



**12.10.2(b) DETERMINATION REPORT
NIRB FILE NO.: 11MN034**

AANDC File No.: N2011F0024

NWB File No.: 2BWMEL----

February 20, 2012

To:

The Honourable Lorne Kusugak
Minister of Community and Government Services
Government of Nunavut
P.O. Box 1000
Iqaluit, NU X0A 0H0

Mr. David Ningeongan
President
Kivalliq Inuit Association
P.O. Box 340
Rankin Inlet, NU X0C 0G0

The Honourable John Duncan
Minister of Aboriginal Affairs
and Northern Development
Government of Canada
Executive Offices
Ottawa, ON K1A 0H4

The Honourable Denis Lebel
Minister of Transport, Infrastructure
and Communities
Government of Canada
330 Spark St., 29th Floor
Ottawa, ON K1A 0N8

The Honourable Joe Oliver
Minister of Natural Resources Canada
Government of Canada
580 Booth St., 3rd Floor
Ottawa, ON K1A 0E4

The Honourable Keith Ashfield
Minister of Fisheries and Oceans
Government of Canada
520 Exmouth Street
Sarnia, ON K1A 0E6

Sent via email, fax and regular post

Re: 12.10.2(b) Determination for Agnico-Eagle Mines Ltd.'s "Phase 1: All-Weather Road" Project Proposal, NIRB File No. 11MN034

Dear Honourable Ministers and Mr. President:

On September 29, 2011 the Nunavut Impact Review Board (NIRB or Board) received an application from Agnico-Eagle Mines Ltd. (AEM or the Proponent) seeking an exception from Review for specified exploration and/or development activities ("the application") related to the NIRB's ongoing Review of AEM's Meliadine Gold Mine Project (NIRB File No. 11MN034).

This report shall serve as the NIRB's determination on the application and is provided to the respective Ministers for their consideration.

LEGAL FRAMEWORK

The NIRB is governed by the provisions of the Nunavut Land Claims Agreement (NLCA), which was negotiated based on and reflecting the following objectives¹:

- *to provide for certainty and clarity of rights to ownership and use of lands and resources, and of rights for Inuit to participate in decision-making concerning the use, management and conservation of land, water and resources, including the offshore;*
- *to provide Inuit with wildlife harvesting rights and rights to participate in decision-making concerning wildlife harvesting;*
- *to provide Inuit with financial compensation and means of participating in economic opportunities; and,*
- *to encourage self-reliance and the cultural and social well-being of Inuit.*

The primary objectives of the NIRB are set out in Section 12.2.5 of the NLCA as follows:

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

Part 10 of Article 12 of the NLCA states:

12.10.1 No licence or approval that would be required in order to allow a proposed project to proceed shall be issued in respect of a project that is to be screened by NIRB until the screening has been completed and, if a review pursuant to Part 5 or 6 is to be conducted, until after that review has been completed and a NIRB project certificate has been issued by NIRB pursuant to these provisions.

Exceptions

12.10.2 Notwithstanding Section 12.10.1, where a project proposal has been referred for review pursuant to Part 5 or 6, approvals or licences for exploration or development activities related to that project may be issued if:

- (a) the activity falls within Schedule 12-1; or*
- (b) the activity can, in the judgement of NIRB, proceed without such a review.*

¹ Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty The Queen in Right of Canada

Further to the objectives and provisions outlined above, on September 13, 2011 the Minister of Aboriginal Affairs and Northern Development (AAND) issued correspondence to the Board which referred the Meliadine Gold Project (NIRB File No. 11MN034) to the NIRB for public Review and, in accordance with NLCA 12.5.1, which provided specific direction regarding the NIRB's consideration of the All-Weather Road pursuant to NLCA 12.10.2 as follows:

The discretion to consider and subsequently grant exceptions under 12.10.2 of the Agreement rests with the Board and should only be exercised after careful consideration.

Accordingly, upon accepting the application pursuant to NLCA Section 12.10.2(b), the NIRB conducted a thorough review of the technical matters pertaining to the proposal, and is now expected to provide a determination to the respective authorizing agencies regarding whether they can proceed to issue the required approvals independently of the related project undergoing Review. A determination by the NIRB to allow specific exploration and/or development activities to proceed independently of the Review of the related project under section 12.10.2(b) does not affect the requirement for the Proponent to obtain any licences, permits or approvals required to undertake the activities.

Further, the NIRB's consideration and determination in respect of a section 12.10.2(b) exception application is in no way an indication of the likely outcome of the Review process associated with the related project to which the exception application activities are related. Neither does the NIRB's determination in relation to the section 12.10.2(b) exception application affect the Board's ultimate determination regarding whether the related project under Review should be allowed to proceed, nor the issuance of a NIRB Project Certificate following the final decision of the Minister of AAND.

NIRB ASSESSMENT AND DECISION

After a thorough assessment of all material provided to the Board, in accordance with the primary objectives as described above, the determination of the Board pursuant to Section 12.10.2(b) of the NLCA is to approve the exception of AEM's "Phase 1: All-Weather Road" project from the NIRB's ongoing Review of AEM's Meliadine Gold Mine Project (NIRB File No. 11MN034).

This determination applies only to the exploration and/or development activities as described within the application and is subject to the implementation of the Board's recommendations as set out in this report.

PROCEDURAL HISTORY: BACKGROUND

On February 6, 2011 the NIRB received AEM's "All-Weather Road (AWAR)" project proposal directly from AEM. On February 16, 2011 the NIRB received a referral for screening from the Kivalliq Inuit Association (KIA) for a Land Use Licence III application associated with this project proposal. April 1, 2011 the NIRB received a positive conformity determination (Keewatin Regional Land Use Plan) from the Nunavut Planning Commission (NPC) for this file

and commenced screening of the project proposal. The NIRB assigned this project proposal file number 11RN017.

After completing a review of the application materials submitted, comments received and the provision of several opportunities for the Proponent to respond to comments, concerns and requests for clarification, on July 4, 2011 the Board recommended to the Minister of AAND that this project proposal be returned for clarification pursuant to Section 12.4.4(c) of the NLCA, as it was the NIRB's determination that the project proposal was insufficiently developed to permit proper screening. Recognizing that there was considerable public support for the development of an AWAR from Rankin Inlet to the Meliadine Lake area, the NIRB found that sufficient details had been provided relating to the design, construction and maintenance standards to be implemented, consideration of traffic management, emergency response, snow clearing, and the management of hazards. In addition, the concerns of commenting parties and the NIRB regarding the safety implications of public access to the road were not adequately addressed in the application. The NIRB further determined that insufficient information had been provided regarding the need for, and alternatives to, the AWAR in connection with the Proponent's exploration and bulk sampling activities. Consequently, the NIRB found that the proposal for the development of the AWAR from Rankin Inlet to the Meliadine site was not an independent, standalone project proposal, as presented to the NIRB by AEM. Reflecting these issues, the Board recommended that construction of the AWAR would more appropriately be considered within the context of the Meliadine Gold mining and milling development project, NIRB File No. 11MN034, as described below.

On May 4, 2011 the Board received a referral for screening for AEM's "Meliadine Gold Mine" project proposal. The Board assigned the proposed mining and milling development file number 11MN034 and commenced screening the proposal. Reviewing this project proposal in context, it was the finding of the NIRB that the AWAR proposal (as presented) was inextricably linked to the proposed mining and milling development, and for the AWAR project and mining and milling development to be considered separately would run contrary to the holistic approach in accepted impact assessment practice. After completing a review of all application materials received, comments from the public as well as responses provided by AEM, in a Screening Decision Report issued to the Minister of AAND on July 8, 2011, in accordance with Section 12.4.4(b) of the NLCA the NIRB indicated that the proposal required review pursuant to Part 5 or Part 6 of NLCA Article 12.

On September 14, 2011 the NIRB received correspondence from the Honourable John Duncan, Minister of AAND (the Minister), regarding the NIRB's Screening Decision Report for AEM's "Meliadine Gold Mine" project proposal. The Minister accepted the Board's recommendation that the Meliadine Gold Mine project proposal required a public review, and directed that the project proposal be subject to Review by the NIRB in accordance with NLCA Article 12, Part 5.

The Minister also indicated that, should AEM choose to reapply for early development of an AWAR between Rankin Inlet and the Meliadine site, it would be essential that the mine proposal (i.e. project description) be updated to reflect the modified proposal. It was further noted, as outlined above, that the discretion to consider and subsequently grant exceptions under NLCA 12.10.2 rests with the Board and should only be exercised after careful consideration.

PROCEDURAL HISTORY: CURRENT APPLICATION

On September 29, 2011 the NIRB received an application package from AEM to facilitate the Board's consideration of the proposed construction and operation of a controlled access, single lane all-weather access road from Rankin Inlet to the Meliadine site in support of the Proponent's continued exploration and bulk sampling program, pursuant to NLCA Section 12.10.2(b). On October 20, 2011 the NIRB invited comments from interested parties on AEM's 12.10.2(b) application for its "Phase 1: All-Weather Road" proposal, with a request for submissions to be submitted on or before November 21, 2011.

As activities excepted under NLCA Section 12.10.2(b) would be considered for approval separately from the NIRB's Review of AEM's Meliadine Gold Mine project proposal, parties were asked to provide their comments and advice to the Board regarding the following issues:

- Agreement or disagreement with the conclusions in the 12.10.2(b) application package regarding the alternatives assessment, environmental impacts, proposed mitigation, significance of impacts, and monitoring measures;
- Whether or not conclusions in the 12.10.2(b) application package were supported by the analysis;
- Assessment of the quality and presentation of the information in the 12.10.2(b) application package;
- The expressed need for and required timing of the proposed exceptions as presented within the 12.10.2(b) application package;
- Permanence of proposed infrastructure;
- The reversibility of potential impacts;
- The adequacy of proposed security bonding; and,
- Whether approval of the activities would have the effect or appearance of fettering any further or final decision by the Board relating to the larger project under Review.

On or before November 21, 2011 comments regarding AEM's 12.10.2(b) application were received from the following parties:

- Kivalliq Inuit Association;
- Government of Nunavut;
- Aboriginal Affairs and Northern Development Canada;
- Environment Canada;
- Fisheries and Oceans Canada;
- Transport Canada; and,
- Kivalliq Services.

On December 2, 2011 the NIRB requested that AEM respond to parties' comments and provide additional information as was requested in those submissions from the agencies identified above. Following receipt of AEM's response to public comments pertaining to its application, on December 16, 2011 the Board distributed the additional information to the public with a request for submission of comments on or before January 20, 2012.

On or before January 20, 2012 the NIRB received comments from the following parties:

- Government of Nunavut;
- Aboriginal Affairs and Northern Development Canada;
- Environment Canada;
- Fisheries and Oceans Canada; and,
- Transport Canada.

PROPOSED ACTIVITIES AND SCOPE OF ASSESSMENT

In AEM's September 29, 2011 12.10.2 application materials, the Phase 1: All-Weather Road would involve construction of a 23.8 kilometre (km) single lane road between the Char River and the Meliadine West Advanced Exploration site, with access to be controlled by a manned gate after the turn-off point at the Char River bridge.

Detailed proposed project activities include:

- Construction of an all-weather access road connecting an existing municipality road in Rankin Inlet with the Proponent's Meliadine Property;
- All-weather road to span 6.5 metre (m) running-width, with crossings at Char River, Meliadine River and 10 ephemeral streams;
 - Replacement of existing bridge across Char River with a single-span bridge (29.5 m length)
 - Construction of a single-span bridge (29.5 m length) across the Meliadine River
 - Ice bridge may be built to install the bridge girders in the Meliadine River
 - Construction of a single-span bridge (23.5 m length) across an unnamed ephemeral stream
 - Installation of stacked culverts at nine ephemeral streams
 - Abutments and ancillary facilities
- All-weather road to include 30 m long pull-offs constructed at intervals of approximately every 350 m which are designed to allow 2-way traffic to pass;
- Construction of all-weather road to employ standard road building equipment supplied by local contractors (e.g. dump trucks, loaders, dozers, drills, explosives trucks, fuel - service trucks, pickups/vans, etc.)
- Access to the road will be controlled via a manned gate and gatehouse to be located at the southern end of the road route, near a junction with an existing municipal road;
- Development of esker and rock quarries, including the use of explosives;
- Transportation of fuel from either Rankin Inlet or Meliadine site to trucks and equipment working on road;
- Generation of wastes (combustible and non-combustible);
- Use of light vehicles (vans, pick-ups) to transport personnel to and from work sites;
- Use of existing Meliadine camp facilities including fuel storage, explosives storage, accommodation and incinerator facilities; commercial accommodations might also be used at Rankin Inlet;
- Construction and installation of an emergency shelter to provide refuge in the event of emergency conditions;

- Once constructed, AEM to undertake weekly inspections of the road to ensure it is maintained for safe travel; inspections to be recorded and any deficiency recorded and followed up by a corrective plan. Inspections will include bridge abutments and a visual observation of the road surface to assess the status of road foundation and erosion;
- Development of a wildlife monitoring program with input of local Hunters and Trappers Organization and the KIA to record the prevalence of wildlife seen along the AWAR;
- Ongoing water quality, air quality, and road fill sampling, monitoring and annual reporting;
- Wildlife monitoring and annual reporting; and,
- Reclamation and decommissioning of road surface and road bed upon negative feasibility results for bulk sample or negative Review determination for the Meliadine Gold Mine project [decommissioning to take place once road no longer needed for other decommissioning work at Project site(s)].

AEM has proposed that the additional construction and operation of the all-weather road related to development of the Meliadine Gold Mine be considered as a second phase (i.e. “Phase 2”) of the current proposal, and that it continue to be included with the NIRB’s ongoing Review of AEM’s Meliadine Gold Project (NIRB File No. 11MN034). AEM’s “Phase 2: All-Weather Road” proposal is, therefore, considered separate and distinct from the current application, and this determination is applicable only to Phase 1 of the AWAR. Accordingly, the activities outlined in AEM’s “Phase 2: All-Weather Road” proposal will continue to be included within the scope of the NIRB’s Review of AEM’s Meliadine Gold Mine Project (NIRB File No. 11MN034).

SUMMARY OF COMMENTS RECEIVED

In submissions provided by Transport Canada (TC) and Aboriginal Affairs and Northern Development Canada (AANDC), both agencies commented on the permanency of the all-weather road and raised questions about its long-term use, maintenance and decommissioning. Both parties also questioned whether the operation all-weather road would be incorporated into the NIRB project certificate at the conclusion of the NIRB Review, should the Project be approved to proceed. Fisheries and Oceans Canada (DFO) and the Government of Nunavut (GN) both indicated their belief that the decommissioning and reclamation of the all-weather road would likely be successful, without permanent effects to the environment.

Both the GN and the Kivalliq Inuit Association (KIA) explicitly recognized the benefit of the road to the community and supported the approval of Phase 1 of the all-weather road. There is no party that explicitly discouraged the NIRB from granting the NLCA 12.10.2(b) exception of the Phase 1 all-weather road from the Board’s Review of the Meliadine Gold project.

Concerning the issue of whether the granting of the exception application could in some way fetter the NIRB’s discretion or otherwise impact the NIRB’s Review of the mine (or could be seen to have such an impact) the consensus of the parties was that the Phase 1: All-Weather Road proposal is connected to exploration activities and thus the approval of Phase 1 of the all-weather road is legitimately independent from the approval of the mine.

The following provides a *summary* of the comments and concerns received during the public commenting period for this file. Please refer to Appendix A of this determination to review the comment submissions in their entirety.

Kivalliq Inuit Association (KIA) and Hamlet of Rankin Inlet, November 21, 2011:

- Reported that the six original concerns with the road as proposed in AEM's earlier application (and as outlined in KIA's letter of May 6, 2011) were largely addressed by AEM and that no additional issues were raised by the current proposal which divides the AWAR into two phases.
- Agreed that the Part 5 Review of Phase 2 of the all-weather road would allow parties to adequately address any remaining issues.
- With respect to security, KIA noted that AEM and KIA would work together to update the assessment of additional security required as a result of Phase 1 of the all-weather road.

Government of Nunavut – Executive & Intergovernmental Affairs (GN-EIA), November 21, 2011 (First Round of Comments):

- Commented that the all-weather road is supported by the objectives of approved GN strategies, as the road would help to ensure access to year round economic opportunities and local resources and allow the lines of business for the project to flow through the community.
- Acknowledged the financial and employment benefits of the construction of the all-weather road for local residents and stated that there is much community support.
- Encouraged AEM to work with the Department of Culture, Language, Elders, and Youth (CLEY) to mitigate impacts to archaeological resources.
- Advised that due to mitigation and management plans, Phase 1 of the all-weather road would be unlikely to result in permanent effects to wildlife or Iqalugaarjuup Nunanga Territorial Park. However GN-EIA requested that AEM consider the following:
 - The GN-EIA pointed out that the road to the Park is not an "all weather road" as referred to in AEM's application, but rather is a rough seasonal road which is not maintained in winter months.
 - Road construction staff must be trained to properly handle encounters with wildlife.
 - GN-EIA requested information regarding how AEM would manage the potential establishment and spreading of invasive species from the proposed all-weather road.
 - GN-EIA requested that the location of Peregrine Falcon nests within the Territorial Park be included in the application.
 - GN-EIA requested that AEM be required to submit a standalone wildlife management plan before commencement of any Phase 1 related activities, as well as mitigation plans to address potential impacts to territorial sites, attractions and facilities within the Territorial Park boundaries.
 - GN-EIA requested AEM identify the number and location of quarries/borrow pits within the vicinity of the Territorial Park.

- GN-EIA requested that AEM develop:
 - a noise abatement plan;
 - a dust management plan; and
 - a management plan to address the creation of unauthorized access trails from the all-weather road into the park.
- GN-EIA requested that AEM speak to the adaptability of management plans.

Government of Nunavut –Executive & Intergovernmental Affairs (GN-EIA), January 20, 2012 (Second Round of Comments):

- Supported the all-weather road overall, subject to the NIRB regulatory process.
- Advised that an effects monitoring program for the peregrine falcons in the Territorial Park was still needed, with an appropriate understanding of the effects the all-weather road may have on these birds.
- Accepted the noise and dust management plans that have been provided by AEM.
- GN-EIA advised that they look forward to reviewing the plan to mitigate potential impacts on historical sites, attractions and facilities due to noise and vibrations.
- GN-EIA indicated that they remain concerned about how AEM will prevent people from creating access trails to the Territorial Park from the all-weather road.

Aboriginal Affairs and Northern Development Canada (AANDC), November 21, 2011 (First Round of Comments):

- With respect to the analysis under Section 12.10.2(b), AANDC offered the following:
 - As the outcome of a current 12.10.2(b) exception application may be used as a precedent in the future, and because there has been a lack of guidance regarding the criteria to be used in considering exceptions to date, the NIRB ought to take a precautionary approach in coming to decisions on these applications.
 - Because the NLCA offers no guidance concerning exception applications, the NIRB ought to structure its decision in accordance with the goals and objectives of the NLCA as a whole and the entire scheme of Article 12, in particular.
 - In light of the purpose of the 12.10.2(b) exception, AANDC recommended consideration of whether the nature of a proposed excepted activity is that of a permanent core work, integral to the Project as a whole, or whether its character is ancillary, developmental and temporary.
 - Should the exception be granted in this case, the permanent character of the Road including: design, upgrades, expansion, intensified use, and long term operation, existence, and reclamation should all remain part of the Part 5 Review.
 - The NIRB ought to consider its ability to impose terms and conditions on any of the activities that are proposed to be excepted from the current Part 5 Review and how these terms and conditions, related to the longer-term use, maintenance and ultimate decommissioning of the works proposed for exception could be incorporated into the project certificate that may be granted for the larger project (if ultimately approved).

- AANDC requested clarification of certain issues related to:
 - Surface water quality and quantity;
 - Road and quarry design, construction and operation, including permafrost considerations;
 - Geochemistry;
 - Land forms and vegetation;
 - Waste management;
 - Closure and reclamation planning;
 - Hazardous materials handling;
 - Accidents and malfunctions; and,
 - Environmental impact identification, assessment and mitigation related to the above, including cumulative impacts assessment, alternatives assessment, and plans for monitoring and follow up.

Aboriginal Affairs and Northern Development Canada (AANDC), January 20, 2012 (Second Round of Comments):

- AANDC offered a series of comments and requests following up on its original technical review:
 - Requested a comparative analysis of the results of water quality testing to ensure the sampling undertaken consists of an adequate baseline.
 - Requested that AEM address the fact that laboratory detection limits intermittently exceed guidelines.
 - Requested clarification on the fact that hazard ratings for subsoil along the road are not consistent with AEM's two design scenarios: thaw stable and thaw unstable.

Transport Canada (TC), November 21, 2011 (First Round of Comments):

- TC questioned the long-time use, maintenance and decommissioning of the all-weather road and asked whether the long-term use of the AWAR would be incorporated into the project certificate at the end of the Part 5 Review.
- Reported that AEM would likely require formal approvals for works related to the AWAR under the *Navigable Waters Protection Act* and technical information on these works would be required for review under the Navigable Waters Protection Program prior to issuing approvals in accordance with a NIRB determination.

Transport Canada (TC), January 20, 2012 (Second Round of Comments):

- TC advised that the works requiring review under the Navigable Waters Protection Program were currently in the process of being reviewed.

Fisheries and Oceans Canada (DFO), November 21, 2011 (First Round of Comments):

- DFO advised that the environmental conclusions of AEM pertaining to impacts on fish and fish habitat associated with the construction of the road were sound.

- DFO agreed with AEM that the proposed monitoring regime for the watercourse crossing structures appeared to be appropriate to identify potential environmental or structural issues.
- DFO expressed concerns with the design of watercourse crossing structures, which had not changed since the original project description, and with which DFO originally took exception.
- DFO concluded that if the construction of Phase 1 of the all-weather road and associated watercourse crossings were in accordance with the advice of DFO (letter dated April 29, 2011) and DFO's Operational Statements, then impacts to fish and fish habitat could be mitigated or avoided.
- Specified that an authorization under s. 35(2) of the *Fisheries Act* would not be required for Phase 1 of the all-weather road to proceed and DFO would not require a security bond to be posted.

Fisheries and Oceans Canada (DFO), January 20, 2012 (Second Round of Comments):

- DFO requested that AEM submit a table outlining culvert assemblages due to inconsistencies in the locations of watercourse crossings as they are defined in the environmental assessment (submitted September 2011) versus the plan view drawings.

Environment Canada (EC), November 21, 2011 (First Round of Comments):

- EC advised that the comments provided to NIRB in May 2011 concerning the all-weather road remained relevant to the current exemption application for Phase 1 of the all-weather road.
- EC offered technical comments with regard to:
 - Acid rock draining and metal leaching potential of road construction materials;
 - Road and bridge material selection;
 - Dust suppressant use;
 - Water quality; and,
 - Wildlife.

Environment Canada (EC), January 20, 2012 (Second Round of Comments):

- EC expressed satisfaction with AEM's responses to all of EC's comments and concerns as expressed in its November letter.
- EC also outlined various recommendations and questions arising from inconsistencies in AEM's documentation, including:
 - Confirmation that AEM plans to sample all water crossings in the first year following road construction.
 - Confirmation that Bunker C and calcium chloride dust suppressants will not be used unless migration into surface waters can be prevented.
 - If additional crossings are required, EC requested a commitment from AEM to monitor all or a subset of these crossings.
 - EC requested a map to identify the location of sampling sites for additional baseline water quality data provided by AEM.

- EC requested information supporting the phosphorus guideline derived by AEM and advises that AEM lower their detection limits for phosphorus.

Kivalliq Inuit Association (KIA), February 13, 2012 (After Close of Comment Periods):

- KIA indicated it was satisfied with the project description presented by AEM, as all technical concerns have been addressed and a security deposit is in place for the project to start.
- KIA noted that this project would have a positive economic impact for the region and has the full support of Rankin Inlet and the Kivalliq Region; a positive decision by the NIRB on this application is critical in moving this project forward, as any delay at this point in time could have a detrimental impact on the project and the whole economy of the Kivalliq Region.

ASSESSMENT OF THE APPLICATION IN ACCORDANCE WITH NLCA ARTICLE 12

After a thorough assessment of all materials provided to the NIRB for this project proposal, it is the opinion of the Board that the proposed activities, namely AEM's Phase 1: All-Weather Road proposal, should not cause significant adverse impacts or public concern if allowed to proceed – provided the NIRB's project-specific terms and conditions are applied and enforced.

The NIRB's assessment included consideration of the following general items:

1. Rationale, objective, implications of the proposed activities on the feasibility of the related project undergoing Review

Following its screening of AEM's original February 2011 all-weather road (AWAR) submission (NIRB File No. 11RN017), on July 4, 2011 the NIRB recommended to the Minister that the standalone AWAR project was insufficiently developed to permit proper screening and should be returned to the proponent for clarification in accordance with the NLCA, Section 12.4.4(c).

On August 11, 2011 the Minister responded to the NIRB's recommendation for the AWAR and encouraged AEM and the Board to explore possible process efficiencies that could be gained by a consolidation of the two proposals (the AWAR and Meliadine Gold Mine project, NIRB File No. 11MN034). On September 14, 2011 the Minister issued correspondence to the NIRB which referred the Meliadine Gold Mine project (NIRB File No. 11MN034) to the NIRB for review pursuant to Section 5, Article 12 of the NLCA.

On September 29, 2011 AEM submitted an application to the NIRB for a two-phase approach to the construction and operation of the AWAR. Phase 1 of the AWAR was the proposed construction and operation of a single lane, privately operated road to support the Meliadine Bulk Sample program (NIRB File No. 10EA018) as well as AEM's ongoing exploration in the area. Phase 2 of the AWAR involves the proposed expansion of the Phase 1 single lane road to a two lane road which would then be open to the public. Phase 2 is not being considered as part of the 12.10.2(b) application and is therefore not addressed within this determination.

The KIA comment submission highlighted the fact that the Proponent's bulk sample program was previously approved by the NIRB and allowed to proceed to licensing, and that the Phase 1 AWAR application should be considered as a separate application from the Part 5 Review associated with the Meliadine Gold Mine (NIRB File No. 11MN034). KIA further indicated that the information presented by the Proponent in its application for a 12.10.2(b) exception is now sufficient to meet the engineering standards of any environmental project assessment regime in Canada and that therefore the KIA could not find a reason to deny the Proponent's request for the application of NLCA Section 12.10.2(b) to the current submission.

AEM provided justification for the proposed Phase 1 AWAR as being the most cost-effective and best overall alternative to supply their materials, fuel and personnel to the Meliadine site. Alternatives involved increased reliance upon winter road transportation and increased fuel supply at the Meliadine site. AEM has indicated that the current on-site fuel storage of 1.8 million litres is not sufficient to support all of its currently permitted exploration objectives. AEM also indicated that if the AWAR were not allowed to go forward, the company would need to reconsider the pace of both ongoing exploration and the bulk sample program at the Meliadine site.

The Proponent has provided its rationale and justification for its current application for the Phase 1: AWAR which indicates that ongoing exploration and the bulk sample program at Meliadine is reliant upon the timely development of the AWAR. It is the NIRB's finding that alternatives to Phase 1 of the AWAR involving increased fuel storage at site and increasing reliance upon winter road transportation and/or helicopter use do not present a significantly lower potential for adverse environmental or socio-economic impacts when contrasted with the Phase 1 AWAR option and its associated benefits.

The Board recognizes that the feasibility of the Meliadine Gold Mine project (NIRB File No. 11MN034) currently under Review by the Board depends upon favourable results of the bulk sample program and ongoing surface exploration as would be supported by the current exception application. The Proponent has indicated that the AWAR is the most cost-effective and best overall approach to conducting this work, and the Board notes that the Phase 1: AWAR proposal as currently proposed would support the ongoing exploration which could significantly contribute to the potential future mine development.

2. The permanence of proposed structures

In its 12.10.2(b) application to the NIRB, AEM committed to fully decommission and reclaim the Phase 1: AWAR if the proposed Meliadine Gold Mine project (NIRB File No. 11MN034) fails to pass either the feasibility or environmental assessment phases. The Proponent has indicated that reclamation would take place within a year of complete reclamation of the Meliadine West advanced exploration site. The Proponent's proposed decommissioning plans for the AWAR involve loosening of the road surface, flattening the side slopes and removing all culverts and bridges (not including the Char River Bridge) as well as reclaiming all quarries and borrow sites that were developed during construction.

The Board is of the opinion that the Proponent has satisfactorily demonstrated its willingness to decommission and reclaim the Phase 1: AWAR at any point during the feasibility or environmental assessment stages. No commenting agency provided concerns with the Proponent's proposal to leave the Char River Bridge intact, although the GN and TC provided comments which indicated concern with the long-term authorization of the AWAR; specifically with how the road may be accounted for in a potential NIRB Project Certificate for the Meliadine Gold Mine project (NIRB File No. 11MN034).

The Board notes that its responsibilities for monitoring the effects of major project developments in accordance with Part 7 of Article 12 of the NLCA allow for a wide range of measures to be developed and implemented. Should the Meliadine Gold Mine project be allowed to proceed following the NIRB's Review, any subsequent Project Certificate and monitoring programs would cover the construction and operation of the Phase 2: AWAR. Monitoring recommendations have been set out in this determination which could be incorporated into a potential future Project Certificate and subsequent monitoring program for the Meliadine Gold Mine project (NIRB File No. 11MN034), if the project were to be allowed to proceed following the conclusion of the NIRB's Review.

3. Alternative uses of proposed structures or materials if the related project under Review was not to be approved

AEM has indicated that if the Meliadine Gold Mine project (NIRB File No. 11MN034) does not proceed, following decommissioning of the AWAR, only the bridge to be installed across the Char River would remain in use. The NIRB notes that AEM has proposed to replace the existing bridge at the Char River along the proposed road routing and that upon decommissioning of the road by AEM, the replacement bridge would become the property of the hamlet of Rankin Inlet. AEM has indicated that if, at the time AEM ceases to use the AWAR and is required to decommission the AWAR, the municipality or government determine that they would prefer that the AWAR remain in service, AEM would entertain discussions with relevant parties regarding leaving the AWAR in service. However, the NIRB notes that any future use of the proposed AWAR by other parties is outside the scope of the current proposal and has not been considered in making this determination. The parties are reminded that such future use of the AWAR may be subject to additional assessment requirements by the NIRB.

Given the high level of public support for the proposed Phase 1: AWAR project as demonstrated by individuals and the business community in the hamlet of Rankin Inlet, the NIRB anticipates the possibility of some resistance to decommissioning the AWAR should the Meliadine Mine project (NIRB File No. 11MN034) not proceed.

4. Significance of potential ecosystemic and socio-economic impacts

Potential impacts to wildlife as a result of the Phase 1 AWAR construction and operation were raised as a concern during public commenting for this project proposal. Specifically, concern was raised regarding the Proponent's plans to monitor and mitigate impacts of this road development to the peregrine falcons which are found within or near the project footprint, and also within the Iqaluqaarjuup Nunanga Territorial Park. The Proponent has provided a wildlife

monitoring plan which provides for measures to mitigate potential adverse impacts to peregrine falcon and to other species. Mitigation terms and conditions have also been recommended (see terms and conditions 15-24, and Monitoring and Reporting Requirements item 1).

Potential positive impacts to the local economy have been identified by the Proponent as it has committed to award the contract for the construction of the Awar to a local Inuit Owned company (see term and condition 51). In addition, the opportunity for local hires to fill jobs made available during the construction and ongoing maintenance of the Awar would likely also provide positive socio-economic impacts to the local economy as a result of the proposed project.

5. Public concern

Individuals in the community of Rankin Inlet have indicated their support for the concept of a road from Rankin Inlet to Meliadine Lake. The NIRB staff heard public support for the proposed road development during scoping meetings² held in Rankin Inlet for the NIRB's Review of the Meliadine Gold Mine project (NIRB File No. 11MN034). Kivalliq Services of Rankin Inlet also provided a written submission of support for the proposed Phase 1: Awar development.

In its September 29, 2011 submission, AEM indicated that the construction phase of the Awar would last approximately 6 months and that Rankin Inlet could be expected to see the majority of employment and business opportunities stemming from the development. AEM also predicted a 2 year operational period for the road, by which time either the Meliadine Gold Mine project (NIRB File No. 11MN034) would be approved or the bulk sample program would have ended in a negative feasibility study (effectively terminating the possible Meliadine Gold Mine project).

The NIRB is of the opinion that no significant public concern was expressed during the public commenting period for this file, but rather that support from individuals and the business community was evident. As noted previously, should the Awar be allowed to proceed, the Board believes that public concern may become an issue when the decommissioning and reclamation of the proposed Awar becomes necessary. Similar concern was expressed in the Board's Review of the Meadowbank Gold Project (NIRB File No. 03MN107) where no future plans for road maintenance were presented, and it is reasonable to anticipate these issues may similarly arise in respect to this Awar.

6. Posting of security/performance bonds

The Board notes that AEM has estimated its reclamation liability for the work proposed to be \$476,106 (September 29, 2011 submission, Section 2 – Permanence of Proposed Structures). The KIA indicated that the actual security held for the Meliadine property would be reassessed and that the amount of security determined to be required for the Phase 1: Awar would be

² Public Scoping Meetings Summary Report for the NIRB's Review of AEM's Meliadine Gold Project, January 2012

added to that being held by Nunavut Tunngavik Inc. for the Meliadine Gold Mine project (NIRB File No. 11MN034).

RECOMMENDED PROJECT-SPECIFIC TERMS AND CONDITIONS

The Board is recommending that the following or similar project-specific terms and conditions be imposed upon the Proponent by authorizing agencies through all relevant legislation:

General

1. AEM (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of construction and operation at all times.
2. The Proponent shall forward copies of all permits obtained and required for this project to the Nunavut Impact Review Board (NIRB) prior to the commencement of the project.
3. The Proponent shall operate in accordance with all commitments stated in correspondence provided to the NIRB and other authorizing agencies, including the following:
 - a. *Phase 1-Meliadine All-weather Access Road Environmental Assessment, September 2011* – September 29, 2011
 - b. AEM Response to comments – December 12, 2011.
 - c. Application to Aboriginal Affairs and Northern Development Canada – September 26, 2011
 - d. Application to the Nunavut Planning Commission – November 16, 2011
 - e. Application to the Nunavut Water Board – October 5, 2011
4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.
5. The Proponent shall ensure that all project personnel and contractors are made aware of the Project Terms and Conditions and are provided with training and/or advice on how to implement these measures.

Water Use

6. The Proponent shall not extract water from any fish-bearing water body unless the water intake hose is equipped with a screen of appropriate mesh size to ensure that there is no entrapment of fish. Small lakes or streams should not be used for water withdrawal unless approved by the Nunavut Water Board.
7. The Proponent shall not use water, including constructing or disturbing any stream, lakebed or the banks of any definable water course unless approved by the Nunavut Water Board.

Waste Disposal/Incineration

8. The Proponent shall incinerate all combustible wastes daily, and remove the ash from incineration activities and non-combustible wastes from the project site to an approved facility for disposal.
9. The Proponent shall ensure that no waste oil/grease is incinerated on site.

Fuel and Chemical Storage

10. The Proponent shall ensure that storage of fuel and hazardous materials and re-fuelling of project equipment is conducted at a minimum of thirty-one (31) metres away from the high water mark of any water body and in such a manner as to prevent their release into the environment.
11. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife.
12. The Proponent shall use adequate secondary containment or a surface liner (e.g. self-supporting insta-berms and fold-a-tanks) when storing barreled fuel and chemicals at all locations. Appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, and absorbents) must be readily available during any transfer of fuel or hazardous substances, as well as at fuel caches, vehicle-maintenance areas and drill sites.
13. The Proponent shall inspect and document the condition of all fuel tanks and fuel caches on a weekly basis. All fuel and chemical storage containers must be clearly marked with the Proponent's name and examined for leaks immediately upon delivery.
14. The Proponent shall remove and treat hydrocarbon contaminated soils on site or transport them to an approved disposal site for treatment.
15. The Proponent shall ensure that all personnel are properly trained in fuel and hazardous waste handling procedures, as well as spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24 hour Spill Line at (867) 920-8130.

Wildlife - General

16. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
17. The Proponent shall not harass wildlife. This includes persistently worrying or chasing animals, or disturbing large groups of animals. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.

Migratory Birds and Raptors Disturbance

18. The Proponent shall not disturb or destroy the nests or eggs of any birds. If nests are encountered and/or identified, the Proponent shall take precaution to avoid further interaction and or disturbance (e.g., a 100 metre buffer around the nests). If active nests of any birds are discovered (i.e. with eggs or young), the Proponent shall avoid these areas until nesting is complete and the young have left the nest.

Caribou and Muskoxen Disturbance

19. The Proponent shall cease activities that may interfere with the migration or calving of caribou or muskox, until the caribou or muskox have passed or left the area.
20. The Proponent shall not block or cause any diversion to caribou migration and shall cease activities likely to interfere with migration including project-related road transportation, drilling or movement of equipment or personnel, until such time as the caribou have passed.

21. The Proponent, in operating the all-weather road, shall at all times give the right of way to wildlife when encountered on or near the road surface.
22. The Proponent shall ensure that, when approached by wildlife along the road, project staff are instructed to remain in the vehicle at all times.
23. The Proponent shall ensure that Project staff reduce travel speed when wildlife are within the line of sight from all-weather road.

Ground Disturbance

24. The Proponent shall implement suitable erosion and sediment suppression measures on disturbed areas before, during and after construction in order to prevent sediment from entering any waterbody.

Aggregate Removal within Existing Quarries

25. The Proponent shall use water or other non-toxic and biodegradable additives for dust suppression at quarries as necessary to maintain ambient air quality without causing water to pool or runoff.
26. The Proponent shall not remove any material from below the ordinary high water mark of any lake or stream unless otherwise authorized by the Nunavut Water Board.
27. The Proponent shall not deposit or permit the deposit of sediment into any water body.

Establishment of New Quarries

28. The Proponent shall clearly stake and flag pit and quarry boundaries so they remain visible to other land users.
29. The Proponent shall locate quarry/pit facilities so as to avoid all recreational sites and public use areas, and to protect unique geographical features and natural aesthetics.
30. The Proponent shall ensure there is no obstruction of natural drainage, flooding or channel diversion from quarry/pit access, stockpiles, or other structures or facilities.
31. The Proponent shall ensure that silt fences/curtains are installed down gradient of any quarry activities.
32. The Proponent shall maintain an undisturbed buffer zone of at least 100 metres between quarry site and any high water mark of any water body, unless otherwise authorized by the Nunavut Water Board.
33. The Proponent shall locate screening and crushing equipment on stable ground, at a location with ready access to stockpiles.

Winter Construction of Road and Bridges

34. The Proponent shall not store materials on the surface ice of lakes or streams, except that which is for immediate use.
35. The Proponent shall ensure that no disturbance of the stream bed or banks of any definable watercourse be permitted.

36. The Proponent shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. The Proponent should also test the thickness of ice to ensure the water body is in a state capable of fully supporting equipment or vehicles prior to movement.
37. The Proponent shall ensure that winter lake/stream crossings are located to minimize approach grades and constructed entirely of ice and snow materials. Only ice or snow free of sediment should be used to construct temporary crossings over any ice-covered watercourse.
38. The Proponent shall ensure that bank disturbances are avoided, and no mechanized clearing is carried out immediately adjacent to any watercourse unless otherwise authorized by the Nunavut Water Board.
39. The Proponent shall ensure that stream crossings and/or temporary crossings constructed from ice and snow, which may cause jams, flooding or impede fish passage and or water flow, are removed or notched prior to spring break-up.
40. The Proponent shall avoid disturbance on slopes prone to natural erosion, and alternative locations shall be utilized.
41. The Proponent shall implement sediment and erosion control measures prior to, and during operations to prevent sediment entry into the water during the spring thaw. This includes ensuring that a sufficient thickness of snow and ice is present on winter road(s) used for construction to prevent unnecessary erosion of the underlying ground surface and impact on underneath vegetation.

Construction and Operation of All-Weather Road

42. The Proponent shall ensure that all heavy machinery and vehicles are fitted with standard and well-maintained noise suppression devices, and that engine idling is minimized.
43. The Proponent shall operate the all-weather road as a controlled access road only, and shall implement such control measures as necessary to prevent unauthorized use of the road. The measures that the Proponent shall undertake will include, but are not limited to:
 - a. Maintaining a gate and manned gatehouse at the southern end of the Phase 1 all-weather access road, beyond the Char River bridge;
 - b. The posting of signs in English and Inuktitut at the gate, each major bridge crossing, and each 10 kilometres of road, stating that unauthorized use of the Phase 1 all-weather road is strictly prohibited;
 - c. Prior to opening of the road, and annually thereafter, advertising and holding at least one community meeting in the Hamlet of Rankin with the express purpose of explaining to the community that the Phase 1 all-weather road is a private road and that unauthorized use of the road is prohibited.
 - d. Placing notices at least quarterly on the radio and television to explain to the community that the Phase 1 all-weather road is a private road and that unauthorized use of the road is prohibited.

- e. Requiring all Project personnel and contractors using the road to monitor and report unauthorized use of the road, with AEM providing a report to the NIRB detailing such incidences one (1) year after the road is opened and annually thereafter; and;
- f. Reporting all accidents and other safety incidents on the road to the Hamlet and the Kivalliq Inuit Association immediately, and to the NIRB annually.

Restoration of Disturbed Areas

- 44. The Proponent shall ensure that all disturbed areas are restored to a stable or pre-disturbed state as soon as possible after the completion of work and/or upon termination of the exploration program.
- 45. The Proponent shall complete all clean-up and restoration of the lands used prior to abandonment of site(s).
- 46. The Proponent shall, upon decommissioning of the all-weather road, implement clean-up and reclamation and stabilization measures which include re-vegetation of disturbed areas and/or stabilization of exposed soil in road bed.

Other

- 47. The Proponent shall coordinate with relevant government agencies and departments to engage in project-specific monitoring of socio-economic impacts of the Phase 1 all-weather road, including local employment for construction and operations phases, and success of proposed or established training programs.
- 48. The Proponent shall work with the Hamlet of Rankin Inlet and government service providers to monitor for adverse socio-economic impacts and to develop mitigation measures where these impacts are believed to be occurring.
- 49. The Proponent should, to the extent possible, hire local people and consult with local residents regarding its activities in the region.

MONITORING AND REPORTING REQUIREMENTS

In addition, the Board is recommending the following:

Reporting Requirements

- 1. The Proponent shall submit a comprehensive annual report with copies provided to the Nunavut Impact Review Board (NIRB), Nunavut Water Board (NWB), Kivalliq Inuit Association (KIA), Government of Nunavut (GN), and Environment Canada (EC) by March 31 of each year of permitted activities. The annual report must contain, but is not limited to, the following information:
 - a. A summary of construction and ongoing maintenance and operations of the road;
 - b. A description of local hires and initiatives including contract opportunities awarded to local and Inuit owned firms;

- c. Updated site plans including the locations and specifications of any new and/or retroactively accessed borrow pits and quarry sources as well as volumes of materials extracted from each;
 - d. Updated road routing and design plans as appropriate (i.e. during or after construction, any changes made during operations, etc.);
 - e. Log of authorized and unauthorized users along the all-weather access road;
 - f. Annual monitoring results for water quality, air quality, vegetation, and road fill and quarry sampling, as well as an analysis of observed impacts against those predicted in the original project submission;
 - g. A record of wildlife observations while operating within the project area, to include
 - i. Locations (i.e., position along the road corridor);
 - ii. Species and number of animals;
 - iii. A description of the animal activity and the gender and age of animals if possible;
 - iv. Outline of potential impacts from the project, and commitment to ensure that subsequent Project activities are managed and modified to avoid impacts on wildlife and sensitive sites; and,
 - h. A summary of socio-economic monitoring activities undertaken for the year, including, where possible, a description of how the Proponent has worked to align its efforts with those of the Kivalliq Regional Socio-Economic Monitoring Committee.
2. Prior to commencing any project activities, the Proponent shall submit updated copies of the following management plans to the NIRB:
- a. Noise Abatement Plan;
 - b. Dust Management Plan;
 - c. Road Construction Plan to include:
 - i. Updated road routing and design plans, including a discussion of route alignment and selection in terms of avoidance of terrain with ice rich permafrost,
 - ii. A table that clearly outlines the culvert assemblages that are proposed to be installed at each of the 8 culvert crossings identified along the road routing;
 - iii. Measures to be implemented for dust control during the construction phase;
 - d. Finalized Operations and Maintenance Manual;
 - e. Decommissioning and Reclamation Plan; and,
 - f. Updated site plans including:

- i. The locations and specifications of any new and/or retroactively accessed borrow pits and quarry sources,
- ii. A comprehensive map that shows water quality, air quality, and road fill/quarry material sampling points; and,
- iii. A map of the location of any sensitive wildlife sites such as denning sites, calving areas, caribou crossing sites, and raptor nests in the project area.

Fuel and Chemical Storage Reporting

3. Prior to the commencement of any project activities, the Proponent shall provide the NIRB with precise locations of proposed fuel cache/storage sites along the road routing and in support of any related activities (e.g. quarrying, baseline/data collection, etc.).
4. The Proponent shall update its Spill Contingency Plan to include the up to date emergency contact numbers for the Government of Nunavut-Department of Environment (867-975-4644) and the Manager of Pollution Control and Air Quality (867-975-7748).
5. The Proponent shall implement the recommendations found in the 2003 CCME Guidance Document PN 1326 entitled “Environmental Code of Practice for Above Ground and Underground Storage Tank Systems containing Petroleum Product and Allied Petroleum Products”.

Transport of Waste/Dangerous Goods Reporting

6. The Proponent shall ensure that a waste manifest accompanies the shipment of all waste oil/grease and is registered with the Government of Nunavut Department of Environment (GN-DoE). Contact the Manager of Pollution Control and Air Quality at (867) 975-7748 to obtain a manifest if hazardous waste will be generated during project activities.
7. The Proponent shall ensure that an export manifest or the appropriate transportation of dangerous goods (TDG) documentation accompany all potential hazardous samples and/or materials that are transported off site.

OTHER NIRB CONCERNS AND RECOMMENDATIONS

In addition to the project-specific terms and conditions, the Board is recommending the following:

Bear and Carnivore Safety

1. The Proponent review the bear/carnivore detection and deterrent techniques outlined in “Safety in Grizzly and Black Bear Country” which can be down-loaded from this link: http://www.enr.gov.nt.ca/live/documents/content/Bear_Safety.pdf. Note that some recommendations in this manual are also relevant to polar bears. There is a DVD about polar bears and safety available from Nunavut Parks at the following link <http://www.nunavutparks.com/english/visitor-information/suggested-resources.html> and a “Safety in Polar Bear Country” pamphlet from Parks Canada at the following link <http://www.pc.gc.ca/eng/pn-np/nu/auyuittuq/visit/visit6/d/i.aspx>.

2. Any problem wildlife or any interaction with carnivores should be reported immediately to the local Government of Nunavut, Department of Environment Conservation Office.

Species at Risk

3. The Proponent review Environment Canada's "Environment Assessment Best Practice Guide for Wildlife at Risk in Canada", available at the following link: <http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=5407909E-10F6-4AFE-ACDF-75B9E820B4A1>. The guide provides information to the Proponent on what is required when Wildlife at Risk, including *Species at Risk*, are encountered or affected by the project.

All-Weather Road Construction

4. If ice bridges are constructed to support the preparation or construction of the all-weather road, the Proponent is required to follow the mitigation measures outlined in Fisheries and Oceans Canada's (DFO) Operational Statement for Ice Bridges, available at the following internet address: <http://www.dfo-mpo.gc.ca/regions/central/habitat/os-eo/provinces-territoires-territoires/nu/index-eng.htm>.
5. Cutting or filling of crossing approaches below the high water mark will require prior review and approval by Fisheries and Oceans Canada - Fish Habitat Management Branch (DFO-FHM).

Change in Project Scope

6. All Authorizing Agencies shall notify the NIRB of any changes in operating plans or conditions associated with this project prior to any such change.

Aboriginal Affairs and Northern Development Canada

7. Aboriginal Affairs and Northern Development Canada (AANDC) impose mitigation measures, conditions and monitoring requirements pursuant to the Federal Land Use Permit, which require the Proponent to respect the sensitivities and importance of the area. These mitigation measures, conditions and monitoring requirements should be in regard to the location and area; type, location, capacity and operation of facilities; use, storage, handling and disposal of chemical or toxic material; wildlife and fisheries habitat; and petroleum fuel storage.
8. AANDC consider the importance of conducting regular Land Use Inspections, pursuant to the authority of the Federal Land Use Permit, while the project is in operation. The Land Use Inspections should be focused on ensuring the Proponent is in compliance with the conditions imposed through the Federal Land Use Permit.

AANDC – Water Resources Division

9. AANDC – Water Resources Division should consider the importance of conducting regular inspections, pursuant to the authority of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, while the project is in operation. Inspectors should focus on ensuring the Proponent is in compliance with the conditions imposed through the Water Licence.

Kivalliq Inuit Association

10. The Kivalliq Inuit Association (KIA) impose strict mitigation measures and/or conditions upon the Proponent pursuant to the Inuit Owned Lands License in regard to fuel and chemical storage, drilling, water conditions, ground disturbance and wildlife on Inuit owned land.
11. The KIA consider the importance of conducting regular Land Use Inspections while the project is in operation. The Land Use Inspections should be focused on ensuring the Proponent is in compliance with the conditions imposed through the Access to Inuit Owned Lands Permit.

Nunavut Water Board

12. The Nunavut Water Board (NWB) impose mitigation measures, conditions and monitoring requirements pursuant to the Water Licence, which require the Proponent to respect the sensitivities and importance of water in the area. These mitigation measures, conditions and monitoring requirements should be in regard to use of water, snow and ice; waste disposal; access infrastructure and operation for camps; drilling operations; spill contingency planning; abandonment and restoration planning; and monitoring programs.
13. In particular, mitigation measures, conditions and monitoring requirements should be considered for the use of water, snow and ice for the development and maintenance of the all-weather road for this project.

REGULATORY REQUIREMENTS

The Proponent has applied for, or will require, the following authorizations for the proposed exploration and/or development activities:

- Class A Land Use Permit – Aboriginal Affairs and Northern Development Canada
- Class B Water License – Nunavut Water Board
- Land Use License III – Kivalliq Inuit Association

The Proponent is also advised that the following legislation may apply to the project:

1. The *Fisheries Act* (<http://laws.justice.gc.ca/en/showtdm/cs/F-14///en>).
2. The *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (<http://www.canlii.org/ca/sta/n-28.8/whole.html>).
3. The *Migratory Birds Convention Act* and *Migratory Birds Regulations* (<http://laws.justice.gc.ca/en/showtdm/cs/M-7.01>).
4. The *Species at Risk Act* (<http://laws.justice.gc.ca/en/showtdm/cs/S-15.3>). Attached in **Appendix B** is a list of Species at Risk in Nunavut.

5. The *Nunavut Wildlife Act* which contains provisions to protect and conserve wildlife and wildlife habitat, including specific protection measures for wildlife habitat, the release of invasive species, and species at risk.
6. The *Nunavut Act* (<http://laws.justice.gc.ca/en/showtdm/cs/N-28.6>). The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix C**.
7. The *Navigable Waters Protection Act* (NWPA) (<http://laws.justice.gc.ca/en/N-22/index.html>)
8. The Proponent shall undertake quarrying in accordance with the *Territorial Quarrying Regulations* (<http://www.canlii.org/en/ca/laws/regu/crc-c-1527/latest/crc-c-1527.html>) or equivalent.

Other Applicable Guidelines

9. The Proponent shall practice progressive reclamation in accordance with the restoration guidelines outlined in Indian and Northern Affairs Canada's *Northern Land Use Guidelines Pits and Quarries* (2010) (<http://www.ainc-inac.gc.ca/ai/scr/nt/ntr/pubs/nlug7-eng.asp>).

Validity of Land Claims Agreement

Section 2.12.2

Where there is any inconsistency or conflict between any federal, territorial and local government laws, and the Agreement, the Agreement shall prevail to the extent of the inconsistency or conflict.

Dated February 16, 2012 at Yellowknife, NT.



Lucassie Arragutainaq, Chairperson

Attachments: Appendix A: Public Comment Submissions
Appendix B: Species at Risk in Nunavut
Appendix C: Archaeological and Palaeontological Resources Terms and Conditions for Land Use Permit Holders

Appendix A
Public Comment Submissions

Appendix B

Species At Risk in Nunavut

This list includes species listed on one of the Schedules of SARA (*Species at Risk Act*) and under consideration for listing on Schedule 1 of SARA. These species have been designated as at risk by COSEWIC (Committee on the Status of Endangered Wildlife in Canada). This list may not include all species identified as at risk by the Territorial Government.

- Schedule 1 is the official legal list of Species at Risk for SARA. SARA applies to all species on Schedule 1. The term “listed” species refers to species on Schedule 1.
- Schedule 2 and 3 of SARA identify species that were designated at risk by the COSEWIC prior to October 1999 and must be reassessed using revised criteria before they can be considered for addition to Schedule 1.
- Some species identified at risk by COSEWIC are “pending” addition to Schedule 1 of SARA. These species are under consideration for addition to Schedule 1, subject to further consultation or assessment.

Schedules of SARA are amended on a regular basis so it is important to periodically check the SARA registry (www.sararegistry.gc.ca) to get the current status of a species.

Updated: January 2012

Terrestrial Species at Risk ¹	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility ²
Eskimo Curlew	Endangered	Schedule 1	EC
Ivory Gull	Endangered	Schedule 1	EC
Ross's Gull	Threatened	Schedule 1	EC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	EC
Rusty Blackbird	Special Concern	Schedule 1	GN
Felt-leaf Willow	Special Concern	Schedule 1	GN
Peregrine Falcon	Special Concern (<i>anatum-tundrius</i> complex ³)	Schedule 1 - Threatened (<i>anatum</i>) Schedule 3 – Special Concern (<i>tundrius</i>)	GN
Short-eared Owl	Special Concern	Schedule 3	GN
Peary Caribou	Endangered	Schedule 1	GN
Barren-ground Caribou (Dolphin and Union population)	Special Concern	Schedule 1	GN
Polar Bear	Special Concern	Schedule 1	GN
Terrestrial	COSEWIC		Government Organization

Species at Risk ¹	Designation	Schedule of SARA	with Primary Management Responsibility ²
Red Knot (<i>rufa</i> subspecies)	Endangered	Pending	EC
Red Knot (<i>islandica</i> subspecies)	Special Concern	Pending	EC
Porsild's Bryum	Threatened	Pending	GN
Horned Grebe (Western population)	Special Concern	Pending	EC
Grizzly Bear	Special Concern	Pending	GN
Wolverine (Western population)	Special Concern	Pending	GN
Atlantic Cod, Arctic Lakes	Special Concern	No schedule	DFO
Atlantic Walrus	Special Concern	Pending	DFO
Beluga Whale (Cumberland Sound population)	Threatened	Pending	DFO
Beluga Whale (Eastern Hudson Bay population)	Endangered	Pending	DFO
Beluga Whale (Western Hudson Bay population)	Special Concern	Pending	DFO
Beluga Whale (Eastern High Arctic – Baffin Bay population)	Special Concern	Pending	DFO
Bowhead Whale (Eastern Canada – West Greenland population)	Special Concern	Pending	DFO
Killer Whale (Northwest Atlantic / Eastern Arctic populations)	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO

¹ The Department of Fisheries and Oceans has responsibility for aquatic species.

² Environment Canada (EC) has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the Migratory Birds Convention Act (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Territorial Government. Populations that exist in National Parks are also managed under the authority of the Parks Canada Agency.

³ The *anatum* subspecies of Peregrine Falcon is listed on Schedule 1 of SARA as threatened. The *anatum* and *tundrius* subspecies of Peregrine Falcon were reassessed by COSEWIC in 2007 and combined into one subpopulation complex. This subpopulation complex was assessed by COSEWIC as Special Concern.

Appendix C
Archaeological and Palaeontological Resources Terms and Conditions
for Land Use Permit Holders



INTRODUCTION

The Department of Culture, Language, Elders and Youth (CLEY) routinely reviews land use applications sent to the Nunavut Water Board, Nunavut Impact Review Board and the Department of Indian and Northern Affairs Canada. These terms and conditions provide general direction to the permittee/proponent regarding the appropriate actions to be taken to ensure the permittee/proponent carries out its role in the protection of Nunavut's archaeological and palaeontological resources.

TERMS AND CONDITIONS

- 1) The permittee/proponent shall have a professional archaeologist and/or palaeontologist perform the following **Functions** associated with the **Types of Development** listed below or similar development activities:

	Types of Development (See Guidelines below)	Function (See Guidelines below)
a)	Large scale prospecting	Archaeological/Palaeontological Overview Assessment
b)	Diamond drilling for exploration or geotechnical purpose or planning of linear disturbances	Archaeological/ Palaeontological Inventory
c)	Construction of linear disturbances, Extractive disturbances, Impounding disturbances and other land disturbance activities	Archaeological/ Palaeontological Inventory or Assessment or Mitigation

Note that the above-mentioned functions require either a Nunavut Archaeologist Permit or a Nunavut Palaeontologist Permit. CLEY is authorized by way of the *Nunavut and Archaeological and Palaeontological Site Regulations*³ to issue such permits.

³ P.C. 2001-1111 14 June, 2001

- 2) The permittee/proponent shall not operate any vehicle over a known or suspected archaeological or palaeontological site.
- 3) The permittee/proponent shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.
- 4) The permittee/proponent shall immediately contact CLEY at (867) 934-2046 or (867) 975-5500 should an archaeological site or specimen, or a palaeontological site or fossil, be encountered or disturbed by any land use activity.
- 5) The permittee/proponent shall immediately cease any activity that disturbs an archaeological or palaeontological site encountered during the course of a land use operation until permitted to proceed with the authorization of CLEY.
- 6) The permittee/proponent shall follow the direction of CLEY in restoring disturbed archaeological or palaeontological sites to an acceptable condition. If these conditions are attached to either a Class A or B Permit under the Territorial Lands Act INAC's directions will also be followed.
- 7) The permittee/proponent shall provide all information requested by CLEY concerning all archaeological sites or artifacts and all palaeontological sites and fossils encountered in the course of any land use activity.
- 8) The permittee/proponent shall make best efforts to ensure that all persons working under its authority are aware of these conditions concerning archaeological sites and artifacts and palaeontological sites and fossils.
- 9) If a list of recorded archaeological and/or palaeontological sites is provided to the permittee/proponent by CLEY as part of the review of the land use application the permittee/proponent shall avoid the archaeological and/or palaeontological sites listed.
- 10) Should a list of recorded sites be provided to the permittee/proponent, the information is provided solely for the purpose of the proponent's land use activities as described in the land use application, and must otherwise be treated confidentially by the proponent.

LEGAL FRAMEWORK

As stated in Article 33 of the *Nunavut Land Claims Agreement*:

Where an application is made for a land use permit in the Nunavut Settlement Area, and there are reasonable grounds to believe that there could be sites of archaeological importance on the lands affected, no land use permit shall be issued without written consent of the Designated Agency. Such consent shall not be unreasonably withheld. [33.5.12]

Each land use permit referred to in Section 33.5.12 shall specify the plans and methods of archeological site protection and restoration to be followed by the permit holder, and any other conditions the Designated Agency may deem fit. [33.5.13]

Palaeontology and Archaeology

Under the *Nunavut Act*⁴, the federal government can make regulations for the protection, care and preservation of palaeontological and archaeological sites and specimens in Nunavut. Under the *Nunavut Archaeological and Palaeontological Sites Regulations*⁵, it is illegal to alter or disturb any palaeontological or archaeological site in Nunavut unless permission is first granted through the permitting process.

Definitions

As defined in the *Nunavut Archaeological and Palaeontological Sites Regulations*, the following definitions apply:

“archaeological site” means a place where an archaeological artifact is found.

“archaeological artifact” means any tangible evidence of human activity that is more than 50 years old and in respect of which an unbroken chain of possession or regular pattern of usage cannot be demonstrated, and includes a Denesuline archaeological specimen referred to in section 40.4.9 of the Nunavut Land Claims Agreement.

“palaeontological site” means a site where a fossil is found.

“fossil” includes:

Fossil means the hardened or preserved remains or impression of previously living organisms or vegetation and includes:

(a) natural casts;

(b) preserved tracks, coprolites and plant remains; and

(c) the preserved shells and exoskeletons of invertebrates and the preserved eggs, teeth and bones of vertebrates

⁴ s. 51(1)

⁵ P.C. 2001-1111 14 June, 2001

GUIDELINES FOR DEVELOPERS FOR THE PROTECTION OF ARCHAEOLOGICAL RESOURCES IN THE NUNAVUT TERRITORY

(NOTE: Partial document only, complete document at: <http://gov.nu.ca/cley/english/arch.html>)

Introduction

The following guidelines have been formulated to ensure that the impacts of proposed developments upon heritage resources are assessed and mitigated before ground surface altering activities occur. Heritage resources are defined as, but not limited to, archaeological and historical sites, burial grounds, palaeontological sites, historic buildings and cairns. Effective collaboration between the developer, the Department of Culture, Language, Elders and Youth (CLEY), and the contract archaeologist(s) will ensure proper preservation of heritage resources in the Nunavut Territory. The roles of each are briefly described.

CLEY is the Nunavut Government agency which oversees the protection and management of heritage resources in Nunavut, in partnership with land claim authorities, regulatory agencies, and the federal government. Its role in mitigating impacts of developments on heritage resources is as follows: to identify the need for an impact assessment and make recommendations to the appropriate regulatory agency; set the terms of reference for the study depending upon the scope of the development; suggest the names of qualified individuals prepared to undertake the study to the developer; issue an archaeologist or palaeontologist permit authorizing field work; assess the completeness of the study and its recommendations; and ensure that the developer complies with the recommendations.

The primary regulatory agencies that CLEY provides information and assistance to are the Nunavut Impact Review Board, for development activities proposed for Inuit Owned Lands (as defined in Section 1.1.1 of the Nunavut Land Claims Agreement), and the Department of Indian and Northern Affairs, for development activities proposed for federal Crown Lands.

A developer is the initiator of a land use activity. It is the obligation of the developer to ensure that a qualified archaeologist or palaeontologist is hired to perform the required study and that provisions of the contract with the archaeologist or palaeontologist allow permit requirements to be met; i.e. fieldwork, collections management, artifact and specimen conservation, and report preparation. On the recommendation of the contract archaeologist or palaeontologist in the field and the Government of Nunavut, the developer shall implement avoidance or mitigative measures to protect heritage resources or to salvage the information they contain through excavation, analysis, and report writing. The developer assumes all costs associated with the study in its entirety.

Through his or her active participation and supervision of the study, the contract archaeologist or palaeontologist is accountable for the quality of work undertaken and the quality of the report produced. Facilities to conduct fieldwork, analysis, and report preparation should be available to this individual through institutional, agency, or company affiliations. Responsibility for the curation of objects recovered during field work while under study and for documents generated in the course of the study as well as remittance of artifacts, specimens and documents to the repository specified on the permit accrue to the contract archaeologist or palaeontologist. This

individual is also bound by the legal requirements of the *Nunavut Archaeological and Palaeontological Sites Regulations*.

Types of Development

In general, those developments that cause concern for the safety of heritage resources will include one or more of the following kinds of surface disturbances. These categories, in combination, are comprehensive of the major kinds of developments commonly proposed in Nunavut. For any single development proposal, several kinds of these disturbances may be involved

- *Linear disturbances: including the construction of highways, roads, winter roads, transmission lines, and pipelines;*
- *Extractive disturbances: including mining, gravel removal, quarrying, and land filling;*
- *Impoundment disturbances: including dams, reservoirs, and tailings ponds;*
- *Intensive land use disturbances: including industrial, residential, commercial, recreational, and land reclamation work, and use of heritage resources as tourist developments.*
- *Mineral, oil and gas exploration: establishment of camps, temporary airstrips, access routes, well sites, or quarries all have potential for impacting heritage resources.*

Types of Studies Undertaken to Preserve Heritage Resources

Overview: An overview study of heritage resources should be conducted at the same time as the development project is being designed or its feasibility addressed. They usually lack specificity with regard to the exact location(s) and form(s) of impact and involve limited, if any, field surveys. Their main aim is to accumulate, evaluate, and synthesize the existing knowledge of the heritage of the known area of impact. The overview study provides managers with baseline data from which recommendations for future research and forecasts of potential impacts can be made. A Class I Permit is required for this type of study if field surveys are undertaken.

Reconnaissance: This is done to provide a judgmental appraisal of a region sufficient to provide the developer, the consultant, and government managers with recommendations for further development planning. This study may be implemented as a preliminary step to inventory and assessment investigations except in cases where a reconnaissance may indicate a very low or negligible heritage resource potential. Alternately, in the case of small-scale or linear developments, an inventory study may be recommended and obviate the need for a reconnaissance.

The main goal of a reconnaissance study is to provide baseline data for the verification of the presence of potential heritage resources, the determination of impacts to these resources, the generation of terms of reference for further studies and, if required, the advancement of preliminary mitigative and compensatory plans. The results of reconnaissance studies are primarily useful for the selection of alternatives and secondarily as a means of identifying

impacts that must be mitigated after the final siting and design of the development project. Depending on the scope of the study, a Class 1 or Class 2 Permit is required for this type of investigation.

Inventory: A resource inventory is generally conducted at that stage in a project's development at which the geographical area(s) likely to sustain direct, indirect, and perceived impacts can be well defined. This requires systematic and intensive fieldwork to ascertain the effects of all possible and alternate construction components on heritage resources. All heritage sites must be recorded on Government of Nunavut Site Survey forms. Sufficient information must be amassed from field, library and archival components of the study to generate a predictive model of the heritage resource base that will:

- allow the identification of research and conservation opportunities;
- enable the developer to make planning decisions and recognize their likely effects on the known or predicted resources; and
- make the developer aware of the expenditures, which may be required for subsequent studies and mitigation. A Class 1 or 2 permit is required

Assessment: At this stage, sufficient information concerning the numbers and locations of heritage resources will be available, as well as data to predict the forms and magnitude of impacts. Assessments provide information on the size, volume, complexity and content of a heritage resource, which is used to rank the values of different sites or site types given current archaeological knowledge. As this information will shape subsequent mitigation program(s), great care is necessary during this phase.

Mitigation: This refers to the amelioration of adverse impacts to heritage resources and involves the avoidance of impact through the redesign or relocation of a development or its components; the protection of the resource by constructing physical facilities; or, the scientific investigation and recovery of information from the resource by excavation or other method. The type(s) of appropriate mitigative measures are dictated by their viability in the context of the development project. Mitigation strategies must be developed in consultation with, and approved by, the Department of Culture, Language, Elders and Youth. It is important to note that mitigation activities should be initiated as far in advance of the construction of the development as possible.

Surveillance and monitoring: These may be required as part of the mitigation program.

Surveillance may be conducted during the construction phase of a project to ensure that the developer has complied with the recommendations.

Monitoring involves identification and inspection of residual and long-term impacts of a development (i.e. shoreline stability of a reservoir); or the use of impacts to disclose the presence of heritage resources, for example, the uncovering of buried sites during the construction of a pipeline.