



**SCREENING DECISION REPORT
NIRB FILE NO.: 11EN010**

NIRB File No.: 11EN010

Associated NIRB File Nos.: 03MN107, EX160 & EX211

AANDC File Nos.: N2013F0030 & N2011C0010

NWB File Nos.: 2BE-MEA0813 & 2BE-MEA1318

KIA File Nos.: KVCL314C01, KVL312C03,

KVCL305H305 & KVRW11F01

February 10, 2015

To: The Honourable Bernard Valcourt
Minister of Aboriginal Affairs and Northern Development
10 Rue Wellington, 28th floor
Gatineau, QC K1A 0H3

Cc: Thomas Kabloona, Chairperson
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

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

*Sent via email: minister@aandc.gc.ca, bernard.valcourt@parl.gc.ca,
thomas.kabloona@nwb-oen.ca, dningeongan@kivalliqinuit.ca*

Re: Screening Decision for Agnico Eagle Mines Ltd.'s Amendment request with AANDC, NWB and KIA for its "Amaruq (IVR) Winter Access" project, Kivalliq Region, Additional Application Terms and Conditions, 11EN010

Dear Mr. Valcourt, Mr. Kabloona, and Mr. Ningeongan:

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) request to Aboriginal Affairs and Northern Development Canada’s (AANDC) for an amendment to their Land Use Permit No. N2013F0030 for their “Amaruq (IVR) Winter Access” project as well a request to the Nunavut Water Board (NWB) for an amendment to their NWB Type B Water Licence No. 2BE-MEA1318 and an application to the Kivalliq Inuit Association for a new commercial lease (File No. KVCL314C01).

After a thorough assessment of the project proposal, the information within the amendment applications, the comments received (please see *Procedural History* and *Project Activities* in **Appendix A**) and the Proponent’s response to comments, 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 April 21, 2011 Screening Decision, NIRB File No.: 11EN010 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 11EN010 in a Screening Decision Report dated April 21, 2011 and is available from NIRB’s online public registry using the following link
[http://nirb.ca/01-SCREENINGS/COMPLETED%20SCREENINGS/:](http://nirb.ca/01-SCREENINGS/COMPLETED%20SCREENINGS/)

General

1. Agnico-Eagle Mines Ltd. (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 stated in correspondence provided to NIRB (*NIRB Part 1 and 2 Forms*, February 11, 2011; *Non-Technical Summary*,

February 11, 2011) and to other authorizing agencies and government departments (*KIA Right of Way Application*, January 10, 2011; *INAC LUP Application*, March 15, 2011; *Letter of Response to GN-CLEY Comments*, April 8, 2011).

4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Water Use

5. The Proponent shall not extract water from any fish-bearing waterbody 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.
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 Disposal

7. 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 such wastes shall be kept inaccessible to wildlife at all times.

Fuel and Chemical Storage

8. 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.
9. The Proponent shall ensure that re-fuelling of all equipment occurs a minimum of thirty-one (31) metres away from the high water mark of any water body.
10. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife
11. 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.
12. The Proponent shall use adequate secondary containment or a surface liner (e.g. self-supporting insta-berms and fold-a-tanks) at all refueling stations. 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 vehicle-maintenance areas and at drill sites.
13. The Proponent shall inspect and document the condition of all 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

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.
18. 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.
19. 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.
20. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum altitude of 610 metres above ground level unless there is a specific requirement for low-level flying, which does not disturb wildlife and migratory birds.
21. 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. Aircraft should avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors.
22. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.
23. The Proponent shall advise all pilots of relevant flight restrictions and enforce their application over the project area, including flight paths to/from the project area.
24. 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.
25. 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.
26. 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 paths or crossings known to be frequented by (e.g. designated caribou crossings).
27. During the period of May 1 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 overland vehicles outside the immediate vicinity of the camps. Following July 15, if caribou cows or calves are observed within 1 km of project operations, the Proponent shall also suspend all operations in the vicinity, including low-

level over flights, blasting, and use of overland vehicles, until caribou are no longer in the immediate area.

Drilling on Land

35. The Proponent shall not conduct any land based drilling or mechanized clearing within thirty-one (31) metres of the normal high water mark of a water body.
36. The Proponent shall not allow any drilling wastes to spread to the surrounding lands or water bodies.
37. If an artesian flow is encountered, the Proponent shall ensure the drill hole is immediately plugged and permanently sealed.
38. The Proponent shall ensure that all drill areas are constructed to facilitate minimizing the environmental footprint of the project area. Drill areas should be kept orderly with garbage removed daily to an approved disposal site.
39. The Proponent shall ensure that all sump/depression capacities are sufficient to accommodate the volume of waste water and any fines that are produced. The sumps shall only be used for inert drilling fluids, and not any other materials or substances.
40. The Proponent shall not locate any sump 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 do not enter a waterway unless otherwise authorized.
41. The Proponent shall ensure all drill holes are backfilled or capped prior to the end of each field season. All sumps must be backfilled and restored to original or stable profile prior to the end of each field season.

Drilling on Ice

42. If drilling is conducted on lake ice, the Proponent shall ensure that any return water is non-toxic, and will not result in an increase in total suspended solids in the immediate receiving waters above the Canadian Council of Ministers for the Environment (CCME) Guidelines for the Protection of Freshwater Aquatic Life (i.e. 10 mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100 mg/L).
43. The Proponent shall ensure that drill muds and additives are not used in connection with holes drilled through lake ice unless they are re-circulated or contained such that they do not enter the water, or are demonstrated to be non-toxic.
44. The Proponent shall ensure that all drill cuttings are removed from ice surfaces daily.

Winter Road/Trail

45. The Proponent shall select a winter route that maximizes the use of frozen water bodies.
46. The Proponent shall ensure that no disturbance of the stream bed or banks of any definable watercourse be permitted.
47. The Proponent shall not move any equipment or vehicles without prior testing the thickness of the ice to ensure the lake is in a state capable of fully supporting the equipment or vehicles.

48. 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.
49. The Proponent shall suspend overland travel of equipment or vehicles if rutting occurs. Likewise, upon spring break up, or at such a time as the shorelines of frozen water bodies begin to thaw, the Proponent shall suspend all travel over water bodies if disturbance to the banks or shorelines of any definable water body occurs.
50. 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 water body.
51. The Proponent shall ensure that winter lake/stream crossings are located to minimize approach grades and constructed entirely of ice and snow materials. Ice or snow free of sediment should be the only materials used to construct temporary crossings over any ice-covered watercourse.
52. The Proponent shall ensure that bank disturbances are avoided, and no mechanized clearing carried out immediately adjacent to any watercourse.
53. 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.
54. The Proponent shall avoid disturbance on slopes prone to natural erosion, and alternative locations shall be utilized.
55. 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 the winter road to prevent unnecessary erosion of the underlying ground surface and impact on underneath vegetation.
56. The Proponent shall implement a clean-up and reclamation stabilization plan which should include, but is not limited to, re-vegetation and/or stabilization of exposed soil in road bed.
57. The Proponent shall remove any trail markers, grease, and oil marks upon restoration of winter road, and shall make a note of any areas where damage to vegetation has occurred as a result of the winter road.

Other

58. The Proponent should, to the extent possible, hire local people and to consult with local residents regarding their activities in the region.
59. 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:

General

Waste Incineration

60. The Proponent shall incinerate all combustible wastes daily and remove the ash from incineration activities to an approved facility for disposal or dispose of ash by burial beneath no less than one (1) metre of compacted soil. Non-combustible wastes shall be removed from the project site to an approved facility for disposal.
61. The Proponent shall ensure that the incineration of combustible camp wastes comply with the *Canadian Wide Standards for Dioxins and Furans*, and the *Canadian Wide Standards for Mercury*.
62. The Proponent shall ensure that no waste oil/grease is incinerated on site.

Fuel Storage

63. The Proponent shall inspect and document the condition of all large fuel tanks on a weekly basis. All fuel storage containers must be clearly marked with the Proponent's name and examined for leaks immediately upon delivery.

Establishment of New Quarries

64. The Proponent shall use water or other non-toxic and biodegradable additives for dust suppression as necessary to maintain ambient air quality without causing water to pool or runoff.
65. The Proponent shall clearly stake and flag pit and quarry boundaries so they remain visible to other land users.
66. 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.
67. 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.
68. The Proponent shall ensure that silt fences/curtains are installed down gradient of any quarry activities.
69. The Proponent shall maintain an undisturbed buffer zone between the periphery of quarry sites and the high water mark of any water body that is of an adequate distance to ensure erosion control.
70. The Proponent shall locate screening and crushing equipment on stable ground, at a location with ready access to stockpiles.

Temporary Camps

71. The Proponent shall ensure that all camps are located on gravel, sand or other durable land.
72. The Proponent shall not erect camps or store material on the surface ice of lakes or streams unless otherwise authorized by the Nunavut Water Board.

Other

73. The Proponent shall take appropriate dust suppression measures on all gravel roads, including airstrip.

MONITORING AND REPORTING REQUIREMENTS

The Board has previously recommended the following:

Annual Reporting

1. The Proponent shall include within its annual report for the Meadowbank Gold Project (NIRB 03MN107), a summary of activities undertaken as authorized by the Board for File No. 11EN010. This summary is expected to include a map showing approximate locations of drill sites and routing of winter trails.

In addition, the Board is recommending the following:

2. The Proponent shall submit updated monitoring plans, which include all newly proposed activities prior to construction and/or undertaking activities, specifically:
 - Conceptual Closure and Reclamation Plan and RECLAIM Estimates (to include quarry, gravel roads and pads, and airstrip components),
 - Wildlife Management Plan; and
 - Waste Management Plan (to include management of greywater and sewage).

OTHER NIRB CONCERNS AND RECOMMENDATIONS

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

Bear and Carnivore Safety

1. The Proponent should 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. The Proponent should ensure that any problem wildlife or any interaction with carnivores should be reported immediately to the local Government of Nunavut, Department of

Environment Conservation Office (Biologist, Kivalliq Region, Mitch Campbell, phone: 867-857-2828, email: mcampbell@gov.nu.ca).

Species at Risk

3. The Proponent should 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.

Change in Project Scope

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

The Board is currently also recommending the following:

Incineration of Wastes

5. The Proponent review Environment Canada's "Technical Document for Batch Waste Incineration", available at the following link: <http://www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=F53EDE13-1>. The technical document provides information on appropriate incineration technologies, best management and operational practices, monitoring and reporting.

REGULATORY REQUIREMENTS

The Proponent has been previously 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 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>).

In addition, the Proponent is also advised that the following legislation may apply to the project:

Acts and Regulations

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 to the use of CaCl as a drill additive, including biodegradable and non-toxic additives.
2. The *Aeronautics Act* (<http://laws-lois.justice.gc.ca/eng/acts/A-2/>).
3. The Proponent shall undertake quarrying in accordance with the *Nunavut Mining Safety Ordinance* and the *Territorial Quarrying Regulations* (<http://www.canlii.org/en/ca/laws/regu/crc-c-1527/latest/crc-c-1527.html>) or equivalent.
4. The *CEPA Storage Tank System for Petroleum Products and Allied Petroleum Products Regulations* (www.ec.gc.ca/st-rs). The Proponent must identify their tank system to Environment Canada and installation of new systems must comply with the regulations' design requirements.
5. The Proponent shall practice progressive reclamation in accordance with the restoration guidelines outlined in Aboriginal Affairs and Northern Development Canada's *Northern Land Use Guidelines Pits and Quarries* (<http://www.aadnc-aandc.gc.ca/eng/1100100023585>).

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 10, 2015 at Churchill, MB.



Elizabeth Copland, 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

Procedural History

On October 29, 2014 the Nunavut Impact Review Board (NIRB or Board) received Agnico Eagle Mines Ltd.'s (AEM or Proponent) "Amaruq (IVR) Winter Access" project proposal directly from the Proponent. On November 18, 2014 the NIRB received confirmation from the Nunavut Planning Commission (NPC) that the application related to Aboriginal Affairs and Northern Development Canada (AANDC) Land Use Permit No. N2013F0030 remained within the scope of the previous positive conformity determination (Keewatin Regional Land Use Plan).

Past File History

The original application for the project (NIRB File No.: 11EN010) was received from Indian and Northern Affairs Canada (INAC, now AANDC) on March 15, 2011. The proposal was screened by the Board in accordance with Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA) and on April 21, 2011 the NIRB issued the enclosed NLCA 12.4.4(a) screening decision to the Minister of INAC which indicated that the proposed project could proceed subject to the NIRB's recommended project-specific terms and conditions.

Additional authorization and extension requests associated with the "Amaruq (IVR) Winter Access" project have also been reviewed by the NIRB following screening of the original project proposal (File No. 11EN010). As summarized below in Table 1, in each instance, the NIRB confirmed that the application was exempt from the requirement for further screening and that the activities therein remained subject to the terms and conditions recommended in the original April 21, 2011 Screening Decision Report.

Table 1: Additional applications associated with NIRB File No. 11EN010

Authorization	Application			NIRB Decision	
	Date Received by NIRB	Type	Reason for Application	Date Issued	Type
NWB Water Licence (2BE-MEA0813)	August 10, 2011	Amendment	Permit drilling activities to occur within the 30 metre high water mark.	August 15, 2011	Exempt per Schedule 12-1 (5), reissued April 21, 2011 SDR
AANDC Land Use Permit (N2011C0010)	March 22, 2012	Amendment	Conduct exploration activities on additional Crown land.	April 30, 2012	Reissued April 21, 2011 SDR
KIA Land Use Licence (KVL312C03)	May 29, 2012	New licence	Conduct exploration activities on Inuit Owned lands.	August 28, 2012	Reissued April 21, 2011 SDR
NWB Water Licence (2BE-MEA0813)	October 11, 2012	Renewal	Continue water use and waste disposal at exploration camp, Pipe Dream Winter Road, and ongoing resource exploration.	October 18, 2012	Reissued April 21, 2011 SDR

NWB Water Licence (2BE-MEA0813)	January 21, 2013	Amendment	Include two additional exploration areas in its water licence; IVR Exploration and south Meadowbank area.	February 27, 2013	Exempt per Schedule 12-1(5) and reissued April 21, 2011 SDR
AANDC Land Use Permit (N2011C0010)	May 23, 2013	Renewal	Continue land use operations.	May 29, 2013	Reissued April 21, 2011 SDR
AANDC Land Use Permit (N2013F0030)	March 27, 2014	Amendment	Develop and operate a winter access road of approx. 53 km, to transport materials.	April 11, 2014	Reissued April 21, 2011 SDR
NWB Water Licence (2BE-MEA1318)	June 27, 2014	Amendment	Install camp in support of exploration activities on the IVR property.	July 24, 2014	Exempt per Schedule 12-1(5), reissued April 21, 2011 SDR

Notes: AANDC = Aboriginal Affairs and Northern Development Canada; KIA = Kivalliq Inuit Association; NIRB = Nunavut Impact Review Board; NWB = Nunavut Water Board; SDR = Screening Decision Report

Current File History

The current project proposal by AEM is for a new commercial lease from the Kivalliq Inuit Association (KIA), an amendment to its Land Use Permit with AANDC, and an amendment to its water licence with the Nunavut Water Board.

On November 20, 2014 AEM forwarded a NWB Type B water licence amendment application to the NIRB (No. 2BE-MEA1318). On November 24 and November 25, 2014 respectively, the NIRB received a referral from the KIA to screen a new Commercial Lease Class III (No. KVCL314C01) related to the Amaruq (IVR) Winter Access project, as well as a referral from AANDC to screen an amendment to the Land Use Permit (No. N2013F0030) associated with this project.

The NIRB determined that AEM's request might result in a change to the original scope of the project as assessed by the NIRB and, on December 15, 2014 distributed the project proposal to community organizations in Baker Lake, 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 December 29, 2014 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 recommended mitigation measures); and
- Any matter of importance to the Party related to the project proposal.

On December 19, 2014 the NIRB received the water licence amendment application from the NWB (No. 2BE-MEA1318) as previously submitted by the Proponent.

On or before December 29, 2014 the NIRB received comments from the following interested parties:

- Government of Nunavut (GN)
- Aboriginal Affairs and Northern Development Canada (AANDC)
- Environment Canada (EC)
- Fisheries and Oceans Canada (DFO).

On January 9, 2015 the NIRB provided an opportunity for the Proponent to respond to the concerns raised during the public commenting period, requesting that the response be submitted by January 22, 2015. The Proponent provided a response to concerns on January 20, 2015.

All comments provided to NIRB regarding this project proposal can be viewed on NIRB's online public registry at the following location:

<http://ftp.nirb.ca/01-SCREENINGS/COMPLETED%20SCREENINGS/>

Project Activities

As previously screened by the NIRB (File No. 11EN010), AEM's original "Pipe Dream Winter Road and Mining Exploration" project was located within the Kivalliq region, on two properties: the Meadowbank Exploration Project area, approximately 90 kilometers (km) north of the Hamlet of Baker Lake; and the Greyhills Exploration Project area, approximately 43 km northeast of the Hamlet of Baker Lake. The Proponent indicated that it intended to conduct exploration activities, and construct and operate a winter road network near the Meadowbank project area.

Previously-Screening Project Activities

The activities in the original application were located near the Meadowbank Exploration Camp, which was included within the scope of the NIRB's Review of the Meadowbank Gold Mine project (File No. 03MN107) that had been permitted to proceed pursuant to the NIRB's Project Certificate No. 004 issued December 30, 2006. Following an evaluation of the project scope, the NIRB determined that the "Pipe Dream Winter Road and Mining Exploration" project activities were not included within the scope of the Board's previous Review of the Meadowbank Gold Mine Project and as such, these activities were treated as a new project subject to screening in accordance with Article 12 of the NLCA.

The activities and/or components associated with the proposal originally screened under NIRB File No. 11EN010, included:

- Construction and operation of winter road network, approximately 26.5 km in length:
 - Originating at the Meadowbank Exploration Camp at km 100 of the Meadowbank All Weather Private Access Road,
 - Maximize passage over frozen lakes,
 - Preparation include removal of snow from lake ice without flooding;

- Approximately 13,000 metres (m) total on land and on ice diamond (exploration) drilling on Inuit Owned Land and Crown land at the Meadowbank and Greyhills Exploration Projects:
 - Approximately 78 drilling sites located within 19 different areas (areas to be connected via proposed winter road);
- Geological mapping, prospecting, some trenching, geophysical surveying;
- Access via winter road, supported by helicopter;
- Project personnel based out of the Meadowbank Exploration Camp (NIRB File No. 03MN107); and
- Transportation of fuel and chemical materials on an as-needed basis to support drilling activities.

The activities and components associated with the previous August 10, 2011 NWB Type B Water Licence (No. 2BE-MEA0813) amendment application included:

- Conducting drilling activities within the 30 m high water mark of proximal water bodies; and
- Disposal of all drill waste a minimum of 30 m from the ordinary water mark of proximal water bodies.

The Proponent's March 22, 2012 application to amend its AANDC Land Use Permit (No. N2011C0010) included a request to conduct exploration activities on additional Crown land from April 2012 to August 2014 and included the following components:

- Approximately 30 drill sites per year for a total of 60 sites;
- Drilling to be conducted on land and on ice, with sites located approximately 15 km northwest and up to 20 km northeast of the previously permitted exploration sites (NIRB File No. 11EN010).

The Proponent's May 29, 2012 application for a new KIA Land Use Licence (No. KVL312C03) proposed additional exploration activities associated with its "IVR property" to take place on Inuit Owned Lands, approximately 50 km northwest of the Meadowbank Mine site. The activities and components were determined to be related to the NIRB's 11EN010 screening, and included:

- Prospecting, geophysical work, and soil sampling;
- Trenching to enhance surface rock exposure for geological mapping and channel sampling (four to eight trenches);
- On-land and on-ice drilling of approximately 30 or more holes per year (dependent upon results obtained);
- Short term storage of fuel and chemicals at drill sites, including diesel, gasoline and propane;
- Transportation of personnel, fuel and equipment to exploration sites via helicopter;
- Use of water for drilling activities as permitted under the amended Type B Water Licence;
- Backhaul of any waste produced to the Meadowbank mine site for disposal (NIRB File No. 03MN107); and
- Use of Meadowbank Exploration Camp (NIRB File No. 03MN107).

The activities and components associated with the previous October 11, 2012 NWB application for renewal of NWB Type B Water Licence 2BE-MEA0813 were to allow for previously approved water use and waste disposal associated with the “Meadowbank Exploration Camp” project (NIRB File No. 03MN107) and the “Pipe Dream Winter Road and Mining Exploration” project (NIRB File No. 11EN010).

The activities and components associated with the previous January 21, 2013 Type B Water licence (*associated* NIRB File No. EX160; NWB File No. 2BE-MEA0813) amendment included a request to add two exploration areas to the licence: “IVR Exploration” and “south Meadowbank area”.

The Proponent requested a two year extension to its AANDC Land Use Permit (No. N2011C0010) in the May 23, 2013 extension application, to continue land use operations.

The Proponent’s March 27, 2014 application for an amendment to its project and a new AANDC Land Use Permit (No. N2013F0030) included the following additional activities:

- Development and operation of a winter access road, approximately 53 km in length from the Meadowbank mine site to the IVR Exploration site;
 - Winter road mostly located on lakes with 9 km located on land;
 - No use of water for preparation of winter road;
- Use of winter access road to transport material, equipment and fuel for exploration activities;
- Archaeological investigation to be conducted in the summer of 2014.

In addition, AEM’s June 27, 2014 Type B Water Licence (*associated* NIRB File No. EX211; NWB File No. 2BE-MEA1318) amendment application included the establishment of a 50 person temporary exploration camp consisting of 12 tents.

Current Application

AEM is currently proposing to amend its Land Use Permit (No. N2013F0030) with AANDC to include the following additional components and activities which are proposed to take place from February 2015 to September 2016:

- Development and operation of an alternative winter access road, approximately 79 km in length and 5 m wide, from the Meadowbank mine site to the Amaruq (IVR) exploration area to transport materials, equipment and fuel for exploration activities in the event the primary path is not usable;
 - Winter road mostly located on lakes with 7 km located on land with a total area of 3.5 hectares;
 - Winter access road to be used from February to May with approximately four trips per day;
 - No use of water for preparation of winter road;
- Archaeological investigation of the proposed winter access route to be completed in the summer of 2015.

The Proponent is currently proposing an amendment to its NWB Water Licence (No. 2BE-MEA1318) to allow for the following activities, which are proposed to take place from July 2014 to September 2018:

- Potential installation of an airstrip approximately 15 m wide and 500 m long at the south side of the proposed exploration camp using gravel from an esker near proposed location;
- Potential transportation of materials, drills and personnel between the Meadowbank and Amaruq sites via airplane;
- Installation of accommodations trailers for up to 60 personnel;
- Storage of fuel (diesel, gasoline, aviation fuel and propane) and hazardous materials and chemicals (oil, glycol, and grease) in double-walled tanks and/or drums stored in lined berms;
- Installation of a “Bionest” water treatment system to treat sewage and grey water before discharge into the environment;
 - Accumulated sludge (solid materials) to be disposed of in a pit near the site biennially (every 2 years) and treated with lime and covered with a minimum of 30 centimetres (cm) of compacted soil;
 - Potential alternative disposal of grey water in a sump to be released to the environment following treatment;
- Incineration of combustible solid waste;
- Non-combustible solid waste including scrap metal, hazardous waste, contaminated soil and snow to be transported to an approved facility;
- Empty barrels to be reused or transported to a recycling facility via barge;
- Total water consumption of 299 cubic metres per day (m³/day) for all project related activities (including camp and drill activities).
 - Additional water consumption of 30 m³/day to be used for drilling activities for a total 280 m³/day; and
 - Additional water consumption for domestic use of 10 m³/day to be used for a total of 19 m³/day.

AEM is also applying for a new Commercial Lease with the KIA (No. KVCL314C01) to allow for the following activities, with construction to commence in 2015:

- Camp construction, including installation of accommodations trailers, construction of a garage and gravel pad, and installation of a Bionest waste water treatment system;
 - Camp to be re-opened February 2015;
- Use and construction of two gravel pits (quarry):
 - Approximately 15,000 cubic metres (m³) to be extracted by 2017 and up to 40,000 m³ for the next five (5) years;
 - Overburden to be removed and stockpiled for site rehabilitation;
- Construction of gravel roads to support exploration, approximately 5 m wide and 0.40 m thick, within the KIA commercial lease area;
- Drilling activities to commence March 2015, with up to 6 drills anticipated to be in operation for the 2015 season;
 - Storage capacity of 400,000 Litres (L) with tanks to be refilled during the winter season;
 - Installation of 9 - 55, 000 L and 2 – 100,000 L double-walled tanks;

- Continuation of archaeological investigations in the Amaruq region; and
- Additional water use for drilling activities as permitted under the amended NWB Type B water licence.

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 check the SARA registry (www.sararegistry.gc.ca) to get the current status of a species.

Updated: July 2013

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

Species at Risk ¹	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility ²
(<i>islandica</i> subspecies)			
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	EC
Grizzly Bear	Special Concern	Pending	GN
Wolverine (Western population)	Special Concern	Pending	GN
Horned Grebe (Western population)	Special Concern	Pending	EC
Buff-breasted Sandpiper	Special Concern	Pending	EC
Atlantic Cod, Arctic Lakes	Special Concern	No schedule	Fisheries and Oceans Canada (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* 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, and was added to Schedule 1 of SARA in July 2012.

Appendix C
 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 Aboriginal Affairs and Northern Development 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. CH is authorized by way of the *Nunavut and Archaeological and Palaeontological Site Regulations*¹ to issue such permits.

¹P.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 CH 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 CH.
- 6) The permittee/proponent shall follow the direction of CH 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 Aboriginal Affairs and Northern Development Canada directions will also be followed.
- 7) The permittee/proponent shall provide all information requested by CH 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 CH 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*², 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*³, 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.*

² s. 51(1)

³ 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: www.ch.gov.nu.ca/en/Archaeology.aspx)

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

CH 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 CH 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 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. 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 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.