

# SCREENING DECISION REPORT NIRB FILE No.: 15XN046

NPC File No.: 148139

#### November 26, 2015

Following the Nunavut Impact Review Board's (NIRB or Board) assessment of all materials provided, the NIRB is recommending that a review of Kudlik Construction Ltd.'s "Backup Asphalt Plant to IIAIP Project" is not required pursuant to paragraph 92(1)(a) of the *Nunavut Planning and Project Assessment Act* (NuPPAA).

Subject to the Proponent's compliance with the terms and conditions as set out below, the NIRB is of the view that the project proposal is not likely to cause significant public concerns, and it is unlikely to result in significant adverse environmental and social impacts. The NIRB therefore recommends that the responsible Minister(s) accepts this Screening Decision Report.

#### **OUTLINE OF SCREENING DECISION REPORT**

- 1) REGULATORY FRAMEWORK
- 2) PROJECT OVERVIEW & THE NIRB ASSESSMENT PROCESS
- 3) FACTORS FOR DETERMINING SIGNIFICANCE OF IMPACTS
- 4) RECOMMENDED PROJECT-SPECIFIC TERMS AND CONDITIONS
- 5) MONITORING AND REPORTING REQUIREMENTS
- 6) OTHER NIRB CONCERNS AND RECOMMENDATIONS
- 7) REGULATORY REQUIREMENTS
- 8) Conclusion

#### REGULATORY FRAMEWORK

The primary objectives of the 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."

These objectives are confirmed under section 23 of the NuPPAA.

The purpose of screening is provided for under section 88 of the NuPPAA:

"The purpose of screening a project is to determine whether the project has the potential to result in significant ecosystemic or socio-economic impacts and, accordingly, whether it requires a review by the Board..."

To determine whether a review of a project is required, the NIRB is guided by the considerations as set out under subsection 89(1) of NuPPAA:

- "89. (1) The Board must be guided by the following considerations when it is called on to determine, on the completion of a screening, whether a review of the project is required:
  - (a) a review is required if, in the Board's opinion,
    - the project may have significant adverse ecosystemic or socio-economic impacts or significant adverse impacts on wildlife habitat or Inuit harvest activities,
    - ii. the project will cause significant public concern, or
    - the project involves technological innovations, the effects of which are unknown: and
  - (b) a review is not required if, in the Board's opinion,
    - the project is unlikely to cause significant public concern, and
    - its adverse ecosystemic and socioeconomic impacts are unlikely to be ii. significant, or are highly predictable and can be adequately mitigated by known technologies."

It is noted that subsection 89(2) provides that the considerations set out in paragraph 89(1)(a) prevail over those set out in paragraph 89(1)(b).

Where the NIRB determines that a project may be carried out without a review, the NIRB has the discretion to recommend specific terms and conditions to be attached to any approval of the project proposal. Specifically, paragraph 92(2)(a) of NuPPAA provides:

- "92. (2) In its report, the Board may also
  - (a) recommend specific terms and conditions to apply in respect of a project that it determines may be carried out without a review."

#### PROJECT OVERVIEW & THE NIRB ASSESSMENT PROCESS

#### 1. Project Description

The proposed "Backup Asphalt Plant to IIAIP [Iqaluit International Airport Improvement Project] Project" is located within the Qikiqtani region, adjacent to the Iqaluit International Airport runway in the City of Iqaluit. The Proponent intends to construct and operate an asphalt batch plant, as a backup for the Iqaluit International Airport Improvement project, to produce hot-mix asphalt which will be used in municipal projects, including paving of roads and parking lots. Construction of the asphalt plant is proposed to commence in July 2016, which would be operated intermittently as necessary from September 2016 and continue to 2026 or potentially longer.

According to the project proposal, the scope of the project includes the following undertakings, works or activities:

- Construction, operations, maintenance and decommissioning of a hot-mix asphalt batch plant;
- Shipment of construction materials, asphalt batch plant and related materials to Iqaluit via sealift:
- Transportation of construction materials, asphalt batch plant, and operations materials via existing access roads to the site;
- Transportation of the asphalt product to municipal projects;
- Stockpiling and crushing of aggregate materials;
- Storage and use of bitumen for the production of asphalt;
- Storage and use of diesel fuel (40,000 litres);
- Use of heavy equipment to haul materials and asphalt product;
- Production of human and grey water waste;
- Disposal of sewage and grey water wastes by local company; and
- Removal of crushed bitumen drums for disposal at an appropriate southern facility.

# 2. Scoping

The NIRB has identified no additional works or activities in relation to the project proposal.

# 3. Key Stages of the Screening Process

The following key stages were completed:

Date	Stage
September 4, 2015	Receipt of project proposal from the NPC
September 29, 2015	Scoping pursuant to subsection 86(1) of the NuPPAA
September 30, 2015	Information request(s)
October 5, 2015	Public engagement and comment request
October 20, 2015	Ministerial extension
November 9, 2015	Receipt of public comments

#### 4. Public Comments and Concerns

From October 5, 2015 to October 26, 2015 the NIRB provided opportunity for the public to provide comments and concerns regarding the project proposal. Due to an administrative error, not all parties were included in the original distribution of the request for comments. As a result, from October 27, 2015 to November 6, 2015 the NIRB provided an additional opportunity for the public to provide comments. The following is a summary of the comments and concerns received:

# **Government of Nunavut – Department of Environment (GN-DOE)**

• Recommended that the Proponent comply with the Asphalt Paving and Emission Regulations pursuant to the GN's *Environmental Protection Act* and submit an Asphalt Paving and Emissions Monitoring Plan detailing proposed compliance measures.

# **Aboriginal Affairs and Northern Development Canada (AANDC)**

- Noted lack of information regarding the Proponent's public consultation measures and recommended that the Proponent consult potentially affected communities prior to project commencement;
- Noted that with appropriate management and mitigation measures the proposed activities would not likely lead to significant environmental or socio-economic impacts; and
- Noted that fuel would be stored in a single 40,000 litre (L) tank and progressively emptied into a 4,000 L tank. AANDC recommended that the Proponent construct a dyke surrounding the tanks.

### **Environment Canada (EC)**

- Provided recommendations to ensure that deleterious substances do not enter into nearby waterbodies;
- Reminded the Proponent that pursuant to the Migratory Bird Regulations and the Migratory Birds Convention Act that no one shall disturb or destroy the nests or eggs of migratory birds; and
- Provided recommendations pursuant to the *Species at Risk Act* if Species at Risk encountered.

# 5. Comments and Concerns with respect to Inuit Qaujimaningit

No concerns or comments were received with respect to Inuit Qaujimaningit in relation to the proposed project.

#### FACTORS FOR DETERMINING SIGNIFICANCE OF IMPACTS

In determining whether a review of the project is required, the Board considered whether the project proposal had a potential to result in significant ecosystemic or socio-economic impacts.

Accordingly, the assessment of impact significance was based on the analysis of those factors that are set out under section 90 of NuPPAA. The Board took particular attention to take into account traditional knowledge and Inuit Qaujimaningit in carrying out its assessment and determination of the significance of impacts.

The following is a summary of the Board's assessment of the factors that are relevant to the determination of significant impacts with respect of this project proposal:

1. The size of the geographic area, including the size of wildlife habitats, likely to be affected by the impacts.

The size of the geographic area for the on-site activities for the proposed project would be 10,000 square metres (m<sup>2</sup>), located adjacent to the existing airstrip, within the Iqaluit Airport

development area, and would consist of a batch asphalt plant facility, area to store aggregate materials, and on-site transportation of materials through processing. The project related transportation activities would utilize existing municipal roads. The asphalt plant would be located in proximity to existing industrial activity, including the Iqaluit International Airport and a quarry site. The area associated with the proposed development has not been identified as being an important wildlife habitat; however, due to the ongoing traffic and development in the area, the proposed project area would likely only overlap with the range of small mammals.

2. The ecosystemic sensitivity of that area.

The proposed project would occur in an area with no particular identified ecosystemic sensitivity.

3. The historical, cultural and archaeological significance of that area.

The project Proponent has indicated that there are no known areas of historical, cultural and archaeological significance associated with the proposed project area. Should the project be approved to proceed, the Proponent has committed to contacting the Government of Nunavut in the event that heritage resources are discovered during work operations.

4. The size of the human and the animal populations likely to be affected by the impacts.

The proposed project would occur approximately one (1) kilometre (km) from the city centre of Iqaluit, within the Municipal boundary; as a result, human populations are likely to be affected by potential project impacts. The Proponent had indicated that there is no potential for negative impacts to health resulting from emissions, odour, or noise. Further, no concerns were raised by parties during the public consultation period, and the Proponent has committed to operational considerations to reduce the impacts from spills or emergencies. No specific animal populations have been identified as likely to be affected by potential project impacts. However, as noted previously, it is expected that small mammals may inhabit the area and be potentially impacted by the proposed activities.

5. The nature, magnitude and complexity of the impacts; the probability of the impacts occurring; the frequency and duration of the impacts; and the reversibility or irreversibility of the impacts.

The "Backup Asphalt Plant to IIAIP Project" is a proposed asphalt batch plant facility. The nature of potential impacts, including potential impacts to water quality and vegetation and soils potentially resulting from spills, are generally considered to be predictable and mitigatable through known technology and easily monitored. In general, there is potential for infrequent, localised impacts to the biophysical environment that are temporary in nature, reversible and mitigable with due care. However, there is potential for intermittent, localized impacts to air quality that are predictable, mitigable through known technology, and the Proponent is required by legislation to monitor emissions. Further, there is potential for frequent, localized impact to terrain resulting from on-site constructions, operations, staging,

and movement of materials that would likely be irreversible but confined to the project development area.

6. The cumulative impacts that could result from the impacts of the project combined with those of any other project that has been carried out, is being carried out or is likely to be carried out.

Proposed transportation routes of the project would utilize existing roads and thus overlap with existing traffic. As a result, there is the potential for cumulative impacts to air quality resulting from dust generated from transportation and stockpiling activities. Should the project be approved to proceed, the Proponent has committed to applying water as dust suppression along the haul road and at the construction site, as well as equipping its equipment and vehicles with anti-pollution systems. The potential for dust has been identified and considered in development of the recommended mitigation measures set out in the following section.

The proposed project is intended to be used as a backup to the existing asphalt plant, which is designed to produce large quantities of asphalt and run for longer periods of time. As a result, the proposed installation and use of the backup Asphalt batch plant could reduce potentially greater cumulative impacts that could result from the use of the existing asphalt batch plant for smaller projects.

7. Any other factor that the Board considers relevant to the assessment of the significance of impacts.

No other specific factors have been identified as relevant to the assessment of this project proposal.

In considering the factors as set out above in the screening of the project proposal, the NIRB has identified a number of issues and provides the following views regarding whether or not the proposed project has the potential to result in significant impacts, and has proposed terms and conditions that would mitigate the potential adverse impacts identified.

# 1. Ecosystem, wildlife habitat and Inuit harvesting activities:

<u>Issue 1:</u> Potential negative impacts to water quality, vegetation and soil, and small mammal habitat from potential spills resulting from the storage and transfer of fuel and asphalt end product.

<u>Board views</u>: As discussed above in the assessment of factors relevant to this project proposal, the potential for impacts is applicable to a small geographic area and limited due to likely infrequent rate of occurrence. Further, while the magnitude of impacts resulting from a potential spill is unknown, the Proponent has provided a comprehensive spill prevention plan (see Proponent Commitments section).

- Recommended Mitigation Measures: It is recommended that operational procedures for storing and transfer of materials, use of secondary containment, and spill response equipment would reduce the risk of uncontrolled releases of fuel or hazardous materials resulting in negative impacts to water quality, vegetation, soil, and small mammal habitat. The following terms and conditions are recommended to mitigate the potential adverse impacts: 7-14.
- <u>Issue 2:</u> Potential negative impacts to air quality from increased sound levels during operations at the asphalt batch plant, plant and vehicle emissions, as well as dust from transportation activities.
- <u>Board views</u>: The potential for negative impacts to air quality is applicable to a relatively small geographic area that could potentially extend to residential areas. There is a moderate probability of impacts occurring, however, the potential impacts would likely be low in magnitude and reversible in nature as the Proponent has provided mitigation measures and has committed to meeting the *Asphalt Paving Industry Emission Regulations* of Nunavut (see Proponent Commitments section).
- Recommended Mitigation Measures: The Proponent is expected to follow the requirements of the Asphalt Paving and Emission Regulations of Nunavut as outlined by item 9 of the above Regulatory Requirements Section. The following terms and conditions are recommended to mitigate the potential adverse impacts: 21-23. The Proponent is further requested to submit follow-up monitoring regarding air emissions through annual reporting as outlined in item 1 and 2 of the Monitoring and Reporting Requirements Section of this report. In order to provide parties with information related to the NIRB assessment and assist with determining compliance, terms and conditions 1 through 4 have been recommended.
- <u>Issue 3:</u> Potential impacts to surface water drainage, terrain, and wildlife and bird habitat from the proposed installation of the asphalt batch plant, on-site stockpiling, vehicle movements, and general operations.
- <u>Board views</u>: The potential for negative impacts is limited to a relatively small geographic area and the probability of impacts occurring and the magnitude of resulting impacts would likely be low as the Proponent has noted that the site location for the proposed facility is already being used to stockpile aggregates and activities associated with the Iqaluit International Airport Improvement Project, and would not be conducted on undisturbed land. Potential effects are likely largely irreversible in nature, as the Proponent has noted that aggregate materials would be left on-site post decommissioning.
- <u>Recommended Mitigation Measures</u>: The following terms and conditions are recommended to mitigate the potential adverse impacts during operations, decommissioning, and restoration: 5, 6, and 15-20.

#### 2. Socio-economic effects on northerners:

- **Issue 4:** Low potential for negative impacts from disturbance to historical, cultural and archaeological sites. The Proponent is proposing to work in an area of pre-existing industrial activity and no known historical significance has been identified associated with the project development area.
- <u>Board Views:</u> The Proponent has provided mitigation measures (see Emergency Response Plan) and is required to contact the Culture and Heritage Department of the Government of Nunavut when encountering historical sites (see Regulatory Requirements section).
- <u>Recommended Mitigation Measures</u>: Term and condition 24 is recommended to mitigate the potential adverse impacts.
- <u>Issue 5:</u> Potential positive impact to residents of Iqaluit as the Proponent has committed to employing local Inuit beneficiaries.
- <u>Board Views:</u> The Proponent has noted its intention to employ local Inuit beneficiaries and has committed to providing health and safety training to mitigate potential risks to workers (see Emergency Response Plan).
- <u>Recommended Mitigation Measures</u>: Term and condition 25 is recommended to ensure that the Proponent informs the community of employment opportunities.

### 3. Significant public concern:

- <u>Issue 6:</u> No significant public concern was expressed during the public commenting period for this file.
- <u>Board Views:</u> Follow up consultation and involvement of local community members is expected to mitigate any potential for public concern resulting from project activities.
- <u>Recommended Mitigation Measures</u>: Term and condition 25 is recommended to ensure that the affected community and organizations are informed about the project proposal and to mitigate any concerns that may arise from the project activities.

#### 4. Technological innovations for which the effects are unknown:

No specific issues have been identified associated with this project proposal.

In considering the above factors and subject to the Proponent's compliance with the terms and conditions necessary to mitigate against the potential adverse environmental and social effects, the Board is of the view that the proposed project is unlikely to cause significant public concern and its adverse ecosystemic and socioeconomic impacts are unlikely to be significant, or are highly predictable and can be adequately mitigated by known technologies.

#### RECOMMENDED PROJECT-SPECIFIC TERMS AND CONDITIONS

The Board is recommending the following specific terms and conditions to apply in respect of the project:

#### General

- 1. Kudlik Construction 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 the Nunavut Planning Commission (City of Iqaluit Permit Application, NIRB Part 1 Form, September 4, 2015), and to the NIRB (NIRB Part 2 forms, Plans, and Maps, September 28, 2015; updated NIRB Part 2 Form and Maps, October 2, 2015).
- 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. Unless otherwise authorized by the Nunavut Water Board, 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-fueling of all equipment occurs a minimum of thirty-one (31) metres away from the high water mark of any water body, unless otherwise authorized by the Nunavut Water Board.
- 9. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife.
- 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 at all locations.
- 11. 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.

- 12. The Proponent shall inspect and document the condition of all large fuel tanks 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.
- 13. The Proponent shall remove hydrocarbon contaminated soils and/or materials to an approved disposal site for treatment.
- 14. 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.

#### **Migratory Birds and Raptors Disturbance**

- 15. Unless required to do so for aviation safety requirements, 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.
- 16. The Proponent shall ensure that all project personnel are made aware of the measures to protect wildlife, migratory birds, and Species at Risk and are provided with training and/or advice on how to implement these measures.

#### **Ground Disturbance**

- 17. 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.
- 18. 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.

#### **Restoration of Disturbed Areas**

- 19. The Proponent shall remove all garbage, fuel and equipment upon abandonment.
- 20. The Proponent shall complete all clean-up and restoration of the lands used, to the extent practicable, upon abandonment of site.

#### Other

- 21. All construction and road vehicles must be fitted with standard and well-maintained noise suppression devices and engine idling is to be minimized.
- 22. The Proponent shall take appropriate measures to reduce the emission of airborne contaminants from the asphalt plant activities.
- 23. The Proponent shall take appropriate dust suppression measures and shall use water or other non-toxic biodegradable additives for dust suppression as necessary to maintain ambient air quality without causing water to pool or runoff.
- 24. The Proponent shall ensure that all staff are aware of the Proponent's responsibilities and requirements regarding archaeological or palaeontological sites that are encountered during on-site activities.

25. The Proponent should, to the extent possible, hire local people and consult with local residents regarding their activities in the area and available Inuit Qaujimaningit that can inform project activities.

#### MONITORING AND REPORTING REQUIREMENTS

In addition, the Board is recommending the following:

### **Asphalt Paving and Emissions Monitoring Plan**

1. The Proponent shall submit a stand-alone Asphalt Paving and Emissions Monitoring Plan to the NIRB and the GN-DOE prior to construction activities. The updated plan should provide additional details on air quality monitoring, inspection and testing practices, as well as operational considerations to comply with the *Asphalt Paving Industry Emission Regulations*.

## **Annual Report**

- 2. The Proponent shall submit a comprehensive annual report by March 31st of each year of permitted activities. The annual report must contain, but is not limited to, the following information:
  - a. Details on any mitigation or monitoring activities undertaken relating to dust and noise;
  - b. Any updates to the Asphalt Paving and Emissions Monitoring Plan, including:
    - i. Details on inspections that occurred during the year;
    - ii. A map and descriptions of the air quality testing undertaken and planned, specifically noting sample locations, results of tests, and comparison of results to required emissions standards;
    - iii. Any strategies considered if actual air quality tests not meeting emissions standards; and
    - iv. Any additional activities undertaken to meet the standards required by the *Asphalt Paving Industry Emission Regulations*.
  - c. A summary of any complaints or reporting of impacts by community members, particularly as relates to odour, noise, and dust;
  - d. A summary of any community consultations undertaken the previous year and/or planned for the upcoming year; and
  - e. Summary of any heritage sites encountered during project activities and any follow-up action or reporting required as a result.

#### OTHER NIRB CONCERNS AND RECOMMENDATIONS

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

#### **Bear and Carnivore Safety**

- 1. The Proponent review the bear/carnivore detection and deterrent techniques outlined in "Safety in Grizzly and Black Bear Country" which can be down-loaded from this link: <a href="http://www.enr.gov.nt.ca/sites/default/files/web\_pdf\_wd\_bear\_safety\_brochure\_1\_may\_2015">http://www.enr.gov.nt.ca/sites/default/files/web\_pdf\_wd\_bear\_safety\_brochure\_1\_may\_2015</a>
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- 2. Any problem wildlife or any interaction with carnivores should be reported immediately to the local Government of Nunavut, Department of Environment Conservation Office (Iqaluit Conservation Officer, phone: (867) 462-4002).

#### REGULATORY REQUIREMENTS

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

## **Acts and Regulations**

- 1. The *Fisheries Act* (http://laws-lois.justice.gc.ca/eng/acts/F-14/index.html).
- 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 A** 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 B**.
- 7. The Transportation of Dangerous Goods Regulations, Transportation of Dangerous Goods Act (http://www.tc.gc.ca/eng/tdg/safety-menu.htm), and the Canadian Environmental Protection Act (http://laws-lois.justice.gc.ca/eng/acts/C-15.31/). The Proponent must ensure that proper shipping documents accompany all movements of dangerous goods. The Proponent must register with the Government of Nunavut, Department of Environment Manager of Pollution Control and Air Quality at 867-975-7748.
- 8. 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.

9. The Government of Nunavut's *Environmental Protection Act* and the *Asphalt Paving and Emission Regulations* (http://gov.nu.ca/sites/default/files/Asphalt%20Emission%20Regs.pdf).

#### **CONCLUSION**

The foregoing constitutes the Board's screening decision with respect to the Kudlik Construction Ltd.'s "Backup Asphalt Plant to IIAIP Project" proposal.

Dated November 26, 2015 at Churchill, MB.

Elizabeth Copland, Chairperson

Attachments: Appendix A: Species at Risk in Nunavut

Appendix B: Archaeological and Palaeontological Resources Terms and Conditions for Land Use

Permit Holders

# Appendix A:

# 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: June 2015

Species at Risk <sup>1</sup>	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility <sup>2</sup>
Eskimo Curlew	Endangered	Schedule 1	Environment Canada (EC)
Ivory Gull	Endangered	Schedule 1	EC
Ross's Gull	Threatened	Schedule 1	EC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	EC
Rusty Blackbird	Special Concern	Schedule 1	Government of Nunavut (GN)
Peregrine Falcon	Special Concern (anatum-tundrius complex <sup>3</sup> )	Schedule 1 - Threatened ( <i>anatum</i> ) Schedule 3 – Special Concern ( <i>tundrius</i> )	GN
Short-eared Owl	Special Concern	Schedule 3	GN
Red Knot (rufa subspecies)	Endangered	Schedule 1	EC
Red Knot (islandica subspecies)	Special Concern	Schedule 1	EC
Horned Grebe (Western population)	Special Concern	Pending	EC
Red-necked Phalarope	Special concern	Pending	EC
Buff-breasted Sandpiper	Special concern	Pending	EC
Felt-leaf Willow	Special Concern	Schedule 1	GN
Porsild's Bryum	Threatened	Schedule 1	GN
Peary Caribou	Endangered	Schedule 1	GN
Barren-ground Caribou	Special Concern	Schedule 1	GN

Species at Risk <sup>1</sup>	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility <sup>2</sup>
(Dolphin and Union population)			
Polar Bear	Special Concern	Schedule 1	GN/Fisheries and Oceans Canada (DFO)
Grizzly Bear	Special Concern	Pending	GN
Wolverine	Special Concern	Pending	GN
Atlantic Cod, Arctic Lakes	Special Concern	Pending	DFO
Atlantic Walrus	Special Concern	Pending	DFO
Beluga Whale (Cumberland Sound population)	Threatened	Schedule 2	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
Bowhead Whale (Eastern Arctic population		Schedule 2	DFO
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* subspecies of Peregrine Falcon is listed on Schedule 1 of SARA as threatened. The *anatum* and *tundrius* subspecies of Peregrine Falcon were reassessed by COSEWIC in 2007 and combined into one subpopulation complex. This subpopulation complex was assessed by COSEWIC as Special Concern.

#### **Appendix B:**

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)	
	Large coele prospecting	Archaeological/Palaeontological	
a)	Large scale prospecting	Overview Assessment	
	Diamond drilling for exploration or		
b)	geotechnical purpose or planning of	Archaeological/ Palaeontological	
	linear disturbances	Inventory	
	Construction of linear disturbances,	Archaeological/ Palaeontological	
c)	Extractive disturbances, Impounding	Inventory or Assessment or Mitigation	
	disturbances and other land		
	disturbance activities	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*<sup>1</sup> to issue such permits.

<sup>&</sup>lt;sup>1</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>2</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>3</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>2</sup> s. 51(1)

<sup>&</sup>lt;sup>3</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.