



## SCREENING DECISION REPORT

### NIRB FILE No.: 15XN051

NPC File No.: 149361  
*Related to NPC File No.: 148158 and 149195*  
 NWB File No.: 1BR-THI2027

**September 1, 2020**

Following the Nunavut Impact Review Board's (NIRB or Board) assessment of all materials provided, the NIRB is recommending that a review of Qikiqtaaluk Environmental Inc.'s "Installation of an Incinerator" is not required pursuant to Article 12, Section 12.4.4(a) of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)* and s. 92(1)(a) of the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (*NuPPAA*).

Subject to the Proponent's compliance with the terms and conditions as set out in 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 accepts this Screening Decision Report.

#### OUTLINE OF SCREENING DECISION REPORT

<b>REGULATORY FRAMEWORK .....</b>	<b>2</b>
<b>PROJECT REFERRAL .....</b>	<b>3</b>
<b>PROJECT OVERVIEW &amp; THE NIRB ASSESSMENT PROCESS .....</b>	<b>3</b>
<b>ASSESSMENT OF THE PROJECT PROPOSAL IN ACCORDANCE WITH PART 3 OF THE <i>NUPPAA</i> .....</b>	<b>6</b>
<b>VIEWS OF THE BOARD .....</b>	<b>8</b>
<b>RECOMMENDED PROJECT-SPECIFIC TERMS AND CONDITIONS .....</b>	<b>12</b>
<b>OTHER NIRB CONCERNS AND RECOMMENDATIONS .....</b>	<b>15</b>
<b>CONCLUSION .....</b>	<b>18</b>

#### **APPENDICES**

APPENDIX A: PREVIOUSLY-SCREENED PROJECT PROPOSALS .....	19
APPENDIX B: SPECIES AT RISK IN NUNAVUT .....	21
APPENDIX C: ARCHAEOLOGICAL AND PALAEOLOGICAL RESOURCES TERMS AND CONDITIONS FOR LAND USE PERMIT HOLDERS .....	24

## REGULATORY FRAMEWORK

The primary objectives of the NIRB are set out in Article 12, Section 12.2.5 of the *Nunavut Agreement* and are confirmed by s. 23 of the *NuPPAA*:

*Nunavut Agreement*, Article 12, Section 12.2.5: 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.

The purpose of screening is provided for under Article 12, Section 12.4.1 of the *Nunavut Agreement* and s. 88 of the *NuPPAA* which states:

*NuPPAA*, s. 88: 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 Article 12, Section 12.4.2(a) and (b) of the *Nunavut Agreement* and s. 89(1) of *NuPPAA* which states:

*NuPPAA*, s. 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,
  - i. 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
  - iii. the project involves technological innovations, the effects of which are unknown; and
- (b) a review is not required if, in the Board's opinion,
  - i. the project is unlikely to cause significant public concern, and
  - ii. its adverse ecosystemic and socioeconomic impacts are unlikely to be significant, or are highly predictable and can be adequately mitigated by known technologies.

It is noted that under Article 12, Section 12.4.2(c) and s. 89(2) of the *NuPPAA* provides that the considerations set out in s.89(1)(a) prevail over the considerations set out in s. 89(1)(b) of the *NuPPAA*.

As set out under Article 12, Section 12.4.4 of the *Nunavut Agreement* and s. 92(1) of the *NuPPAA*, upon conclusion of the screening process, the Board must provide its written report the Minister. The contents of the NIRB's report are specified under *NuPPAA*:

*NuPPAA*, s. 92(1): The Board must submit a written report to the responsible Minister containing a description of the project that specifies its scope and indicating that:

- (a) a review of the project is not required;
- (b) a review of the project is required; or
- (c) the project should be modified or abandoned.

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 pursuant to paragraph 92(2)(a) of *NuPPAA* as follows:

*NuPPAA*, s. 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 REFERRAL

On May 25, 2020 the NIRB received a referral to screen Qikiqtaaluk Environmental Inc.'s "Installation of an Incinerator" project proposal from the Nunavut Planning Commission (NPC or Commission), which noted that the project proposal is outside the area of an applicable regional land use plan. The Commission noted that the previous conformity determination issued on November 24, 2015 for the activities associated with the current proposal continues to apply and has determined that the project proposal is a significant modification to the project because of the installation and operation of a biomedical waste incinerator that was not part of the previously screened project proposal

Pursuant to Article 12, Sections 12.4.1 and 12.4.4 of the *Nunavut Agreement* and s. 87 of the *NuPPAA*, the NIRB commenced screening this project proposal. Due to the proposal containing activities that were sufficiently related to previously assessed activities under NIRB file number **15XN051**, the NIRB viewed this project proposal as an amendment to the previously screened project and assigned the proposal with this previous file number.

#### PROJECT OVERVIEW & THE NIRB ASSESSMENT PROCESS

### 1. Screening Process Timelines

The following key stages were completed for the screening process:

Date	Stage
May 25, 2020	Receipt of <i>amended</i> project proposal and referral from the Commission.
May 27, 2020	Request to complete public registry online and provide information pursuant to s. 144(1) of the <i>NuPPAA</i>
May 27, 2020 & June 5, 2020	Request(s) to Proponent for additional information in order to carry out screening pursuant to s. s. 144(1) of the <i>NuPPAA</i>
July 13, 2020	Proponent responded to information request(s) and provided additional information

Date	Stage
July 13, 2020	Scoping pursuant to s. 86(1) of the <i>NuPPAA</i>
July 20, 2020	Public engagement and comment request
August 10, 2020	Receipt of public comments
September 1, 2020	Issuance of Screening Decision Report

## 2. Project Scope

All documents received and pertaining to this project proposal can be accessed from the NIRB's online public registry at <https://www.nirb.ca/project/125540>.

The following table provides a summary of the *original* project as previously screened by the NIRB (File No. 15XN051):

<b>Original Project:</b>	Environmental Waste Processing Facility
<b>Region:</b>	The project as previously approved was located within the Qikiqtani (South Baffin) region.
<b>Location:</b>	Within city limits of Iqaluit
<b>Summary of Project Description:</b>	The Project as originally screened included conducting remediation of hydrocarbon contaminated soils, management of contaminated water, contaminated soil and management of industrial and household hazardous and non-hazardous waste. A complete description of the scope of activities previously approved has been included within <a href="#">Appendix A</a> .
<b>Original Project Timeline:</b>	Year-round operation commenced May 2016 and will continue as long as operations was commercially viable.

The following table provides a summary of the current *amended* project as proposed by QE:

<b>Amended Project:</b>	Installation of an Incinerator
<b>Region:</b>	The project would be located in the same area as previously approved and would be located within the Qikiqtani (South Baffin) region.
<b>Location:</b>	Within the city limits of Iqaluit
<b>Summary of Project Description:</b>	The Proponent intends to amend the scope of previously approved activities by installing and operating a biomedical waste incinerator.
<b>Project Proposed Timeline:</b>	Installation June 2020 to May 2021

As required under s. 86(1) of the *NuPPAA*, the Board accepts the scope of the project as set out by QE in the proposal. The scope of the amended project proposal includes the following undertakings, works, or activities:

- Installation and operation of biomedical waste incinerator;
- Use of vehicles (airplane, trucks, barge) to transport equipment to incinerator site;
- Installation of container to store diesel fuel in order to operate facilities;
- Production of hazardous and non-hazardous waste that will be processed as appropriate (disposed at landfill or sent to southern facilities for proper disposal); and
- Use of accommodations and facilities within the city of Iqaluit.

### 3. Inclusion or Exclusion to Scoping List

The NIRB has identified no additional works or activities in relation to the project proposal. As a result, the NIRB proceeded with screening the project based on the scope as described above.

### 4. Public Comments and Concerns

Notice regarding the NIRB's screening of this project proposal was distributed on July 20, 2020 to community organizations in Iqaluit, as well as to relevant federal and territorial government agencies, Inuit organizations and other parties. The NIRB requested that interested parties review the proposal and provide the Board with any comments or concerns by August 10, 2020 regarding:

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

On or before August 10, 2020 the NIRB received comments from the following interested parties:

- **Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC)**

#### *a. Summary of Public Comments and Concerns Received during the Public comment period of this file*

The following provides a summary of the comments and concerns received by the NIRB:

#### **Crown-Indigenous Relations and Northern Affairs Canada**

- Noted that the potential impacts of the proposed Project can be mitigated with known practices or technology.
- Noted that the Identification of Environmental Impacts table does not include potential impacts from stored fuel and from the incinerator and recommends the Proponent update the Impacts table.
- Recommends the Proponent prioritize the hiring and training of local Inuit beneficiaries to maintain and operate the biomedical waste incinerator.

- Recommends the Proponent maintain open communication with the City of Iqaluit, nearby administrators, and community members on project activities. All project results should be communicated with these interested parties.
- Recommends that the Proponent adopt additional common fuel practices to mitigate potential adverse effects from fuel activities.

***b. Comments and Concerns with respect to Inuit Qaujimaningit, Traditional, and Community Knowledge***

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

**ASSESSMENT OF THE PROJECT PROPOSAL IN ACCORDANCE WITH PART 3 OF THE *NuPPAA***

In determining whether a review of the project is required, the Board considered whether the project proposal had 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 s. 90 of the *NuPPAA*. The Board took particular care to take into account Inuit Qaujimaningit, traditional and community knowledge 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:

<b>Factor</b>	<b>Comment</b>
The size of the geographic area, including the size of wildlife habitats, likely to be affected by the impacts.	<ul style="list-style-type: none"> <li>▪ The size of the geographical area takes place within the municipal boundaries of the city of Iqaluit.</li> <li>▪ The proposed project would take place within habitats of far-ranging wildlife species such as migratory and non-migratory birds, arctic fox, arctic hare and Species at Risk such as Polar Bears.</li> </ul>
The ecosystemic sensitivity of that area.	<ul style="list-style-type: none"> <li>▪ No specific areas of ecosystemic sensitivity have been identified by the Proponent within the physical footprint of the proposed project.</li> </ul>
The historical, cultural and archaeological significance of that area.	<ul style="list-style-type: none"> <li>▪ No specific areas of historical, cultural and archaeological significance have been identified by the Proponent within the physical footprint of the proposed project.</li> </ul>
The size of the human and the animal populations likely to be affected by the impacts.	<ul style="list-style-type: none"> <li>▪ The proposed project may potentially impact human and animal populations as the activities are within the city limits of Iqaluit. However, activities are applicable to a small geographical area and the Proponent has committed to ensuring project activities do not interfere with human and animal populations.</li> </ul>

Factor	Comment
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.	<ul style="list-style-type: none"> <li>A zone of influence of up to 20 km from the most potentially-disruptive project activities was selected for the NIRB's assessment.</li> <li>With adherence to the relevant regulatory requirements and application of the mitigation measures recommended by the NIRB, no significant residual effects are expected to occur.</li> </ul>
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.	<ul style="list-style-type: none"> <li>The mitigation measures recommended by the NIRB have been designed with consideration for the potential for cumulative effects to result from the impacts of the project combined with other past, present and reasonably foreseeable projects.</li> </ul>
Any other factor that the Board considers relevant to the assessment of the significance of impacts.	<ul style="list-style-type: none"> <li>No other relevant factors were identified.</li> </ul>

**Other present and reasonably foreseeable projects considered in this assessment:**

NIRB Project Number	Project Title	Project Type
<b><i>Present Projects – approved or in operation</i></b>		
13UN024	New Landfill and Waste Transfer Station	Infrastructure
18YN041	Characterizing Iqaluit's baseline municipal wastewater contamination loadings to the marine environment	Research
19QN021	Iqaluit Quarry Area 1 and Area 2	Pits and Quarries
19UN013	City of Iqaluit – Apex River Drinking Water Supply	Water
19YN029	Diversity of pelagic primary producers in coastal habitats and the potential for harmful blooms in Eastern Canadian Arctic, with a focus near Iqaluit, Nunavut	Research
19YN036	Coastal Environmental Baseline Program: Baseline Mercury Levels in Frobisher Bay Fish and Invertebrates	Research
<b><i>Past Projects</i></b>		
18YN043	Contaminants in Shellfish, Water and Sediment in Frobisher Bay, Nunavut	Research
18YN046	Concept Advancement for a Raw Water Intake	Research
19YN023	Arctic Research and Conservation Team Investigating Climate Change	Research
19YN035	A survey of mercury levels within edible plants, fungi and soil in Iqaluit and surrounding areas	Research



<b>NIRB Project Number</b>	<b>Project Title</b>	<b>Project Type</b>
19YN039	Microplastics in beach sediment: Collecting baseline data for microplastic contamination around Iqaluit, Nunavut, and developing tools for effective community-based monitoring	Research

#### IEWS OF THE BOARD

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

The NIRB has listed specific Acts and Regulations below that may be applicable to the project proposal but this list should not be considered as a complete list and the Proponent is responsible to ensure that it follows all Acts and Regulations that may be applicable to the project proposal.

#### **Ecosystem, wildlife habitat and Inuit harvesting activities:**

<b>Valued Component</b>	Migratory and non-migratory birds, arctic fox, arctic hare and Species at Risk such as Polar Bears
<b>Potential effects:</b>	Potential adverse effects to migratory and non-migratory birds, and their migratory routes and Species at Risk such as Polar Bears from noise and visual disturbance generated from the transportation, installation, and operation of an incinerator.
<b>Nature of Impacts:</b>	The potential for impacts is applicable to a small geographical area and is limited due to the proximity of the proposed sites to existing infrastructure, and human activity.
<b>Mitigating Factors:</b>	The Proponent has committed to ensuring project activities do not interfere with human and animal populations. The location within an existing working Hazardous Waste Disposal facility makes the possibility of wildlife interactions low.
<b>Previously Recommended Terms and Conditions:</b>	Waste Disposal – 6 Fuel and Chemical Storage – 9 Wildlife – General – 18 Migratory Birds and Raptors Disturbance – 19 and 20
<b>Proposed New Terms and Conditions:</b>	Wildlife General – 39 through 41
<b>Related Acts and/or Regulations:</b>	The Board previously recommended in the April 15, 2016 Screening Decision Report the following legislation, which continues to apply to the current proposal:



	<ol style="list-style-type: none"> <li>1. The <i>Fisheries Act</i> (<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>).</li> <li>2. The <i>Migratory Birds Convention Act</i> and <i>Migratory Birds Regulations</i> (<a href="http://laws-lois.justice.gc.ca/eng/acts/M-7.01/">http://laws-lois.justice.gc.ca/eng/acts/M-7.01/</a>).</li> <li>3. The <i>Species at Risk Act</i> (<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 <b>Appendix A</b> is a list of Species at Risk in Nunavut.</li> <li>4. The <i>Wildlife Act</i> (<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.</li> </ol> <p>In addition, the Proponent is also advised that the following legislation may apply to the project:</p> <ol style="list-style-type: none"> <li>5. The <i>Migratory Birds Convention Act</i> (<a href="http://laws-lois.justice.gc.ca/eng/acts/M-7.01/">http://laws-lois.justice.gc.ca/eng/acts/M-7.01/</a>), the <i>Migratory Birds Regulations</i> (<a href="https://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._1035/index.html">https://laws-lois.justice.gc.ca/eng/regulations/C.R.C., c. 1035/index.html</a>) and the <i>Migratory Bird Sanctuary Regulations</i> (<a href="https://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._1036/index.html">https://laws-lois.justice.gc.ca/eng/regulations/C.R.C., c. 1036/index.html</a>).</li> <li>6. The <i>Wildlife Area Regulations</i> under the <i>Canada Wildlife Act</i> (<a href="https://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._1609/FullText.html">https://laws-lois.justice.gc.ca/eng/regulations/C.R.C., c. 1609/FullText.html</a>).</li> </ol>
--	---

<b>Valued Component</b>	Surface water quality, fish and fish habitat, soil and vegetation
<b>Potential effects:</b>	Potential adverse impacts to surface water quality, fish and fish habitat, the land and vegetation from the transportation, construction and operation of an incinerator and usage and storage of fuel
<b>Nature of Impacts:</b>	The proposed incinerator is located within an existing hazardous waste disposal facility so the potential for additional impacts from incineration and disposal of waste is minimal.
<b>Mitigating Factors:</b>	The Proponent has previously provided a comprehensive spill contingency plan and has committed to updating the plan.
<b>Previously Recommended Terms and Conditions:</b>	Fuel and Chemical Storage – 7 through 12
<b>Proposed New Terms and Conditions:</b>	Fuel and Chemical Storage – 34 through 38

<b>Related Acts and/or Regulations:</b>	<p>The Board previously recommended in the April 15, 2016 Screening Decision Report the following legislation, which continues to apply to the current proposal:</p> <ol style="list-style-type: none"> <li>1. The <i>Fisheries Act</i> (<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>).</li> <li>2. The <i>Nunavut Waters and Nunavut Surface Rights Tribunal Act</i> (<a href="http://laws-lois.justice.gc.ca/eng/acts/n-28.8/">http://laws-lois.justice.gc.ca/eng/acts/n-28.8/</a>).</li> <li>3. The <i>Transportation of Dangerous Goods Regulations</i> (<a href="http://www.tc.gc.ca/eng/tdg/clear-tofc-211.htm">http://www.tc.gc.ca/eng/tdg/clear-tofc-211.htm</a>), <i>Transportation of Dangerous Goods Act</i> (<a href="http://laws-lois.justice.gc.ca/eng/acts/t-19.01/">http://laws-lois.justice.gc.ca/eng/acts/t-19.01/</a>), and the <i>Canadian Environmental Protection Act</i> (<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>).</li> </ol>
---	--

<b>Valued Component</b>	Air Quality
<b>Potential effects:</b>	Potential adverse effects to ambient air quality due to the transportation, construction, and operation of a biomedical waste incinerator.
<b>Nature of Impacts:</b>	The potential for impacts is high due to the operation of an incinerator, however, is applicable to a small geographic area and would be mitigated by appropriate operation and safety requirements.
<b>Mitigating Factors:</b>	The Proponent has committed to monitoring air quality and emissions.
<b>Previously Recommended Terms and Conditions:</b>	N/A
<b>Proposed New Terms and Conditions:</b>	N/A
<b>Related Acts and/or Regulations:</b>	<p>In addition, the Proponent is also advised that the following legislation may apply to the project:</p> <ol style="list-style-type: none"> <li>1. The Proponent review Environment and Climate Change Canada's "Technical Document for Batch Waste Incineration", available at the following link: <a href="http://www.ec.gc.ca/gdd-mw/default.asp?lang=En&amp;n=F53EDE13-1">http://www.ec.gc.ca/gdd-mw/default.asp?lang=En&amp;n=F53EDE13-1</a>. The technical document provides information on appropriate incineration technologies, best management and operational practices, monitoring and reporting</li> </ol>

<b>Valued Component</b>	Traditional land use activities
<b>Potential effects:</b>	No specific concerns or impacts to public and traditional land use activities in the area have been identified, however, the Board is recommending terms and conditions to ensure project activities are

	informed by available Inuit Qaujimaningit and that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities.
<b>Nature of Impacts:</b>	The potential for impacts is considered to be low due to the close distance to the city of Iqaluit and location within an operating facility.
<b>Mitigating Factors:</b>	The proposed location of the incinerator within an operating Hazardous Waste Facility makes the use of the area for traditional activities highly unlikely.
<b>Previously Recommended Terms and Conditions:</b>	N/A
<b>Proposed New Terms and Conditions:</b>	Other – 44 and 45
<b>Related Acts and/or Regulations:</b>	N/A

#### **Socio-economic effects on northerners:**

<b>Valued Component</b>	Local hiring, contracting, and economic impact
<b>Potential effects:</b>	The Board recommends the hiring of local community members during the life of the project
<b>Nature of Impacts:</b>	The potential for impacts is considered to be positive for the local Inuit who are hired.
<b>Mitigating Factors:</b>	Recommended terms and conditions
<b>Previously Recommended Terms and Conditions:</b>	26
<b>Proposed New Terms and Conditions:</b>	N/A
<b>Related Acts and/or Regulations:</b>	N/A

#### **Significant public concern:**

<b>Valued Component</b>	Public concern
<b>Potential effects:</b>	No significant public concern was expressed during the public commenting period for this file; however, the Board previously recommended terms and conditions to ensure project activities do not interfere with Inuit wildlife harvesting or traditional land use activities, to the extent possible hire local people and access local services where

	possible, and to ensure planned activities in the area utilizes available Inuit Qaujimaningit.
<b>Nature of Impacts:</b>	The potential for impacts is considered to be minimal as long as the Proponent follow the recommended terms and conditions.
<b>Mitigating Factors:</b>	Recommended terms and conditions
<b>Previously Recommended Terms and Conditions:</b>	Other – 26 and 27
<b>Proposed New Terms and Conditions:</b>	Other – 44 and 45
<b>Related Acts and/or Regulations:</b>	N/A

**Technological innovations for which the effects are unknown:**

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

**Administrative Conditions:**

To encourage compliance with applicable regulatory requirements and assist the Board and responsible authorities with compliance and effects monitoring for project activities, the Board has previously recommended terms and conditions 1 through 4, and 5 through 27 which continue to apply to the current project proposal. The Board is also recommending terms and conditions 28 through 31 to ensure complete reference to applicable regulatory requirements.

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 following terms and conditions were previously issued by the NIRB in the April 15, 2016 Screening Decision Report(s) for File No. **15XN051**, **and continue to apply to the “Installation of an Incinerator” project:**

**General**

1. Qikiqtaaluk Environmental Inc.'s (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 (Application to Determine Conformity,

November 24, 2015), the NIRB (Part 1 Form, February 16, 2016 and NIRB Part 2 Form, February 26, 2016) and to the Nunavut Water Board (Type B Licence Application, March 1, 2016).

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 fuel and chemicals.
11. The Proponent shall ensure that appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, and absorbents) are readily available during any transfer of fuel or hazardous substances.
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.

### **Landfarm Operations**

13. The Proponent shall treat only petroleum and hydrocarbon contaminated soils at the landfarm facility. Materials contaminated with other substances such as glycol and heavy metals are not to be stored at the landfarm and must be disposed of at an authorized facility.
14. The Proponent shall ensure that it meets the required standards as set out in the Nunavut Water Board's Water Licence for this project prior to any discharge of water collected in the retention cell(s).
15. The Proponent shall ensure that the equipment used for aeration in the landfarm operation have been cleaned off within the landfarm facilities prior to exiting.

16. The Proponent shall take appropriate dust suppression measures when conducting soil turning and removal.
17. All operations personnel shall be adequately trained prior to commencement of landfarm operations, and shall be made aware of all operational guidelines and Proponent commitments relating to the Project.

### **Wildlife - General**

18. 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.

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

19. The Proponent shall not disturb or destroy the nests or eggs of any birds. If nests are encountered and/or identified, the Proponent shall take precaution to avoid further interaction and or disturbance (e.g., a 100 metres buffer around the nests). If active nests of any birds are discovered (i.e., with eggs or young), the Proponent shall avoid these areas until nesting is complete and the young have left the nest.
20. The Proponent shall minimize activities during periods when birds are particularly sensitive to disturbance such as migration, nesting and moulting.

### **Ground Disturbance**

21. 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.
22. The Proponent shall implement suitable erosion and sediment suppression measures on all areas before, during and after conducting activities in order to prevent sediment from entering any waterbody.
23. All construction and road vehicles must be fitted with standard and well-maintained noise suppression devices and engine idling is to be minimized.

### **Restoration of Disturbed Areas**

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

### **Other**

26. 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.
27. The Proponent shall ensure that all staff are aware of the Proponent's responsibilities and requirements regarding archaeological or paleontological sites that are encountered during on-site activities.

In addition to the previously issued terms and conditions, the Board recommends the following project-specific terms and conditions:

### **General**

28. Qikiqtaaluk Environmental Inc. (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times and make it accessible to enforcement officers upon request.
29. The Proponent shall operate in accordance with all commitments stated in correspondence provided to the Nunavut Planning Commission (NPC File No.: 149361), and the NIRB (Online Application Form, July 13, 2020). This information should be accessible to enforcement officers upon request.
30. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.
31. The Proponent shall ensure that it meets the standards and/or limits as set out in the authorizing agencies' permits or licences as required for this project.

### **Waste Management**

32. The Proponent shall manage all hazardous and non-hazardous waste including food, domestic wastes, debris and petroleum-based chemicals (e.g., greases, gasoline, glycol-based antifreeze) in such a manner to avoid release into the environment and access to wildlife at all times until disposed of appropriately or at an approved facility.
33. The Proponent shall incinerate all combustible wastes as needed, and dispose of as required by the appropriate authorizing agencies. All non-combustible wastes from the project site shall be removed to an approved facility for disposal.

### **Fuel and Chemical Storage**

34. All fuel and chemical storage containers must be clearly marked with the Proponent's name for ease of identification.
35. The Proponent shall routinely inspect and document the conditions of fuel and hazardous material storage containers and containment areas as required by the appropriate authorizing agencies. Fuel containment areas shall be kept clear of debris, water and snow to facilitate inspections for leaks.
36. The Proponent shall have a Spill Contingency Plan in place at all fuel storage or transfer locations and shall ensure that appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, and absorbents) are readily available.
37. The Proponent shall follow the authorizing agencies' direction for management and removal of hazardous materials and wastes (e.g., contaminated soils, sediment and waste oil).
38. The Proponent shall ensure that wildlife deterrent systems are utilized at the time of a spill incident in order to avoid wildlife (terrestrial or marine) and migratory birds from being contaminated.



## **Wildlife – General**

39. The Proponent shall not substantially alter or damage or destroy any wildlife habitat in conducting this operation unless otherwise authorized by the appropriate authorizing agencies.
40. The Proponent shall not chase, weary, harass or molest wildlife. This includes persistently circling, chasing, hovering over, pursuing or in any other way harass wildlife, or disturbing large groups of animals.
41. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.

## **Land Use and Restoration of Disturbed Areas**

42. The Proponent shall ensure that the land use area is kept clean and tidy at all times.
43. The Proponent shall avoid disturbance on slopes prone to natural erosion, and alternative locations shall be utilized.

## **Other**

44. The Proponent should engage with local residents regarding planned activities in the area and should solicit available Inuit Qaujimaningit and information regarding current recreational and traditional usage of the project area which may inform project activities. Posting of translated public notices and direct engagement with potentially interested groups and individuals prior to undertaking project activities is strongly encouraged.
45. The Proponent shall ensure that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities.

## **OTHER NIRB CONCERNS AND RECOMMENDATIONS**

In addition to the project-specific terms and conditions, the Board has previously recommended the following on April 15, 2016:

### **Change in Project Scope**

1. Responsible authorities or Proponent shall notify the Nunavut Planning Commission (NPC) and the NIRB of any changes in operating plans or conditions, including phase advancement, associated with this project prior to any such change.

### **Bear and Carnivore Safety**

2. (*updated*) The Proponent should review the Government of Nunavut's booklet on Bear Safety, which can be downloaded from this link: [http://gov.nu.ca/sites/default/files/bear\\_safety\\_-\\_reducing\\_bear-people\\_conflicts\\_in\\_nunavut.pdf](http://gov.nu.ca/sites/default/files/bear_safety_-_reducing_bear-people_conflicts_in_nunavut.pdf). Further information on bear/carnivore detection and deterrent techniques can be found in the "Safety in Grizzly and Black Bear Country" pamphlet, which can be downloaded from this link: [https://www.enr.gov.nt.ca/sites/enr/files/resources/safety\\_in\\_grizzly\\_and\\_black\\_bear\\_country\\_english.pdf](https://www.enr.gov.nt.ca/sites/enr/files/resources/safety_in_grizzly_and_black_bear_country_english.pdf).

There are Polar Bear and grizzly bear safety resources available from the Bear Smart Society with videos on Polar Bear safety available in English, French and Inuktitut at <http://www.bearsmart.com/play/safety-in-polar-bear-country/>. Information can also be obtained from Parks Canada's website on bear safety at the following link: <http://www.pc.gc.ca/eng/pn-np/nu/quttinirpaaq/visit/visit6/d.aspx> or in reviewing the "*Safety in Polar Bear Country*" pamphlet, which can be downloaded from the following link: [http://www.pc.gc.ca/eng/pn-np/nu/quttinirpaaq/visit/visit6/~media/pn-np/nu/auyuittuq/pdf/shared/PolarBearSafety\\_English.ashx](http://www.pc.gc.ca/eng/pn-np/nu/quttinirpaaq/visit/visit6/~media/pn-np/nu/auyuittuq/pdf/shared/PolarBearSafety_English.ashx).

3. 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).

### **Species at Risk**

4. The Proponent review Environment and Climate Change Canada's "Environment Assessment Best Practice Guide for Wildlife at Risk in Canada", available at the following link: [http://epe.lac-bac.gc.ca/100/200/301/environment\\_can/cws-scf/environmental\\_assessment-ef/ea\\_best\\_practices\\_2004\\_e.pdf](http://epe.lac-bac.gc.ca/100/200/301/environment_can/cws-scf/environmental_assessment-ef/ea_best_practices_2004_e.pdf). 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.

### **Migratory Birds**

5. The Proponent review Canadian Wildlife Services' "Key migratory bird terrestrial habitat sites in the Northwest Territories and Nunavut", available at the following link: <http://publications.gc.ca/site/eng/317630/publication.html> and "Key marine habitat sites for migratory birds in Nunavut and the Northwest Territories", available at the following link: <http://publications.gc.ca/site/eng/392824/publication.html>. The guide provides information to the Proponent on key terrestrial and marine habitat areas that are essential to the welfare of various migratory bird species in Canada.
6. For further information on how to protect migratory birds, their nests and eggs when planning or carrying out project activities, consult Environment and Climate Change Canada's Incidental Take web page and the fact sheet "Planning Ahead to Reduce the Risk of Detrimental Effects to Migratory Birds, and their Nests and Eggs" available at <http://www.ec.gc.ca/paom-itmb/>.

### **Transport of Waste/Dangerous Goods and Waste Management**

7. Environment and Climate Change Canada recommends that all hazardous wastes, including waste oil, receive proper treatment and disposal at an approved facility.
8. The Proponent shall ensure that a waste manifest or the appropriate transportation of dangerous goods (TDG) documentation accompany all potential hazardous samples and/or materials that are transported off site. Further, the Proponent shall ensure that the shipment of waste 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.

9. The Proponent shall provide an authorization or letter of conformation of disposal be obtained from the owner/operator of the landfill to be used for disposal of project-related wastes.

The Board is currently also recommending the following:

### **Copy of licences, etc. to the Board and Commission**

10. The NIRB respectfully requests that responsible authorities submit a copy of each licence, permit or other authorization issued for the Project to the NIRB to assist in enabling possible project monitoring that may be required. Please forward a copy of the licences, permits and/or other authorizations to the NIRB directly at [info@nirb.ca](mailto:info@nirb.ca) or upload a copy to the NIRB's online registry at [www.nirb.ca](http://www.nirb.ca).

### **Use of Inuit Qaujimaningit**

11. The Proponent is encouraged to work with local communities and knowledge holders to inform project design, to carry out the project, and to confirm or validate the perspectives represented in publications, film or other media produced as part of the project. Care should be taken to ensure that Inuit Qaujimaningit and local knowledge collected for the project is used with permission and is accurately represented.

### **Incineration of Wastes**

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

## **CONCLUSION**

The foregoing constitutes the Board's screening decision with respect to the Qikiqtaaluk Environmental Inc.'s "Installation of an Incinerator". The NIRB remains available for consultation with the Minister regarding this report as necessary.

Dated September 1, 2020 at Baker Lake, NU.



Kaviq Kaluraq, Chairperson

Attachments: Appendix A: Previously Screened Project Proposals  
Appendix B: Species at Risk in Nunavut  
Appendix C: Archaeological and Palaeontological Resources Terms and Conditions for Land Use Permit Holders

## APPENDIX A: PREVIOUSLY-SCREENED PROJECT PROPOSALS

The original project proposal (NIRB File No.: 15XN051), was received by the Nunavut Impact Review Board (NIRB or Board) from the Nunavut Planning Commission on November 24, 2015, noting that this project proposal is outside the area of an applicable regional land use plan. The project proposal was screened by the Board in accordance with Part 4, Article 12 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)* and Section 3 of the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (*NuPPAA*). On April 15, 2016 the NIRB issued a screening decision pursuant to s. 92(2)(a) of the *NuPPAA* to the Minister of Indigenous and Northern Affairs which indicated that the proposed project could proceed subject to the NIRB's recommended project-specific terms and conditions.

The Qikiqtaaluk Environmental Inc.'s (Proponent) original "Environmental Waste Processing Facility" project was located in the Qikiqtani (South Baffin) region, within the city limits of Iqaluit. The Proponent intended to conduct remediation of hydrocarbon contaminated soils, in addition to management of contaminated water. Year-round operations were to commence May 2016 and to continue as long as operations are commercially viable.

According to the previously screened project proposal, the scope of the project included the following undertakings, works or activities:

### Continuation of activities

- Contaminated Water Management
  - Relocation of Water Treatment Unit, which consists of one (1) marine container 40 feet (ft) long and four (4) storage tanks in volumes varying from 25,000 litres (L) to 30,000 L;
  - Ongoing storage of contaminated water in tanks until sufficient levels are obtained for processing, and then released once achieved release criteria. Untreated water that would not add additional contaminants to the soil would be used in on-site soil management;
  - Treatment of potential site contact water; and
  - Additional types of contaminants to be removed from impacted water.

### Establishment of additional waste management facilities

- Contaminated Soil Management
  - Temporary storage and treatment of hydrocarbon contaminated soils using physical (screening and washing), chemical (oxidation), and biological (biopile and/or landfarm) techniques in a lined and bermed treatment area;
- Management of industrial and household hazardous and non-hazardous waste
  - Collection, transportation, sorting, and storage of hazardous and non-hazardous waste;
    - Hazardous Waste Management facility to consist of six (6) 20-foot marine containers.
  - Hazardous waste management activities to be conducted at a waste transfer station:

- Annual shipping of hazardous and non-hazardous waste (including, but not limited to, hydrocarbon contaminated sludge and solids and industrial and household wastes) to an authorized facility for final disposal;
- Equipment
  - Use of two (2) vacuum units mounted on a trailer to transport contaminated bulk liquids to the Environmental Waste Processing Facility;
  - Heavy equipment to be used as needed, including use of:
    - Forklifts, flatbed trucks, and loaders to transport waste;
    - Excavators to be used in management of contaminated soils, including mixing soils for aeration;
    - Screening unit to separate and remove non-contaminated materials from contaminated soils; and
- Eventual reclamation and decommissioning of site.

## APPENDIX B: SPECIES AT RISK IN NUNAVUT

Due to the requirements of Section 79(2) of the Species at Risk Act (SARA), and the potential for project-specific adverse effects on listed wildlife species and its critical habitat, measures should be taken as appropriate to avoid or lessen those effects, and the effects need to be monitored. Project effects could include species disturbance, attraction to operations and destruction of habitat. This section applies to all species listed on Schedule 1 of SARA, as listed in the table below, or have been assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), which may be encountered in the project area. This list may not include all species identified as at risk by the Territorial Government. The following points provide clarification on the applicability of the species outlined in the table.

- 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.

If species at risk are encountered or affected, the primary mitigation measure should be avoidance. The Proponent should avoid contact with or disturbance to each species, its habitat and/or its residence. All direct, indirect, and cumulative effects should be considered. Refer to species status reports and other information on the species at risk Registry at <http://www.sararegistry.gc.ca> for information on specific species.

Monitoring should be undertaken by the Proponent to determine the effectiveness of mitigation and/or identify where further mitigation is required. As a minimum, this monitoring should include recording the locations and dates of any observations of species at risk, behaviour or actions taken by the animals when project activities were encountered, and any actions taken by the proponent to avoid contact or disturbance to the species, its habitat, and/or its residence. This information should be submitted to the appropriate regulators and organizations with management responsibility for that species, as requested.

For species primarily managed by the Territorial Government, the Territorial Government should be consulted to identify other appropriate mitigation and/or monitoring measures to minimize effects to these species from the project.

Mitigation and monitoring measures must be undertaken in a way that is consistent with applicable recovery strategies and action/management plans.

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

Updated: September 2019

<b>Terrestrial Species at Risk<sup>1</sup></b>	<b>COSEWIC Designation</b>	<b>Schedule of SARA</b>	<b>Government Organization with Primary Management Responsibility<sup>2</sup></b>
<b>Migratory Birds</b>			
Buff-breasted Sandpiper	Special Concern	Schedule 1	Environment and Climate Change Canada (ECCC)
Common Nighthawk	Threatened	Schedule 1	ECCC
Eskimo Curlew	Endangered	Schedule 1	ECCC
Harlequin Duck	Special Concern	Schedule 1	ECCC
Harris's Sparrow	Special Concern	Schedule 1	ECCC
Horned Grebe	Special Concern	Schedule 1	ECCC
Ivory Gull	Endangered	Schedule 1	ECCC
Olive-sided Flycatcher	Threatened	Schedule 1	ECCC
Peregrine Falcon	Special Concern	Schedule 1	ECCC
Red Knot Islandica Subspecies	Special Concern	Schedule 1	ECCC
Red-necked Phalarope	Special Concern	Schedule 1	ECCC
Ross's Gull	Threatened	Schedule 1	ECCC
Rusty Blackbird	Special Concern	Schedule 1	ECCC
Short-eared Owl	Special Concern	Schedule 1	ECCC
<b>Vegetation</b>			
Porsild's Bryum	Threatened	Schedule 1	Government of Nunavut (GN)
<b>Arthropods</b>			
Transverse Lady Beetle	Special Concern	No Schedule	GN
<b>Terrestrial Wildlife</b>			
Caribou (Dolphin and Union Population)	Endangered	Schedule 1	GN
Caribou (Barren-ground Population)	Threatened	No Schedule	GN
Caribou (Torngat Mountains Population)	Endangered	No Schedule	GN
Grizzly Bear (Western Population)	Special Concern	Schedule 1	ECCC
Peary Caribou	Endangered	Schedule 1	GN
Polar Bear	Special Concern	Schedule 1	ECCC
Wolverine	Special Concern	Schedule 1	GN
<b>Marine Wildlife</b>			
Atlantic Walrus (High Arctic Population)	Special Concern	No Schedule	Fisheries and Oceans Canada (DFO)
Atlantic Walrus (Central/Low Arctic Population)	Special Concern	No Schedule	DFO
Beluga Whale (Cumberland Sound Population)	Threatened	Schedule 1	DFO
Beluga Whale (Eastern Hudson Bay Population)	Endangered	No Schedule	DFO

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

<sup>2</sup> Environment and Climate Change Canada (ECCC) 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.



<b>Terrestrial Species at Risk<sup>1</sup></b>	<b>COSEWIC Designation</b>	<b>Schedule of SARA</b>	<b>Government Organization with Primary Management Responsibility<sup>2</sup></b>
Beluga Whale (Eastern High Arctic-Baffin Bay Population)	Special Concern	No Schedule	DFO
Beluga Whale (Western Hudson Bay Population)	Special Concern	No Schedule	DFO
<b>Fish</b>			
Atlantic Cod (Arctic Lakes Population)	Special Concern	No Schedule	DFO
Fourhorn Sculpin (Freshwater Form)	Data Deficient	Schedule 3	DFO
Lumpfish	Threatened	No Schedule	DFO
Thorny Skate	Special Concern	No Schedule	DFO

## APPENDIX C: ARCHAEOLOGICAL AND PALAEOONTOLOGICAL 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 Indigenous and Northern Affairs Canada. These terms and conditions provide general direction to the permittee/proponent regarding the appropriate actions to be taken to ensure the permittee/proponent carries out its role in the protection of Nunavut's archaeological and palaeontological resources.

### TERMS AND CONDITIONS

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

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

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

<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 Indigenous and Northern Affairs 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 *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut 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*<sup>5</sup>, 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 Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut 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.*

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

---

<sup>4</sup> s. 51(1)

<sup>5</sup> P.C. 2001-1111 14 June, 2001

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 *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)*), and the Indigenous and Northern Affairs 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.