

# SCREENING DECISION REPORT NIRB FILE NO.: 12EN012

AANDC File No: N2012C0001

NWB File No.: 2BE-QIL1217 (formerly 2BE-QIL0712) GN-CGS File No.: LUP06-607-014 and LUP 06-607-015

June 5, 2015

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

The Honourable Johnny Mike Minister of Community and Government Services Government of Nunavut P.O. Box 2410 Iqaluit, NU X0A 0H0

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

Sent via email: minister@aandc.gc.ca, bernard.valcourt@parl.gc.ca, jmike@gov.nu.ca, jmaniapik1@gov.nu.ca; and thomas.kabloona@nwb-oen.ca

Re: Screening Decision for Stornoway Diamond Corporation's Amendment and Renewal request with NWB and GN-CGS for its "Qilalugaq", Kivalliq Region, Additional Application Terms and Conditions, 12EN012

# 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 Stornoway Diamond Corporation<sup>1</sup> (Stornoway) request to the Nunavut Water Board (NWB) and Government of Nunavut-Community and Government Services (GN-CGS) for an amendment and renewal to their Type B water licence and land use permit (Commissioners land) for their "Qilalugaq" project.

After a thorough assessment of the project proposal, the amendment and renewal 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 reissuing the recommended project-specific terms and conditions contained in the May 4, 2012 Screening Decision, NIRB file No.: 12EN012 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 No. 12EN012 in a Screening Decision Report dated May 4, 2012 and is available from the NIRB's online public registry using the following link:

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

## General

- 1. Stornoway Diamonds Corporation (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.

<sup>&</sup>lt;sup>1</sup> North Arrow Minerals Inc. is forming a joint venture agreement with Stornoway and will be transferring permits to their company once the agreement is complete.

- 3. The Proponent shall operate in accordance with all commitments stated in correspondence provided to NIRB (NIRB Part 1 and NIRB Part 2 forms, March 27, 2012), Aboriginal Affairs and Northern Development Canada (Land Use Permit Application, January 4, 2012) and Nunavut Planning Commission (Conformity Determination, March 21, 2012).
- 4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

#### Water Use

5. 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**

6. 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**

- 7. 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.
- 8. 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.
- 9. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife at all times.
- 10. 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 and 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.
- 11. The Proponent shall remove and treat hydrocarbon contaminated soils on site or transport them to an approved disposal site for treatment.
- 12. The Proponent shall ensure that all personnel are properly trained in fuel and hazardous waste handling procedures, as well as spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24 hour Spill Line at (867) 920-8130.

## Wildlife - General

- 13. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
- 14. 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.

15. 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.

# **Migratory Birds and Raptors Disturbance**

16. 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.

# **Aircraft Flight Restrictions**

- 17. 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.
- 18. 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.
- 19. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.
- 20. 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.

## Caribou and Muskoxen Disturbance

- 21. 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.
- 22. 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, bulk sampling or movement of equipment or personnel until such time as the caribou have passed.
- 23. 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 or blasting. 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, until caribou are no longer in the immediate area.

#### **Ground Disturbance**

- 24. 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. Overland travel of equipment or vehicles must be suspended if rutting occurs.
- 25. The Proponent shall implement suitable erosion and sediment suppression measures on disturbed areas before, during and after construction in order to prevent sediment from entering any waterbody.

## **Stripping and Trenching**

- 26. The Proponent shall not conduct any trenching activities within 31 metres of the high water mark of any water body.
- 27. The Proponent shall ensure that removal of material take place within one metre of the high water mark above the ground water table.
- 28. The Proponent shall implement sediment and erosion control measures by employing erosion prevention measures (e.g., berms or silt fence) in the trenching area during the project operation.
- 29. The Proponent shall stockpile all overburden/topsoil generated during trenching using proper erosion prevention measures. Upon completion of operation, the Proponent shall back fill, reclaim/re-contour and re-vegetate all disturbed areas.
- 30. The Proponent shall pump accumulated water in blast trenches to a natural depression sump, and build berms where necessary. Water should be analyzed in accordance with the Nunavut Water Board water licence discharge criteria before discharging into the environment.

## **Restoration of Disturbed Areas**

- 31. The Proponent shall ensure that all disturbed areas are restored to a stable or pre-disturbed state as practical as possible upon completion of field work.
- 32. The Proponent shall remove all garbage, fuel and equipment upon abandonment.
- 33. The Proponent shall complete all clean-up and restoration of the lands used prior to the end of each field season and/or upon abandonment of site.

#### Other

- 34. The Proponent should, to the extent possible, hire local people and to consult with local residents regarding their activities in the region.
- 35. 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:

#### **Drilling on Land**

- 36. 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 unless otherwise authorized by the Nunavut Water Board.
- 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 unless otherwise authorized by the Nunavut Water Board. 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.
- 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.

#### Other

45. The Proponent shall ensure that its planned seasonal activities are communicated to the local community with sufficient notice to ensure potential public concerns can be considered and responded to appropriately.

## MONITORING AND REPORTING REQUIREMENTS

The Board has previously recommended the following:

# Wildlife Log/Record of Observations

1. 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 is to be submitted annually at the end of the operational season to the NIRB.

# **Transportation and Management of Waste and Dangerous Goods**

- 2. The Proponent must obtain confirmation and authorization from the intended community landfill prior to disposal of waste(s). Copy of this confirmation is to be submitted to the NIRB and Environment Canada prior to commencement of operations.
- 3. The Proponent shall ensure that a waste manifest accompanies the shipment of all waste oil/grease and is registered with the Government of Nunavut Department of Environment (GN-DoE). Contact the Manager of Pollution Control and Air Quality at (867) 975-7748 to obtain a manifest if hazardous waste will be generated during project activities.
- 4. 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.

In addition, the Board is recommending the following:

# Wildlife Mitigation and Monitoring Plan

5. Prior to the start of construction, the Proponent shall submit a Wildlife Mitigation and Monitoring Plan (WMMP) to the Nunavut Impact Review Board (NIRB), Government of Nunavut-Department of Environment (GN-DoE), Aboriginal Affairs and Northern Development Canada (AANDC), and Environment Canada (EC). At a minimum, this plan should include the previously recommended wildlife log/record of observations and proposed mitigation measures for caribou, migratory birds, polar bear and other sensitive species that may be encountered within the project area. The Proponent is encouraged to consult with the Government of Nunavut's Regional Biologists during the development of the WMMP, regarding project schedule and timelines so as to ensure adequate mitigation of potential wildlife impacts.

## **Annual Report**

- 6. The Proponent shall submit a comprehensive annual report with copies provided to the Nunavut Impact Review Board (NIRB); Government of Nunavut-Department of Environment (GN-DoE), Aboriginal Affairs and Northern Development Canada (AANDC), and Environment Canada (EC) by March 31<sup>st</sup> of each year of permitted activities beginning March 31, 2016. The annual report must contain, but not be limited to, the following information:
  - a) A summary of activities undertaken for the year, including:
    - a map showing the approximate location of drill sites;
    - a map showing the location of the fuel cache;
    - a description of local hires, contracting opportunities and initiatives;
    - flight altitudes, frequency of flights and anticipated flight routes;
    - site photos;
  - b) A work plan for the following year, including any progressive reclamation work undertaken;
  - c) A summary of community consultations undertaken throughout the year, providing copy of materials presented to community members, a description of issues and concerns

- raised, discussions with community members and advice offered to the company as well as any follow-up actions that were required or taken to resolve any concerns expressed about the project proposal;
- d) Summary of the consultation conducted with Government of Nunavut biologists and any relevant outcomes including revisions or alterations to the timing of project activities;
- e) A log of instances in which community residents occupy or transit through the project area for the purpose of traditional land use or harvesting. This log should include the location and number of people encountered, activity being undertaken (e.g. berry picking, fishing, hunting, camping, etc.), date and time; and any mitigation measures or adaptive management undertaken to prevent disturbance;
- f) A discussion of issues related to wildlife and environmental monitoring, including the number of cease-work orders required as a result of proximity to caribou;
- g) An analysis of the effectiveness of mitigation measures for wildlife;
- h) A brief summary of Wildlife Monitoring and Mitigation Plan (WMMP) results including the wildlife log and record of observations as well as any mitigation actions that were undertaken;
- i) Summary of any heritage sites encountered during the exploration activities and any follow-up action or reporting required as a result; and
- j) A summary of how the Proponent has complied with conditions contained within this Screening Decision, and all conditions as required by other authorizations associated with the project proposal.

#### 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 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: <a href="http://www.enr.gov.nt.ca/">http://www.enr.gov.nt.ca/</a> 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 <a href="http://www.nunavutparks.com/english/visitor-information/suggested-resources.html">http://www.nunavutparks.com/english/visitor-information/suggested-resources.html</a> and a "Safety in Polar Bear Country" pamphlet from Parks Canada at the following link <a href="http://www.pc.gc.ca/eng/pn-np/nu/auyuittuq/visit/visit6/d/i.aspx">http://www.pc.gc.ca/eng/pn-np/nu/auyuittuq/visit/visit6/d/i.aspx</a>.
- 2. Any problem wildlife or any interaction with carnivores should be reported immediately to the local Government of Nunavut, Department of Environment Conservation Office (Conservation Officer of Baker Lake, Robert Harmer, phone: (867) 793-2940, email: <a href="mailto:rharmer@gov.nu.ca">rharmer@gov.nu.ca</a>).

## **Species at Risk**

3. The Proponent review Environment Canada's "Environment Assessment Best Practice Guide for Wildlife at Risk in Canada", available at the following link: <a href="http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=5407909E-10F6-4AFE-ACDF-">http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=5407909E-10F6-4AFE-ACDF-</a>

<u>75B9E820B4A1</u>. 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.

# **Caribou Management**

5. Territorial and federal government agencies in Nunavut should work together with Regional Inuit Associations, co-management boards and industry to develop an action plan to identify and mitigate potential cumulative effects of human land use activities, including mineral exploration, on barren-ground caribou. This assessment of cumulative effects should occur at a regional scale (i.e., larger than individual project areas).

## **Aboriginal Affairs and Northern Development Canada**

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

# Aboriginal Affairs and Northern Development Canada – Water Resources Division

8. 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.

#### **Nunavut Water Board**

9. 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.

#### REGULATORY REQUIREMENTS

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

- 1. The *Fisheries Act* (<a href="http://laws-lois.justice.gc.ca/eng/acts/F-14/index.html">http://laws-lois.justice.gc.ca/eng/acts/F-14/index.html</a>).
- 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* (<a href="http://lawslois.justice.gc.ca/eng/acts/M-7.01/">http://lawslois.justice.gc.ca/eng/acts/M-7.01/</a>).
- 4. The *Species at Risk Act* (<a href="http://laws-lois.justice.gc.ca/eng/acts/S-15.3/index.html">http://laws-lois.justice.gc.ca/eng/acts/S-15.3/index.html</a>). Attached in **Appendix B** is a list of Species at Risk in Nunavut.
- 5. The *Wildlife Act* (<a href="http://www.canlii.org/en/nu/laws/stat/snu-2003-c-26/latest/snu-2003-c-26.html">http://www.canlii.org/en/nu/laws/stat/snu-2003-c-26/latest/snu-2003-c-26.html</a>) 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* (<a href="http://laws-lois.justice.gc.ca/eng/acts/N-28.6/">http://laws-lois.justice.gc.ca/eng/acts/N-28.6/</a>). The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix C**.
- 7. The *Transportation of Dangerous Goods Regulations*, *Transportation of Dangerous Goods Act* (<a href="http://www.tc.gc.ca/eng/tdg/safety-menu.htm">http://www.tc.gc.ca/eng/tdg/safety-menu.htm</a>), and the *Canadian Environmental Protection Act* (<a href="http://laws-lois.justice.gc.ca/eng/acts/C-15.31/">http://laws-lois.justice.gc.ca/eng/acts/C-15.31/</a>). 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.
- 8. The Aeronautics Act (http://laws-lois.justice.gc.ca/eng/acts/A-2/).

# **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 \_\_\_\_\_June 5, 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 February 19, 2015 the Nunavut Impact Review Board (NIRB or Board) received an application from Stornoway Diamond Corporation<sup>2</sup> (Stornoway) for an amendment to its Water Licence with the Nunavut Water Board (NWB) 2BE-QIL1217 *formerly* 2BE-QIL0712 and a new Land Use Permit with Government of Nunavut-Community and Government Services (CGS) to replace LUP06-607-014 for the "Qilalugaq" project. On February 20, 2015 the NIRB received a referral from the NWB and on March 19, 2015 CGS referred the project to the Board for screening. On April 1, 2015 the NIRB received a positive conformity determination (Keewatin Regional Land Use Plan) from the Nunavut Planning Commission (NPC) for this project proposal.

# Past File History

On January 4, 2012 the Nunavut Impact Review Board (NIRB) received Stornoway Diamond Corporation's (Stornoway) "Qilalugaq" project proposal from Aboriginal Affairs and Northern Development Canada (AANDC). On March 21, 2012 the NIRB received a positive conformity determination (Keewatin Regional Land Use Plan) from the NPC for this file. The NIRB assigned this project proposal file number 12EN012.

The project proposal was screened in accordance with Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA) and on May 4, 2012 the NIRB issued a 12.4.4(a) screening decision to the Minister of Aboriginal Affairs and Northern Development recommending that the proposed bulk sampling activities be allowed to proceed subject to the NIRB's recommended project-specific terms and conditions.

On February 5, 2013 the NIRB received an application from the CGS for a new Land Use Permit for Stornoway Diamond Corporation's "Qilalugaq" project proposal to conduct the same activities. After a thorough assessment of the application request, the NIRB determined that the application was exempt from the requirement for further screening pursuant to Section 12.4.3 of the NLCA, and reissued the enclosed screening decision report on February 20, 2013.

# **Current File History**

The current project proposal by Stornoway is for an amendment to their existing Nunavut Water Board (NWB) Water Licence 2BE-QIL1217 (*formerly* 2BE-QIL0712) as well as a new Land Use Permit with CGS to replace LUP06-607-014.

The NIRB determined that this request may result in a change to the original scope of the project and on April 21, 2015 the project proposal was distributed to community organizations in Repulse Bay (Naujaat), as well as to relevant federal and territorial government agencies, and

<sup>&</sup>lt;sup>2</sup> North Arrow Minerals Inc. is forming a joint venture agreement with Stornoway and will be transferring permits to their company once the agreement is complete.

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 May 1, 2015 regarding:

- Whether the inclusion of the additionally proposed component(s) and/or activity(ies) would significantly modify the project;
- Any additional mitigation measures that are appropriate; and
- Any other matter of importance to the Party related to the project proposal.

On or before May 1, 2015 the NIRB received comments from the following interested parties:

- Government of Nunavut (GN)
- Aboriginal Affairs and Northern Development Canada (AANDC)
- **■** Environment Canada (EC)

Following receipt of a request from the GN for additional time to provide a supplemental comment submission for the Board's consideration, on May 20, 2015 the NIRB received the supplemental comment submission from the GN.

On June 3, 2015 North Arrow submitted additional information to the NIRB in response to comments raised during the NIRB's public commenting period. On June 4, 2015 the NIRB received an additional set of applications from North Arrow to the Government of Nunavut-Community and Government Services to continue storing fuel within the municipal boundaries, and provide further detail on the location of the core shack also proposed within the municipal boundaries. The additional applications were reviewed by NIRB and determined to be within the scope of the current project amendment.

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**

## **Previously-Approved Activities**

The project is located in the Kivalliq Region within the municipality boundary of Repulse Bay (Naujaat), approximately 10 kilometres (km) north of the community. The Proponent intends to continue diamond exploration activities in July and August 2015, with a follow-up winter exploration program in 2016.

The original application, that was screened in accordance with Part 4, Article 12 of the NLCA, included the following project components/activities:

- Bulk sample program to extract approximately 1,500 tonnes of material (trenching/excavation);
- Survey of select group of mineral claims (to be undertaken in 2012 only);
- Use of helicopter to:

- o Daily transport of personnel and equipment to and from site
- Daily transport of contractors to conduct surveys
- o Transport of tracked mini-excavator to site
- o Transport of filled mega bags from site to Repulse Bay; ~ 40 bags/day
- o Transport of fuel drums to and from site as required
- Use of accommodations at Repulse Bay;
- Transportation, storage and use of fuel at site. Two options presented for storage of fuel:
  - 1) Storage of fuel at secure site in Repulse Bay with minimal amount of fuel stored at site (one 205 litre drum of diesel fuel and one 205 litre drum of Jet-B fuel); or
  - 2) Storage of Jet-B fuel at site in a temporary berm (total of 58,220 litres) and diesel fuel on as needed basis (maximum of one 205 litre drum).
- Potential trenching activities to develop temporary fuel storage berms;
- Domestic waste to be hauled out each day to the facility in Repulse Bay; and
- On site chemical and hazardous materials storage.

On February 5, 2013 the NIRB received an application for a new Land Use Permit from the Government of Nunavut – Community and Government Services (CGS) for the above mentioned project. After a thorough assessment of the new Land Use Permit, the NIRB determined that the application was exempt from the requirement for further screening pursuant to Section 12.4.3 of the NLCA, and reissued the enclosed screening decision report on February 20, 2013.

# **Current Request**

The Proponent is currently applying for an amendment to its existing Nunavut Water Board (NWB) Water Licence 2BE-QIL1217 (formerly 2BE-QIL0712) as well as a new Land Use Permit with CGS to replace previous permit LUP06-607-014 and include the following additional components or activities:

- Diamond exploration in 2015 (with the option of 2016 if program delayed) and proposed activities to include:
  - O Summer program anticipated to operate during the months of July and August in 2015 and May through August in 2016;
  - o On land and on-ice drilling using two diamond drills and targeting 20 to 30 locations for a total of 10,000 to 20,000 metres of drill core;
- Use of helicopter to transport personnel and drill equipment between proposed drill locations on a daily basis in the summer;
- Use of Snowcats or similar machines to transport personnel and drill equipment between proposed drill locations on a daily basis in the winter;
- Water withdrawal from two unnamed lakes for drilling purposes; and
- Archaeological surveys.

# **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 <sup>1</sup>	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility <sup>2</sup>
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	Schedule 1	GN
	(anatum-tundrius complex <sup>3</sup> )		
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	Endangered	Schedule 1	EC
(rufa subspecies)			
Ross's Gull	Threatened	Schedule 1	EC
Red Knot	Special Concern	Schedule 1	EC

Species at Risk <sup>1</sup>	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility <sup>2</sup>
(islandica subspecies)			
Harlequin Duck	Special Concern	Schedule 1	EC
(Eastern population)			
Grizzly Bear	Special Concern	Pending	GN
Wolverine (Western population)	Special Concern	Pending	GN
Horned Grebe	Special Concern	Pending	EC
(Western population)			
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	Threatened	Pending	DFO
(Cumberland Sound population)	F 1 1	D 11	PEO
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	Special Concern	Pending	DFO
(Eastern Canada – West Greenland population)			
Killer Whale (Northwest Atlantic / Eastern Arctic populations)	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO

<sup>&</sup>lt;sup>1</sup> The Department of Fisheries and Oceans has responsibility for aquatic species.

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> 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	Function	
	(See Guidelines below)	(See Guidelines below)	
a)	Large seels prospecting	Archaeological/Palaeontological	
	Large scale prospecting	Overview Assessment	
	Diamond drilling for exploration or		
b)	geotechnical purpose or planning of	Archaeological/ Palaeontological	
	linear disturbances	Inventory	
c)	Construction of linear disturbances,	Archanological/Palacontalogical	
	Extractive disturbances, Impounding	Archaeological/ Palaeontological Inventory or Assessment or Mitigation	
	disturbances and other land		
	disturbance activities	Willigation	

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*<sup>3</sup> to issue such permits.

<sup>&</sup>lt;sup>3</sup> P.C. 2001-1111 14 June, 2001

- 2) The permittee/proponent shall not operate any vehicle over a known or suspected archaeological or palaeontological site.
- 3) The permittee/proponent shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.
- 4) The permittee/proponent shall immediately contact 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*<sup>4</sup>, 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*<sub>5</sub>, 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.

<sup>&</sup>lt;sup>4</sup>s. 51(1)

<sup>&</sup>lt;sup>5</sup> 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.