to Table 7.2-3 of volume 7	AEM commits to provide clarity in the FEIS regarding the pathway analyses for water quality.
44	NIRB	Related to Table 7.3-27 of Volume 7	AEM commits to review table 7.3-27 of the DEIS and to include appropriate cross-referencing within the FEIS where possible.
45	KIA	KIA IR 19	AEM commits to provide the mass balance model for total dissolved solids, chloride and sodium within the FEIS.
46	KIA	KIA IR 19 and 22	AEM commits to provide the framework for its water quality adaptive management plan within the FEIS. The detailed plan will be provided in support of the [Type A] Water Licence application.
47	KIA	KIA IR 22	AEM commits to provide a mass balance/dilution assessment of oxygen response to effluent discharge sufficient to demonstrate no significant adverse effects on dissolved oxygen within the FEIS.
48	KIA	KIA IR 24	AEM commits to provide a summary of data regarding accumulation of sediment and sediment quality at diffuser outlets similar to the Meliadine project, if available, within the FEIS.

Commit-ment #	Party	Reference (relevant IR or TRC)	Commitment
49	DFO		AEM commits to review the new *Fisheries Act* , specifically Schedule 1 and Section 7-13, Section 6, and available new DFO policy statements relating to the new Act. Also, AEM will review available new regulations, including new Aquatic Invasive Species Regulations, new MMER Regulations, and Marine Mammals Regulations, if in force at the time of preparation of the FEIS, and will incorporate applicable information and updated terminology into the FEIS and an updated Off-Setting Plan (formally called No Net Loss Plan). AEM will also include common and Inuktitut names of fish and provide photos within the FEIS.
Socio-Economic Environment and Assessment including Heritage Resources			
50	KIA	KIA IR 30, 31, 32, 34, 35 and 37	AEM commits to review the additional data provided by KIA in reference to the Socio-Economic Environment and include where appropriate within the FEIS. Where not included AEM will provide rationale for not including in the FEIS.
51	GN	GN TRC 34	AEM commits to provide information on the mitigation measures that would address the following barriers: decreasing numbers of unemployed; limited education achievement; challenges of rotational work; and, limited participation by women in Volume 9.
52	GN	GN IR 4 and AANDC 86	AEM commits to provide additional information, in principal, on what plans AEM has for socio-economics during temporary closure of the mine within the FEIS, supporting document 2: Socio-Economic Management Plan.
53	GN	GN TRC #39	As per the Road Management Plan Section 7.1 of Volume 7, AEM commits to regular inspections of the bridge constructed in 2012 on the lower Meliadine River to ensure that the natural flow of water is maintained at this specific location. AEM will report the results of the inspections to the Territorial Archaeologist. The timing of the inspections should coincide with the annual ice break up in the spring/early-summer. If archaeological sites within Iqaluqaarjuup Nunanga Territorial Park continue to be damaged by flooding in the future, appropriate protective measures will be developed to consider long-term solutions.
54	GN	GN TRC 41	AEM will remove the third paragraph from Section 9.11.6 of Volume 9 regarding Cumulative Effects for archaeological feature types. Archaeological feature type representation will be considered on a case-by-case basis during the permitting process.
55	GN	GN TRC 44	AEM commits to include a discussion within the FEIS regarding potential residual effects to cultural and archaeological resources in the project area using terminology consistent with the methodology used within the environmental assessment.
56	AANDC	AANDC TRC 55	AEM commits to provide an update and inform the parties (six groups) outside the Nunavut Settlement Area and report the results of the consultation within the FEIS.
57	AANDC	AANDC TRC 54	AEM commits to clarify the methodology used for selecting key community concerns within the FEIS.
58	AANDC	AANDC TRC 85	AEM commits to report the details on the direct employment effect analysis, namely total payroll and payments to contractors in both the construction and operation phases based on the Meadowbank experience.
59	AANDC	AANDC TRC 82	AEM commits to include an evaluation of the training programs planned for the Meliadine site and include any relevant information from lessons learned from the Meadowbank site in the FEIS.
60	NIRB		AEM commits to include details regarding its proposed hunter harvest monitoring program similar to what has been developed for the Meadowbank project along the all-weather access road within the FEIS.
61	NIRB	Related to table 9.1-3, Volume 9	AEM commits to review Volume 9 of the DEIS and clarify the study areas for the assessment including the potentially impacted communities. The FEIS will be updated as required.
62	NIRB	Related to table 9.1-3, Volume 9	AEM commits to provide rationale for the definition of duration used in Volume 9 and for any differences between definitions used for the ecosystemic and socio-economic environments.

Commit-ment #	Party	Reference (relevant IR or TRC)	Commitment
63	NIRB		AEM commits to update the FEIS to provide references and clarification as requested during the Technical Meeting. Sections as follows: ▪ s. 9.3.1.6.1 (p. 9-76): "All communities have a number of Anglican, Roman Catholic, Glad Tidings and/or….The remaining 1% of the population identifies as having another religion." - references required. ▪ s. 9.3.5.3 (p. 9-105): "The cumulative effects on Individual, Family and Community Wellbeing were discussed in Section 9.6.8...It is also possible that a critical mass of well-functioning individuals and families can act as role models to other members of the community." - clarification regarding the statements made in this section, and references to justify statements required. ▪ s. 9.4.1.1 (p. 9-125): "Telecommunication in Nunavut relies on costly...with other internet service providers in the larger Nunavut communities." - references required. ▪ s. 9.4.1.2 (p. 9-127): "Arviat had a population of 2331 in 2010. Population has grown by 16.7% per year since 2001..." - reference required. ▪ s. 9.4.1.2 (p. 9-128): "The housing shortage (there were reportedly 600 names...resistant staphylococcus aureus infections." - references for waiting list numbers; additional details from housing authorities regarding the numbers of people on various housing lists. ▪ s. 9.4.1.2 (p. 9-129): "Chesterfield Inlet is also one of the oldest communities in...considered by people who live there to be quiet and more traditional than others in the Kivalliq." - references required. ▪ s. 9.4.1.2 (p. 9-130): "Land based activity is not as...Inuit identity is being challenged." - references required. ▪ s. 9.6.4.2 (p. 9-232): "Most people, including addiction counselors and...Many people in Baker Lake do not believe that alcohol abuse has increased in association with Meadowbank." - references required. ▪ s. 9.6.4.7 (p. 9-236): "With regard to in-migration, different...other hamlets become more varied in their population and more accepting of diveristy." - references required. ▪ s. 9.7.1.2.1 (p. 9-254): References required for text within this section. ▪ s. 9.7.1.2.3 (p. 9-255): References required for text within this section. ▪ s. 9.7.1.2.4 (p. 9-255): "All communities have RCMP....those that are not police related (e.g., assistance with tax returns)."
64	NIRB		AEM commit to review material related to alcohol and abuse related to change in shift with Meadowbank and address as necessary in the FEIS.
65	AANDC	AANDC TRC 80	AEM commits to provide information on type of cross-cultural training that would be provided to employees at the Meliadine site and include information pertaining to how long an individual will need to be on site before receiving this type of training. Discussion to be provided within FEIS.
66	GN		GN commits to work with AEM to discuss how best to arrange interviews with key informants in Rankin Inlet to assess the existing capacities of the health and education facilities and information to be provided in the FEIS.
Public Engagement and Incorporation of Inuit Qaujimajatuqangit			
67	KIA	KIA IR 01	AEM commits to provide additional information on how it incorporated Inuit Qaujimajatuqangit into the document and provide a summary in the FEIS.
68	NIRB		AEM commits to update the FEIS to identify where [Inuit Qaujamajatuqangit] traditional knowledge was used in the analyses of VECs.
Terrestrial Environment including Wildlife, Migratory Birds, Species at Risk and Vegetation			
69	GN	GN TRC 19, 21, 22 and 25; EC TRCs 1, 4, 5, 6, 7; KIA IR 2, IR 3 and TRC 3; and AANDC TRC 69 and 71	AEM will provide more detail within the Terrestrial Environment Management and Monitoring Plan (TEMMP) for the FEIS including the following: 1) Wildlife monitoring protocols including survey design and methods and integration with existing programs (e.g., GN caribou collaring); 2) Specific mitigation and management strategies as advised by GN-DoE, EC, Rankin Inlet-HTO and KIA; 3) Specific mitigation and management strategies with examples of “What-if” scenarios for dealing with migratory birds and raptors, and their nests, predator dens and caribou migration; 4) Human-wildlife conflict management plan; and 5) Mitigation and management specific to the all-weather access road (AWAR) road.

Commit-ment #	Party	Reference (relevant IR or TRC)	Commitment
70	GN	GN TRC 13	AEM will not include grizzly bears, wolverine and arctic fox as VECs in the FEIS, but AEM commits to undertake a den survey prior to construction of Project infrastructure and phase II of the road and other project infrastructure. In addition, AEM will include management strategies the management, mitigation and monitoring of these species within the TEMMP, specifically as part of the human-wildlife conflict management plan.
71	GN	GN TRC 17	Provided AEM can acquire appropriate data (i.e., rate of annual expansion and density by management areas to calculate eastward expansion), AEM will predict range expansion densities towards the Project area and provide a discussion regarding future muskox distribution near the Project including a rationale for, and explicit inclusion of, muskox in the TEMMP but not as a formal VEC in the FEIS.
72	GN	GN TRC 23	Provided AEM can acquire appropriate data (i.e., rate of annual expansion and density by management areas to calculate eastward expansion) for muskox, AEM commits that it will predict range expansion densities towards the Project area and provide a discussion regarding future muskox distribution near the Project and provide a rationale for inclusion in the TEMMP but not as a formal VEC in the FEIS.
Human Health and Risk Assessment			
Cumulative Effects Assessment			
73	NIRB		AEM will provide a graphic representation within the FEIS of the cumulative effects assessment that was completed.
74	NIRB		AEM will clarify that its consideration of cumulative effects within the FEIS included the Qamanirjuaq caribou herd, and will update its cumulative effects assessment if required.
Marine Environment and Marine Transportation			
75	EC	EC TRC 2 (125 as submitted)	AEM commits to include in its shipping contracts the setback distances as recommended by Environment Canada.
76	EC	EC TRC 2 (125 as submitted)	AEM commits to make its best efforts to provide ship track data to [the] NIRB for inclusion in its annual monitoring report for the Meliadine Gold Project, if approved.
77	GN	GN TRC 14	AEM will review the references related to occurrence of polar bears in the marine environment in particular known summer time concentrations along the shipping route and update the baseline information within FEIS as needed.
78	GN	GN TRC 15	AEM will work with the GN and other agencies to acquire appropriate data related to marine mammal (e.g., polar bears, walrus) and marine bird distribution and density to assess worst case and best case scenarios should a fuel release or spill event occur in the marine environment along the shipping route. Using the available data where applicable, AEM will for the FEIS: 1) highlight rough densities of marine mammals (e.g., polar bears) along the shipping routes; 2) justify the likelihood of major spills (i.e., justify one in a hundred years), and provide rationale around the parameters of magnitude (i.e., location of spill, volume of spill, area of dispersion, type of spill, response time); 3) identify worst case scenario (i.e., highest density of polar bears, high volume, worst type of liquid) and best case scenario (i.e., lowest density of marine mammals, low volume, lightest type of liquid); and 4) where appropriate, update the impact assessment within the FEIS.
79	NIRB	Related to Section 8.1.2 of Volume 8	AEM commits to clarify statement in Section 8.1.2 within the DEIS "RSA (regional study area) also includes waters, communities, and portions of Nunavut and other regions of Canada that may be relevant to the assessment of widespread effects of the project…Subsequently, transboundary impacts are incorporated into the effects assessment." within the FEIS.
80	NIRB	Related to Section 8.3.7.2.1 of Volume 8	AEM commits to clarify statement in section 8.3.7.2.1 within the DEIS which states "At the Project level….natural recruitment, with an unlikely probability of occurrence given the application of proposed mitigation…" within the FEIS. This clarification will include a description of "natural recruitment" and how this would work to reverse the effects of a major fuel spill and evidence that this would work in an arctic environment.

Commit-ment #	Party	Reference (relevant IR or TRC)	Commitment
81	NIRB	Related to Section 8.3.11 of Volume 8	AEM commits to providing within the FEIS, clarification/justification regarding its statement in the DEIS Section 8.3.11 which states "no environmental monitoring is proposed for marine fish and fish habitat."
Accidents and Malfunctions			
82	AANDC	AANDC TRC 52	AEM commits to ensure that its Emergency Response Plan includes the all weather access road and Itivia area as presented within the FEIS.
83	NIRB		AEM commits to including within its Emergency Response Plan as presented in the FEIS, clarification regarding planned location and mobilization of emergency response equipment and emergency response personnel, and procedures for responding to incidents along the all weather access road as well as at Itivia facilities. AEM will describe its plans to consult with the Hamlet of Rankin Inlet regarding the potential coordination of emergency response efforts and training for incidents at Rankin Inlet and Itivia facilities.