SCREENING DECISION REPORT
NIRB FILE NO.: 10EA018

NWB File No.: 2BB-MEL0914
KIA File No.: KVCL102J168

August 10, 2012

The Honourable John Duncan
Minister of Aboriginal Affairs and Northern Development
10 Wellington, 21st Floor
Gatineau, QC K1A 0H4

and Mr. Thomas Kabloona
Chairperson, Nunavut Water Board

P.O. Box 119
Gjoa Haven, NU X0B 1J0

Sent via email: duncan.j@parl.gc.ca; minister@aandc.gc.ca *and* tomkabloona@netkaster.ca

Re: Screening Decision for Agnico-Eagle Mines Ltd.'s Amendment request with the Nunavut Water Board for its "Meliadine Bulk Sample" Project, Kivalliq Region, Additional Application Terms and Conditions, 10EA018

Dear Sirs:

The primary objectives of the Nunavut Impact Review Board (NIRB) are set out in section 12.2.5 of the Nunavut Land Claims Agreement (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.*"

Section 12.4.3 of the NLCA states that:

> "*Any application for a component or activity of a project proposal that has been permitted to proceed in accordance with these provisions shall be exempt from the requirement for screening by NIRB unless:*
>
> *(a) such component or activity was not part of the original project proposal; or*
>
> *(b) its inclusion would significantly modify the project.*"

NIRB ASSESSMENT AND DECISION

The NIRB has completed a review of Agnico-Eagle Mines Ltd.'s (AEM or the Proponent) request to Nunavut Water Board (NWB) for an amendment to their Type B water licence (NWB File No. 2BB-MEL0914) for the "Meliadine Bulk Sample" project.

After a thorough assessment of the project proposal, the amendment application information and the comments received (please see *Procedural History* and *Project Activities* in **Appendix A)**, in accordance with Section 12.4.3 of the NLCA, the Board has determined that this request will result in a change to the original scope of the project. Therefore, the NIRB is re-issuing the recommended project-specific terms and conditions contained in the May 5, 2010 Screening Decision, NIRB File No.: 10EA018 in addition to new terms and conditions which are designed to mitigate any potential impacts to the environment as per Section 12.4.4(a) of the NLCA.

PREVIOUSLY APPROVED PROJECT-SPECIFIC TERMS AND CONDITIONS

The following terms and conditions were previously approved by the NIRB for file **10EA018** in a Screening Decision Report dated May 5, 2010 and is available from NIRB's ftp site using the following link: http://ftp.nirb.ca/01-SCREENINGS/COMPLETED%20SCREENINGS/.

General

1. Comaplex Minerals Corp. (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of 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 provided to NIRB, including those commitments made to authorizing agencies in the various project applications.
4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Water

5. 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 shall not be used for water withdrawal.
6. 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

7. At the portal site, the Proponent shall keep all garbage and debris in bags placed in a covered metal container or equivalent until disposed of at an approved facility. All wastes shall be kept inaccessible to wildlife at all times.
8. The Proponent shall ensure that no waste oil/grease will be incinerated on site. All waste oil/grease must be transported off site and disposed of at an approved facility. A waste manifest must accompany the shipment of all waste oil/grease and the proponent must

register 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 is generated during project activities.

9. 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.

Fuel and Chemical Storage

10. The Proponent shall locate all fuel and other hazardous materials 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 secondary containment or a surface liner (self-supporting insta-berms, fold-a-tanks, etc), when storing barrelled fuel and chemicals, and at all refuelling stations. The Proponent shall ensure that appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, absorbents, etc) must be readily available during any transfer of fuel or hazardous substances, as well as at vehicle-maintenance areas and at drill sites.
13. The Proponent shall inspect and document the condition of all fuel tanks and fuel caches on a weekly basis, and a copy of this weekly inspection report must be made available to inspectors upon request. The Proponent shall examine all fuel and chemical storage containers immediately upon delivery for leaks. All containers must be marked with the Proponent's name. All leaks should be repaired immediately and appropriate actions taken with leaked materials.
14. The Proponent shall remove and treat hydrocarbon contaminated soils on site or transport them to an approved disposal site.
15. The Proponent shall ensure that all on site 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

16. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
17. The Proponent shall take all possible measures to avoid wildlife encounters. Any problem wildlife should be reported immediately to the Government of Nunavut, Department of Environment.
18. 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.

19. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum altitude of 650 metres above ground level unless there is a specific requirement for low-level flying, which does not disturb wildlife and migratory birds.

20. The Proponent shall ensure that aircraft maintain a vertical distance of 1000 metres and a horizontal distance of 1500 metres from any observed groups (colonies) of migratory birds. It is recommended aircraft avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors.

21. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.

22. 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.

23. The Proponent shall cease activities that may interfere with migration or calving of caribou or muskox, until the caribou or muskox have passed or left the area.

24. The Proponent shall not block or cause any diversion to caribou migration, and shall cease activities likely to interfere with migration such as airborne geophysics surveys, drilling or movement of equipment or personnel until such time as the caribou have passed.

25. The Proponent shall not construct or operate any camp, cache any fuel or conduct blasting within 10 km, or conduct any drilling operation within 5 km of any designated caribou crossings.

26. During the period of May 15 to July 15, when caribou are observed within 1 km of project operations the Proponent shall suspend all operations, including low-level over flights, blasting, and use of snow mobiles and all-terrain vehicles outside the immediate vicinity of the camps.

27. The Proponent shall ensure that all project personnel are made aware of the measures to protect wildlife and are provided with training and/or advice on how to implement these measures. The Proponent shall also advise all pilots of relevant flight restrictions and enforce their application over the project area and flight paths to or from the project area.

Physical Environment

28. The Proponent shall ensure that the land use area is kept clean and tidy at all times.

29. 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 shall suspend overland travel of equipment or vehicles if rutting occurs.

30. The Proponent shall stockpile all overburden/topsoil generated for reclamation using proper erosion prevention measures. The Proponent shall use the stockpiled materials upon reclamation and re-vegetate all disturbed areas.

31. The Proponent shall implement suitable erosion and sediment suppression measures on disturbed areas before, during and after construction until vegetation or other appropriate measures are established in order to prevent sediment from entering any water body.

Drilling and Bulk Sample

32. The Proponent shall have all equipment inspected for leaks or cracks prior to use and on a regular basis. Any problems encountered must be addressed immediately.
33. The Proponent shall not locate any sump or cell within thirty-one (31) metres of the normal high water mark of any water body. Sumps and areas designated for waste disposal shall be sufficiently bermed or otherwise contained to ensure that substances to do not enter a waterway unless otherwise authorized.
34. The Proponent shall properly discharge/dispose of contaminated water in either a sump or a cell. Prior to discharge to the environment, the Proponent shall ensure that the water quality meets with the Nunavut Water Board water licence discharge criteria.
35. If an artesian flow is encountered, the Proponent shall ensure the drill hole is immediately plugged and permanently sealed.
36. The Proponent shall use water and/or non-toxic and biodegradable additives for dust suppression, where dust suppression is required.
37. The Proponent shall ensure there is no obstruction of natural drainage, flooding or channel diversion when determining locations of rock pads, road expansion, stockpiling etc.
38. The Proponent shall ensure that all reasonable public safety procedures are implemented during the life of the operation.

Restoration

39. The Proponent shall remove all garbage, fuel and equipment upon abandonment.
40. The Proponent shall complete all clean-up and restoration of the lands used upon abandonment of site.

Other

41. The Proponent should, to the extent possible, hire local people and to consult with local residents regarding their activities in the region.
42. Any activity related to this application, and outside the original scope of the project as described in the application, will be considered a new project and should be submitted to the NIRB for Screening.

NEW RECOMMENDED PROJECT-SPECIFIC TERMS AND CONDITIONS (pursuant to Section 12.4.4(a) of the NLCA)

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

Landfill Operations

43. The Proponent shall only dispose of non-hazardous materials at the landfill and shall limit this disposal to those materials listed as acceptable for disposal (as outlined in Agnico-Eagle's *Meliadine Gold Project Landfill Design and Management Plan*, April 2012). Hazardous materials, materials listed as unacceptable for disposal at the landfill, or materials

that contain asbestos, fluorescent tubes or ozone depleting substances are not to be disposed of in the landfill and shall only be disposed of at an authorized facility.

44. The Proponent shall ensure that it meets the standards and/or limits as set out in the Nunavut Water Board Water Licence and any other permits as required for this project.

45. The Proponent shall take appropriate dust suppression measures when conducting soil topping of landfill materials, or landfill capping activities.

46. All operation personnel shall be adequately trained prior to commencement of landfill operations. Operational personnel must also be trained in operational guidelines and commitments made by the Proponent for this project.

MONITORING AND REPORTING REQUIREMENTS

The Board has previously recommended the following:

1. The Proponent shall submit a comprehensive annual report with copies provided to the Kivalliq Inuit Association, Government of Nunavut Department of Environment, Indian and Northern Affairs Canada and the Nunavut Impact Review Board by March 31 of each year of permitted activities. The annual report must contain the following information, at a minimum:
   a. A summary of activities undertaken for the year;
   b. A work plan for the following year;
   c. A summary of monitoring results based on the Mitigation and Monitoring Plan;
   d. A summary of the annual wildlife observations record or report;
   e. A summary of actions taken to protect archaeological and paleontological resources in the project area;
   f. Details regarding steps taken to ensure all staff are properly trained and aware of the Proponent's obligations and commitments;
   g. A summary of local hires and initiatives;
   h. A summary of site-visits by Land Use Inspectors with results and follow-up actions;
   i. Site photos;
   j. Efforts made to achieve compliance with the Canadian Wide Standards for Dioxins and Furans, and the Canadian Wide Standards for Mercury;
   k. A summary of the number and location of spills and failures which activated the Spill Contingency Plan; and
   l. A summary of how the Proponent has complied with NIRB conditions contained within this Screening Decision, and the conditions associated with all authorizations for the project.

2. The Proponent shall update its Spill Contingency Plan to include the following:
   a. 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).
   b. Correct the Environment Canada Yellowknife office phone number to 867-669-4730; remove the 24 hr Emergency pager and the phone number for Environment Canada Protection to 867-975-4644.

c. Include best management practices for the construction and operation of an ice airstrip.
d. The Proponent should use best management practices to reduce noise.
e. The Proponent should use best management practices in regards to air quality.

3. The Proponent should 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".
4. The Proponent shall maintain a record of wildlife observations while operating within the project area. The reports should include locations (i.e., latitude and longitude), species, number of animals, a description of the animal activity, and a description of the gender and age of animals if possible. Prior to conducting project activities, the Proponent should map the location of any sensitive wildlife sites such as denning sites, calving areas, caribou crossing sites, and raptor nests in the project area, and identify the timing of critical life history events (i.e., calving, mating, denning and nesting). Additionally, the Proponent should indicate potential impacts from the project, and ensure that operational activities are managed and modified to avoid impacts on wildlife and sensitive sites.

   A copy of this wildlife record or report should be submitted annually at the end of the operational season to the following Government of Nunavut – Department of Environment contacts:
   - Biologist, Kivalliq Region: Mitch Campbell, (867) 857-2828, mcampbell@gov.nu.ca
   - Wildlife Deterrent Specialist: Sarah Medill, (867) 934-4335, smedill@gov.nu.ca

5. The Proponent should update its detailed Blasting Program to ensure the effects of blasting on fish and fish habitat, water quality and wildlife is minimized. The Blasting Program should also:
   a. Comply with the DFO guidelines;
   b. Include a monitoring and mitigation plan
   c. Restrict blasting when migrating caribou, or sensitive local carnivores or birds may be negatively affected; and
   d. Minimize the use of ammonium nitrate to reduce the effects of blasting on water quality.

In addition, the Board is recommending the following:

Annual Report

6. In its annual report to the NIRB, the Proponent will include the following information:
   a. Detailed information regarding landfill construction, including site photographs taken in both winter and summer seasons.
   b. A summary of landfill operations for the year, including a description of any subsequent changes made to landfill design or procedures implemented over the previous year.
   c. Monitoring information pertaining to the placement of materials, wildlife management, changes to permafrost or frozen conditions of site soils, and the collection and results of leachate and/or surface water runoff.

Updated Landfill Design and Management Plan

7. The Proponent shall update its Landfill Design and Management Plan prior to commencing any landfill construction and provide copies to Environment Canada (EC), the Government of Nunavut (GN), and the NIRB. The updated plan should include:
   a. A description of site conditions that support the development of landfill infrastructure, including confirmation of the presence of non-frost/thaw susceptible soils and the need to place such material over the natural ground surface prior to deposition of wastes in order to protect the natural cover and surficial soils from damage during construction and filling, and to minimize detrimental changes to the thermal regime.
   b. Recycling practices to be implemented in order to actively reduce the amount of materials to be placed in the landfill.
   c. The development of a landfill monitoring and management plan which addresses operations and closure and is designed in such a way as to monitor project related impacts and to aid in the management of leachate at the landfill. The plan should confirm the accuracy of predictions made regarding wildlife management, surface water management, permafrost protection, and should address the monitoring and subsequent management of any landfill leachate.

OTHER NIRB CONCERNS AND RECOMMENDATIONS

In addition to the project-specific terms and conditions, the Board has previously recommended the following:

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.nwtwildlife.com/Publications/safetyinbearcountry/safety.htm. 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/pn-np/nu/auyuittuq/pdf/PolarBearEnglish2007final.pdf.

2. The Proponent review Environment Canada's "Environmental Assessment Best Practice Guide for *Wildlife at Risk in Canada*", available at the following link: http://www.cws-scf.ec.gc.ca/publications/eval/index_e.cfm. 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.

3. The Proponent review Transport Canada's "Syntheses of Best Practices – Road Salt Management", available at the following link: http://www.tac-atc.ca/english/resourcecentre/roadsalt.cfm. The synthesis of best practices provides information to the Proponent on responsible usage of calcium chloride (CaCl).

4. The Proponent review the Government of Nunavut – Department of Environment "Environmental Guidelines for Dust Suppression", available at the following link: www.gov.nu.ca/env/suppression.pdf.

Kivalliq Inuit Association

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.

Nunavut Water Board

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.

The Board is currently also recommending the following:

Kivalliq Inuit Association

5. The KIA should consider the importance of conducting regular inspections while the project is in operation. Inspectors should focus on ensuring the Proponent is in compliance with the conditions imposed through the Land Use License as such conditions may apply to project activities.

Nunavut Water Board

6. The NWB should consider the requirement for monitoring and mitigation measures pertaining to the Proponent's proposed use of permafrost to function in place of a synthetic liner and insulating layer. The NWB should be aware that the Proponent has indicated that it intends to use the landfill area as a proposed future tailing/waste rock storage facility for the Meliadine Gold Project which has *not* been approved for use and is currently undergoing Review by the NIRB, per File No. 11MN034.

Aboriginal Affairs and Northern Development Canada – Water Resources Division

7. Aboriginal Affairs and Northern Development Canada (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, especially as such conditions may define limits to camp size, water uses, and details regarding landfill design and operation.

REGULATORY REQUIREMENTS

The Proponent has been previously advised that the following legislation may apply to the project:

1. The Proponent is advised that the *Canadian Environmental Protection Act (http://laws.justice.gc.ca/en/C-15.31/)* lists calcium chloride (CaCl) as a toxic substance. The Proponent should assess alternatives (including biodegradable and non-toxic) to drill additives prior to the use of CaCl and try to avoid the use of CaCl.

2. The *Fisheries Act* (http://laws.justice.gc.ca/en/showtdm/cs/F-14///en).

3. The *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (http://www.canlii.org/ca/sta/n-28.8/whole.html).

4. The *Migratory Birds Convention Act* and *Migratory Birds Regulations* (http://laws.justice.gc.ca/en/showtdm/cs/M-7.01).

5. 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.

6. The *Nunavut Wildlife Act* which contains provisions to protect and conserve wildlife and wildlife habitat, including specific protection measures for wildlife habitat and species at risk.

7. 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**.

8. The *Transportation of Dangerous Goods Regulations*, *Transportation of Dangerous Goods Act* (http://www.tc.gc.ca/tdg/menu.htm), and the *Environmental Protection Act* (http://laws.justice.gc.ca/en/C-15.31/text.html) The Proponent must ensure that proper shipping documents accompany all movements of dangerous goods. The Proponent must register with the GN-DOE Manager of Pollution Control and Air Quality at 867-975-7748.

9. The *Aeronautics Act* (http://laws.justice.gc.ca/en/A-2/).

10. The *Northwest Territories and Nunavut Mining Regulations* (http://laws.justice.gc.ca/en/T-7/C.R.C.-c.1516/index.html).

11. The *Safety Act* http://www.canlii.org/en/nu/laws/stat/rsnwt-nu-1988-c-s-1/73125/rsnwt-nu-1988-c-s-1.html).

12. The *Mine Health and Safety Act* http://www.canlii.org/en/nu/laws/regu/nu-reg-016-2003/72742/nu-reg-016-2003.html).

13. The *Explosive Use Act* (http://www.canlii.org/en/nu/laws/stat/rsnwt-nu-1988-c-e-10/72964/rsnwt-nu-1988-c-e-10.html).

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 ____August 10, 2012_____ at Arviat, NU.

_____
Elizabeth Copland, Acting Chairperson

Attachments: Appendix A: Procedural History and Project Activities
Appendix B: Species at Risk in Nunavut
Appendix C: Archaeological and Palaeontological Resources Terms and Conditions for Land Use Permit Holders.

Appendix A
Procedural History and Project Activities

On May 4, 2012 the Nunavut Impact Review Board (NIRB) received an application for an amendment to Agnico-Eagle Mines Ltd.'s (AEM) "Meliadine Bulk Sample" project proposal from the Nunavut Water Board (NWB). On June 7, 2012 the NIRB received a positive conformity determination (Keewatin Land Use Plan) from the Nunavut Planning Commission for this file.

Past File History

Please be advised that the original Meliadine Bulk Sample project proposal (NIRB File No. 10EA018) including applications for a Land Use Licence from the Kivalliq Inuit Association and a Type B Water Licence from the NWB were received by the NIRB from Comaplex Minerals Corp. (Comaplex; now AEM) on February 25, 2010. On March 9, 2010 the NIRB received a positive conformity determination from the Nunavut Planning Commission (Keewatin Regional Land Use Plan) for this file and commenced screening the proposal in accordance with Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA).

On May 5, 2010 the NIRB issued the enclosed NLCA 12.4.4(a) Screening Decision to the Minister of Indian and Northern Affairs Canada (INAC; now Aboriginal Affairs and Northern Development Canada or AANDC) indicating the proposed project could proceed subject to the NIRB's recommended project-specific terms and conditions.

On May 31, 2012 the NIRB received a second amendment application from the NWB for a reallocation of water for the NWB Type B Water Licence (No. 2BB-MEL0914). On June 6, 2012 the NIRB issued correspondence to the NWB which confirmed that the amendment application was exempt from the requirement for screening pursuant to Section 12.4.3 of the NLCA.

Current File History

AEM's current amendment to the NWB Water Licence for the Meliadine Bulk Sample project (NWB File No. 2BB-MEL0914) includes the following *additional* project activities:

- The construction, operation and reclamation of a landfill for use during the Bulk Sample program.

The NIRB determined that this request may result in a change to the original scope of the project and on May 17, 2012 distributed the project proposal to community organizations in Rankin Inlet, as well as to relevant federal and territorial government agencies, and Inuit organizations. The NIRB requested that interested parties review the proposal and the NIRB's previously recommended terms and conditions and provide the Board with any comments or concerns by June 7, 2012 regarding:

- Whether the project proposal is likely to arouse significant public concern; and if so, why;
- Whether the project proposal is likely to cause significant adverse eco-systemic and socio-economic effects; and if so, why;
- Whether the project is of a type where the potential adverse effects are highly predictable and mitigable with known technology, (providing any additional recommended mitigation measures); and
- Any matter of importance to the Party related to the project proposal.

On or before June 7, 2012 the NIRB received comments from the following interested parties:

- **Government of Nunavut (GN)**
- **Environment Canada (EC)**
- **Fisheries and Oceans Canada (DFO)**

On June 26, 2012 the NIRB provided an opportunity for the Proponent to respond to the concerns raised during the public commenting period. The Proponent provided the requested response to concerns on July 8, 2012.

As the NIRB was facilitating a Final Hearing for its Review of the Mary River Project (File No. 08MN053) at that time, on July 12, 2012 the Board requested an extension from the Minister of AANDC in order to complete the screening of this application.

All comments provided to NIRB regarding this project proposal can be viewed on NIRB's ftp-site, at the following location:
http://ftp.nirb.ca/01-SCREENINGS/COMPLETED%20SCREENINGS/

Project Activities

The originally proposed project was located in the Kivalliq region, approximately 30 kilometres northwest of Rankin Inlet and within the Meliadine Gold Project area (formerly known as the Meliadine West Gold Property). During 2007 and 2008, Comaplex Minerals Corp. conducted a bulk sampling program (NIRB File No. 07EN044) which included the construction of a portal site, waste and ore rock pads, a road, a bulk sampling tower and ancillary infrastructure. In 2010, AEM proposed to expand the existing portal, ramp and existing infrastructure in order to conduct bulk sampling at deeper depths while completing the feasibility study for the Meliadine Gold Mine. The bulk sampling program was anticipated to begin in 2010 and was expected to be completed in 2013.

Previously proposed project activities included:

- Expansion of the existing waste and ore rock pads;
- Widening of the existing road from the portal to the pad sites;
- Construction of a multi-plate cover over the portal;
- Activation of the portal and ramp;
- Increase the amount of equipment (mining and transportation) on site;
- Increase the number of structures and generators at portal site for equipment storage;
- The repair and upgrade of existing infrastructure at portal site;

- Expansions to depth and to branch off the existing underground ramp;
- Construction of a ventilation rise from the ramp expansion;
- Conduct underground diamond drilling;
- Extraction of bulk samples;
- Increased explosives storage (Type 4 magazines) on site;
- Increase the amount of explosives on site;
- Transportation of explosives to site via helicopter;
- Expansion of on-site fuel storage capacity;
- On-site storage of calcium chloride for the purposes of drilling;
- Potential to construct an ice air strip to increase plane access during winter months; and
- Increase the existing camp capacity for year round accommodation.

Some portions of the proposed bulk sample project were previously screened by the NIRB (03EN077, 05EN006, 05EN101, 07AN063, 08EN005, or 08EN043) and included the following activities: winter road, wash car, waste water treatment plant, new wetlands area, bulk sampling tower, existing agreements with the Hamlet of Rankin Inlet and fuel transfer stations.

Project activities associated with the June 6, 2012 exemption to the NWB Type B Water Licence (No. 2BB-MEL0914) specified a reallocation of water drawn from Meliadine Lake to maintain the overall total quantity previously authorized 290 cubic metres (m^3) per day by:

- Increasing quantity of water for camp use, from 25 to 45 m^3 per day; and
- Decreasing quantity of water for all other purposes from 265 to 245 m^3 per day.

The additional project activities considered within the current decision on the NWB Water Licence (No. 2BB-MEL0914) amendment include the construction, operation and decommissioning of a landfill for a period of four years for use only in support of the Meliadine Bulk Sample project. This amendment application included details of AEM's plans to place the landfill within the *proposed* waste rock dump and tailings impoundment area associated with the Meliadine Gold project (NIRB File No. 11MN034) which is currently undergoing Review by the Board. Note that the scope of the current assessment **does not** include the waste rock dump or tailings impoundment area as proposed for the Meliadine Gold project, and only considers the proposed landfill for use during the bulk sample project (NIRB File No. 10EA018).

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 (http://www.sararegistry.gc.ca/default_e.cfm) 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 (*anatum-tundrius* complex[3])	Schedule 1 - Threatened (*anatum*) Schedule 3 – Special Concern (*tundrius)*	GN
Short-eared Owl	Special Concern	Schedule 3	GN
Peary Caribou	Endangered	Schedule 1	GN
			Government

Terrestrial Species at Risk [1]	**COSEWIC Designation**	**Schedule of SARA**	**Organization with Primary Management Responsibility** [2]
Barren-ground Caribou (Dolphin and Union population)	Special Concern	Schedule 1	GN
Polar Bear	Special Concern	Schedule 1	GN
Red Knot (*rufa* subspecies)	Endangered	Pending	EC
Red Knot (*islandica* 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
Department of Culture and Heritage Archaeological and Palaeontological Resources Terms and Conditions
for Land Use Permit Holders

INTRODUCTION

The Department of Culture and Heritage (CH) 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.

BACKGROUND - ARCHAEOLOGY

Nunavut Archaeological and Palaeontological Sites Regulations

All archaeological and palaeontological sites in Nunavut are protected under federal regulations and the Government of Nunavut Minister responsible for Culture and Heritage has been delegated authority to administer the regulations. The Heritage Division of the Department of Culture and Heritage is the Government of Nunavut agency that performs this work.

Under the *Nunavut Archaeological and Palaeontological Sites Regulations*[1], it is illegal to alter or disturb any archaeological or palaeontological site in Nunavut unless permission is first granted through the Government of Nunavut permitting process.

Nunavut Land Claims Agreement – Legal Framework

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

1 P.C. 2001-1111 14 June, 2001

The archaeological record of the Inuit of Nunavut is a record of Inuit use and occupancy of lands and resources through time. The evidence associated with their use and occupancy represents a cultural, historical and ethnographic heritage of Inuit society and, as such, Government recognizes that Inuit have a special relationship with such evidence, which shall be expressed in terms of special rights and responsibilities. [Article 33.2.1]

The archaeological record of Nunavut is of spiritual, cultural, religious and educational importance to Inuit. Accordingly, the identification, protection and conservation of archaeological sites and specimens and the interpretation of the archaeological record is of primary importance to Inuit and their involvement is both desirable and necessary. [Article 33.2.2]

In recognition of the cultural, spiritual and religious importance of certain areas in Nunavut to Inuit, Inuit have special rights and interests in these areas as defined by Article 33 of the Nunavut Land Claims Agreement. [Article 33.2.5]

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:

(a) natural casts
(b) preserved tracks, coprolites and plant remains; and
(c) the preserved shells and exoskeletons of invertebrates and the eggs, teeth and bones of vertebrates.

TERMS AND CONDITIONS

1) The permittee shall not operate any vehicle over a known or suspected archaeological or palaeontological site.
2) The permittee shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.
3) The permittee shall immediately contact the Department of Culture and Heritage (867) 975-5500 should an archaeological or palaeontological site or specimen be encountered or disturbed by any land use activity.

4) The permittee 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 the Government of Nunavut Department of Culture and Heritage.

5) The permittee shall follow the direction of the Department of Culture and Heritage and Aboriginal Affairs and Northern Development Canada in restoring disturbed archaeological or palaeontological sites to an acceptable condition.

6) The permittee shall provide all information requested by the Department of Culture and Heritage concerning all archaeological and palaeontological sites, artifacts or fossils encountered in the course of any land use activity.

7) The permittee shall make best efforts to ensure that all persons working under authority of the permit are aware of these conditions concerning archaeological sites and artifacts, and palaeontological sites and fossils.

8) The permittee shall avoid the known archaeological and/or palaeontological sites listed in Attachment 1.

9) The permittee shall have an archaeologist or palaeontologist perform the following functions, as required by the Department of Culture and Heritage:

   a) survey
   b) inventory and documentation of the archaeological or palaeontological resources of the land use area
   c) assessment of potential for damage to archaeological or palaeontological sites
   d) mitigation
   e) marking boundaries of archaeological or palaeontological sites
   f) site restoration

	Types of Development	Function
a)	Large –scale prospecting	Archaeological/Palaeontological Overview Assessment
b)	Drilling for exploration of geotechnical purposes, 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

The Department of Culture and Heritage shall authorize by way of a Nunavut Archaeologist Permit, or a Nunavut Palaeontologist Permit, all procedures subsumed under the above operations.

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 and Heritage (CH), and the contract archaeologist(s) will ensure proper preservation of heritage resources in the Nunavut Territory. The roles of each are briefly described.

The Department of Culture and Heritage is the Nunavut Government agency that 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; identify, upon request, 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 Culture and Heritage 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 Aboriginal Affairs and Northern Development Canada, 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. As directed by the Government of Nunavut, the developer shall implement avoidance or mitigative measures to protect heritage resources or to recover the information they contain through excavation, analysis, and report writing. The developer assumes all costs associated with all forms of heritage resource assessment and mitigation.

The project 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 rests with the project 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 1 Permit is required for this type of study if field surveys are undertaken.

Reconnaissance: This is done to provide an 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 potential 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 impacts through the redesign or relocation of a development or its components; the protection of the resource by constructing physical barriers, or the scientific investigation and recovery of information from the resource by excavation or other methods. The type(s) of mitigative measures employed 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 and Heritage. 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.