



SCREENING DECISION REPORT
NIRB FILE No.: 24EN047

NPC File No.: 150522

December 5, 2024

Following the Nunavut Impact Review Board’s (NIRB or Board) assessment of all materials provided, the NIRB is recommending that a review of White Cliff Minerals Ltd.’s “Rae Copper Exploration Project” 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(s) accepts this Screening Decision Report.

OUTLINE OF SCREENING DECISION REPORT

REGULATORY FRAMEWORK.....	2
PROJECT REFERRAL	3
PROJECT OVERVIEW & THE NIRB ASSESSMENT PROCESS.....	3
ASSESSMENT OF THE PROJECT PROPOSAL IN ACCORDANCE WITH PART 3 OF NUPPAA.....	8
VIEWS OF THE BOARD	10
RECOMMENDED PROJECT-SPECIFIC TERMS AND CONDITIONS	17
MONITORING AND REPORTING REQUIREMENTS.....	23
OTHER NIRB CONCERNS AND RECOMMENDATIONS	25
CONCLUSION	28

APPENDICES

APPENDIX A: SPECIES AT RISK IN NUNAVUT	29
APPENDIX B: ARCHAEOLOGICAL AND PALAEOLOGICAL RESOURCES TERMS AND CONDITIONS FOR LAND USE PERMIT HOLDERS	32

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 September 20, 2024, the NIRB received a referral to screen White Cliff Minerals Ltd.’s (WCM) “Rae Copper Exploration Project” proposal from the Nunavut Planning Commission (Commission), which noted that the project proposal is outside the area of an applicable regional land use plan.

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 and assigned it file number **24EN047**.

PROJECT OVERVIEW & THE NIRB ASSESSMENT PROCESS

1. Screening Process Timelines

The following key stages were completed for the screening process:

Date	Stage
September 20, 2024	Receipt of project proposal and referral from the Commission.
September 4, 2024	Request to complete public registry online and provide information pursuant to s. 144(1) of the <i>NuPPAA</i>
September 9, 2024	Receipt of online application from Proponent
October 3, 2024	Scoping pursuant to s. 86(1) of the <i>NuPPAA</i>
October 8, 2024	Public engagement and comment request
October 30, 2024	Receipt of public comments
December 5, 2024	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 www.nirb.ca/project/125991.

Project:	Rae Copper Exploration Project				
Region:	Kitikmeot Region				
Location:	Coppermine River area west of Kugluktuk				
Closest Community:	Kugluktuk	Distance (approximate)	60 kilometres (km)	Direction	Northwest, West, Southwest
Summary of Project Description:	The Proponent intends to conduct a temporary tent-based exploration camp and run a small seasonal drill exploration program with up to three (3) exploration drills and the following activities: aerial mapping surveys, ground sampling and baseline studies including archeology.				
Project Proposed Timeline:	2025 to 2032 (7-year program)				

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

- The Coppermine district extends 80 km south from Kugluktuk on the Coronation Gulf and 174 km west to 64 km east of Coppermine River, Exploration activities would typically occur in late summer and later winter, but this may vary depending on activity occurring for a few weeks to a few months in duration each season.
- Construction and operation of a seasonal camp for up to 45 people for winter and/or summer exploration
 - Camp closed and operations suspended for calving and post-calving period (May 28-July 3) of the Bluenose East and Dolphin Union caribou herd;
- Use of existing all-weather Hope Lake airstrip or winter ice strip;
- Use of a helicopter to transport personnel and equipment;
- Use of drills (diamond or reverse circulation) for exploration sampling of rock down to 300 m with up to 80 holes/year;
- Use of generators to supply power for camp, drills and other equipment;
- Use of an incinerator to dispose of combustible wastes along with open burn for untreated wood, cardboard, and paper with ash deposited in sumps;
- Use of toilets (Incinerating, pacto, or pit-type toilets);
- Use of snowmobiles, a boat, ATV's and trailers to transport personnel and supplies to field sites;
- Use of water pumps to supply camp and drills;
- Use of a snowcat for camp and drill support;
- Use of a chieftain and sloop for low pressure transport for winter access;

- Use of winter trails or roads when ground and snow/ice conditions permit and use of a loader for the maintenance trail/road/pad. Any winter roads will avoid the Kugluk Territorial Park;
- Use of a tent camp;
- Use of a fly camp to support remote activities seasonally;
- Non-combustible waste to be removed and disposed of at an accredited facility;
- Use of 82,000 litres of aviation fuel for aircraft;
- Use of 82,000 litres of diesel fuel for camp heating, power and drill fuel;
- Use of 4,100 litres of gasoline for small engine fuel;
- Use of 1,800 kg propane for camp cooking and miscellaneous;
- Use of 1000 litres of lubricant and greases for equipment maintenance;
- Use of 500 lbs acetylene for equipment repair welding;
- Use of 1 m³ (cubic meters) of batteries and solvents for various equipment and small appliances requiring batteries and solvents for cleaning;
- Use of 200 lbs of oxygen for welding repairs;
- Use of 2,500 gallons of drill muds, lubricants and additives to add to drill fluids to aid in the drilling process that would be deposited into a sump approx. 31 m away from the ordinary high-water mark for closest waterbody; and
- Use of 30 m³ (cubic meters) of salt that is added to drilling fluids to lower freezing point and prevent freezing in of drill rods.

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 October 8, 2024, to community organizations in Kugluktuk, 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 the NIRB's proposed project-specific terms and conditions, and provide the Board with any comments or concerns by October 30, 2024, 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 October 24, 2024, the NIRB received comments from the following interested parties:

- **Kitikmeot Inuit Association (KIA)**
- **Government of Nunavut (GN)**

- **Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC)**
- **Fisheries and Oceans Canada (DFO)**
- **Transport Canada (TC)**
- **Kugluktuk Hunters and Trappers Organization (KHTO)**

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:

KIA:

The Kitikmeot Inuit Association (KIA) suggests that the following mitigation measures could strengthen the wildlife, birds, fish, and their habitats by:

- Closing the exploration camp slightly earlier (ca. 10 to 15 d) than the starting date noted (May 28), to account for the increasingly frequent shift in migration and calving occurring in Nunavut.
- Maximize the distance of camp and drilling activities from eskers wherever possible to reduce impacts to denning mammals and other wildlife that use them for insect relief.
- Identifying the likely qualities of drill and core wastewater (likely to be able to avoid it being saline) and re-consider the safe location parameters for disposal. Suggests more provisions around distance to water (> 31 m and ideally > 100 m), avoiding dumping it into natural depressions (as there may be a slight grade and more vegetation could be impacted), and creating and use sumps to avoid overflow.
- Provide more details on planned actions/commitments for the closure phase of the project.
- Identify proposed water withdrawal locations and timing of withdrawals (Least Risk Timing Windows), affected waterbodies, and fish species if possible. And noted that the description of fish and fish habitat in the exploration area was limited.
- Ensure surface drainage is considered when creating the pads for the camp and the drill sites.
- Notes that the project poses some risk to the aquatic environment due to under ice withdrawal. KIA recommends sumps and depressions where higher salinity waste may need to be lined to mitigate potential impacts to the aquatic and terrestrial environments. The proponent may provide contractors and local hires direction to suspend overland equipment transportation before the onset of freshet based on local weather conditions.

GN:

Has reviewed the proposed project and has no comments to share with the Board.

CIRNAC:

CIRNAC recommends the Proponent to:

- Update applicable management plans to describe potential impacts of drilling on groundwater quality and quantity and proposed mitigation measures;
- Update the plan to clarify which measures would be implemented in responding to potential spills during ice-covered periods and consider improving the findability of information in the plan to facilitate prompt spill action responses;

- Prioritize the employment, training and contracting of local Inuit and Inuit firms when implementing project activities;
- Maintain open communication with representatives of the Kugluktuk Hunters and Trappers Organization, the Kitikmeot Regional Wildlife Board, the Nunavut Wildlife Management Board, the Hamlet of Kugluktuk as well as community members and other relevant organizations regarding its project proposal; and
- Adhere to applicable regulatory requirements and accepted practices as it carries out its project activities to prevent, mitigate and manage any potential negative environmental impacts.

DFO:

- Recommends that the Proponent follow DFO's protective measures for fish and fish habitat and standard codes of practice which can be found on DFO's website (<https://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html> and <https://www.dfo-mpo.gc.ca/pnw-ppe/pratice-pratique-eng.html>) in order to comply with the Fisheries Act.
- Recommends the Proponent review and implement any relevant DFO's protective measures for fish and fish habitat and standard codes of practice (<https://www.dfo-mpo.gc.ca/pnw-ppe.measures-mesures-eng.html> and <https://www.dfo-mpo.gc.ca/pnw-ppe/pratice-pratique-eng.html>) and respect the NU in-water works restricted activity timing windows (Projects Near Water – Nunavut Restricted Activity Timing Windows for the Protection of Fish and Fish Habitat ([dfo-mpo.gc.ca](https://www.dfo-mpo.gc.ca))). By doing so, works, undertaking or activities where impacts to fish and fish habitat can be avoided.
- Recommends the Proponent refer to DFO's Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater available at <https://www.dfo-mpo.gc.ca/pnw-ppe/codes/screen-ecran-eng.html> when using fish screens, if water intake flow rate is up to 0.150 m³/s, or 150 litres per second (L/s). The Proponent should also follow the Framework for Assessing the Ecological Flow Requirements to Support Fisheries in Canada and the DFO Protocol for Winter Water Withdrawal in the NWT (2010).
- Based on the information that was submitted, DFO recommends the proponent to complete and submit a request for review form (<https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-004-eng.html>) if the application meets the criteria for a site specific review (e.g., will occur during the Restricted Activity period), as described on DFO's website (<https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-003-eng.html>).
- Notes it is the Proponent's Duty to Notify DFO if they have caused, or are about to cause, the death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to (DFO.ARCEMTriage-TriageGEARC.MPO@dfo-mpo.gc.ca).

TC:

- Notes works, such as water intakes for water withdrawals, in navigable waterways are subject to the Canadian Navigable Waters Act (CNWA). To determine the applicability of the CNWA to the project:

- The proponent will need to complete self-assessments of the navigability of all waterways where water intakes will be placed.
 - <https://npp-submissions-demandes-ppn.tc.canada.ca/projectreview-outildexamenduprojet>
- If a waterway is navigable, the water intake that will be used for water withdrawal may be a “minor work” under the CNWA.
 - <https://laws-lois.justice.gc.ca/eng/regulations/sor-2021-170/index.html>
- Notes that the shipper preparing the dangerous shipment for air transportation via helicopter must have International Civil Aviation Organization (ICAO) training for dangerous goods. The shipper must meet the requirements set out in Part 12 of the Transportation of Dangerous Goods Regulations, which includes the ICAO training requirements.
- Notes that the requirements for the domestic marine transportation of dangerous goods are set out in Part 11 of the Transportation of Dangerous Goods Regulations. Please note that Transportation of Dangerous Goods Regulations training is required for the domestic marine shipment of dangerous goods. Training under the International Marine Dangerous Goods Code is not required for domestic marine transportation of dangerous goods.

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

KHTO:

- Does not support the project
- The work is taking place in key caribou migration routes
- Caribou populations are coming back up, need to ensure that they continue
- The helicopter noise will have an impact on all animals
- Work occurs close to the Coppermine River, Kugluktuk’s main source of drinking water
- Caribou may migrate early again as they did in 2024

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

Factor	Comment
<p>The size of the geographic area, including the size of wildlife habitats, likely to be affected by the impacts.</p>	<ul style="list-style-type: none"> ▪ The physical footprint of the proposed project components is by the Coppermine River area west of Kugluktuk. ▪ The proposed project would take place within habitats of far-ranging wildlife species such as migratory Barren ground caribou, muskox, moose, grizzly bear, wolverine, Arctic fox, wolves and birds including geese, tundra swan, ptarmigan, short eared owl, peregrine falcon, rough legged hawk, gyrfalcon, and golden and bald eagles.
<p>The ecosystemic sensitivity of that area.</p>	<ul style="list-style-type: none"> ▪ No specific areas of ecosystemic sensitivity have been identified by the Proponent within the physical footprint of the proposed project. The area is on caribou migratory routes and adjacent to or within caribou calving areas.
<p>The historical, cultural and archaeological significance of that area.</p>	<ul style="list-style-type: none"> ▪ No specific areas of historical, cultural and archaeological significance have been identified by the Proponent within the physical footprint of the proposed project.
<p>The size of the human and the animal populations likely to be affected by the impacts.</p>	<ul style="list-style-type: none"> ▪ The proposed project is likely to impact the community of Kugluktuk through the resupply of the project and activities within areas that hunting occurs.
<p>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.</p>	<ul style="list-style-type: none"> ▪ A zone of influence of up to 100 km from the most potentially-disruptive project activities was selected for the NIRB's assessment. ▪ 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.
<p>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.</p>	<ul style="list-style-type: none"> ▪ As the area has undergone exploration for about 80 years along with several research projects, as such the NIRB has considered cumulative effects in its mitigation measures. The mitigation measures recommended by the NIRB were designed with consideration for the potential for cumulative effects of the impacts from the current project combined with other past, present and reasonably foreseeable projects.
<p>Any other factor that the Board considers relevant to the assessment of the significance of impacts.</p>	<ul style="list-style-type: none"> ▪ The Proponent has committed to closing the camps and stopping all exploration operations during the caribou calving and post-calving period.

VIEWS 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:

Valued Component	Bluenose East Caribou Herd, Dolphin and Union Caribou Herd
Potential effects:	The Coppermine River is known for its fishing, and community members hunt and fish throughout the Regional Study Area, although conversations with the Kugluktuk Hunters and Trappers Organization (KHTO) have indicated use is limited within the area of WCM’s mineral claims. This area is of particular importance because it is within the calving and post-calving grounds of the Bluenose caribou herd. It is also important to note that the community of Kugluktuk is the western edge of the Dolphin and Union herd’s habitat.
Nature of Impacts:	During these periods of elevated sensitivity such as calving and post calving, disturbance can lead to higher calf mortality due to reduced nursing time, cow-calf abandonment, and/or displacement from areas with high quality vegetation.
Mitigating Factors:	To mitigate against this potential for impacts (including cumulative), the Proponent proposes to ensure that the camp would close/cease exploration activities during the calving and post-calving periods of the Bluenose East caribou herd, and the inclusion of a winter trail from Kugluktuk. The Proponent would also use existing infrastructure and disturbed areas (such as the all-weather Hope Lake Airstrip) where practical to reduce cumulative exploration footprint.
Proposed Terms and Conditions:	<p>Waste Management – 10 Fuel and Chemical Storage – 12 and 20 Air Quality – 22 Noise – 24 Wildlife – General – 25 through 30 Aircraft Flight Restrictions – 33 through 35, 37, 38 Caribou and Muskox Disturbance – 39 through 45</p> <p>A finalized <i>Wildlife Monitoring and Management Plan</i> is required that is also supported by local Hunters and Trappers Organization to protect the herds in the area. The Board will require an annual report.</p>

Related Acts and/or Regulations:	<ol style="list-style-type: none"> 1. The <i>Nunavut Act</i> (http://laws-lois.justice.gc.ca/eng/acts/N-28.6/). 2. The <i>Wildlife Act (Nunavut)</i> and its corresponding regulations (http://www.canlii.org/en/nu/laws/stat/snu-2003-c-26/latest/snu-2003-c-26.html).
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Valued Component	Migratory and non-migratory birds, terrestrial and Species at Risk
Potential effects:	Potential adverse effects habitats of far-ranging wildlife species such as, migratory and non-migratory birds, barren ground caribou, musk ox, moose, grizzly bear, wolverine, Arctic fox, and wolves from noise and visual disturbance generated from the transportation of personnel and equipment via aircraft to the proposed exploration sites, establishment of temporary camp, associated camp activities, and helicopter, ATV, and snowmobile activities.
Nature of Impacts:	The potential for human-wildlife conflict and wildlife disturbance, injury or mortality caused by Project activities or personnel.
Mitigating Factors:	There would be implementation of a strict no hunting policy for Project staff and the Proponent committed to training with staff and implementing orientation and training of all staff on Project policies regarding wildlife, waste and work area management of wildlife access, and inspection of work areas regularly when in use for evidence of wildlife access or initiation of nesting. In addition, there would be no fishing without appropriate fishing licence, bear awareness and deterrence measures, equipping field crews with bear deterrence kits which may include: air horn or whistle, bear bangers and bear spray, using bear fences, where appropriate, making use of wildlife monitors, avoiding and do not intentionally approaching wildlife.
Proposed Terms and Conditions:	<p>Waste Management – 10 Fuel and Chemical Storage – 12 and 20 Air Quality – 22 Noise – 24 Wildlife – General – 25 through 30 Aircraft Flight Restrictions – 33 through 35, 37, 38</p> <p>A finalized <i>Wildlife Monitoring and Management Plan</i> is required that is also supported by the local Hunters and Trappers Organization to protect the herds in the area. The Board will require an annual report.</p>
Related Acts and/or Regulations:	<ol style="list-style-type: none"> 1. The <i>Migratory Birds Convention Act and Migratory Birds Regulations</i> (http://laws-lois.justice.gc.ca/eng/acts/M-7.01/). 2. The <i>Species at Risk Act</i> (http://laws-lois.justice.gc.ca/eng/acts/S-15.3/index.html). Attached in Appendix A is a list of Species at Risk in Nunavut.

	3. The <i>Wildlife Act (Nunavut)</i> and its corresponding regulations (http://www.canlii.org/en/nu/laws/stat/snu-2003-c-26/latest/snu-2003-c-26.html).
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Valued Component	Terrestrial vegetation, land, soil quality, terrain stability, and permafrost
Potential effects:	Potential adverse effects to ground stability, vegetation health, soil quality, terrain, and permafrost from the establishment and operation of the camp; the storage, transportation, and use of fuel; exploration drilling activities; and the seasonal use of the winter road.
Nature of Impacts:	The potential for impacts is considered to be minimal due to the limited and temporary nature of the activities and any resulting impacts would be expected to be minimal and reversible. The Regional Study Area overlaps with the Kugluk Territorial Park, however no exploration activities will be conducted within or near the park. The local study area identified one (1) esker in the Local Study Area. The impacts to eskers and other unique or fragile landscapes would be minimized by preferential avoidance of any areas particularly sensitive to exploration activities, management of runoff with the use of sumps to prevent scouring of land, and protection of permafrost.
Mitigating Factors:	The Proponent would ensure orientation and training on all staff on the importance of and need to minimize Project footprint and Project impacts on wildlife habitat, establishment of camp locations on dry durable ground to minimize potential for ground impacts and erosion, use of previously impacted areas (such as existing airstrips) where available and practical, placement of heated tents and drills on cribbing (i.e., raised above ground) to minimize vegetation impacts and permafrost degradation. No off-road transit by vehicles when there is risk of rutting or gouging of the ground, reduce winter trails and any winter road footprint by minimizing length and width of any over-land transit corridors and using existing trails where available. Also, the use of natural depressions or sumps for liquid waste (greywater and cuttings) and filling any dug sumps when no longer in use, minimizing the use of salt during drilling to reduce potential for vegetation impacts. Preventing introduction of non-native species by cleaning debris or soil from any mobile equipment brought to site, v-notching of any winter stream ice crossing prior to melt, locate sumps, fuel storage and infrastructure more than 31 m of a waterbody's ordinary high water level, avoid conducting activity in areas overlapping identified sensitive features and apply appropriate setbacks where needed, progressively close drill sites and fly camps as work is completed to reduce cumulative footprint impacts and at closure, stabilize any impacted areas potentially subject to erosion or sediment loss.
Proposed Terms and Conditions:	Waste Management – 10 and 11 Fuel and Chemical Storage – 13, 15 through 21 Wildlife – General – 25

	<p>Road and Ground Disturbance – 46 Land Use and Restoration of Disturbed Areas – 57 through 61 Drilling General -47 through 49 Drilling on land – 50 through 54 Camps – 62 and 63</p> <p>The Board requires the Proponent to submit a <i>Restoration and Abandonment Plan</i> and <i>Waste Management Plan</i> once finalized in the regulatory process with the Nunavut Water Board.</p>
Related Acts and/or Regulations:	The <i>Canadian Environmental Protection Act</i> (http://laws-lois.justice.gc.ca/eng/acts/C-15.31/).

Valued Component	Surface water quality, fish and fish habitat
Potential effects:	Potential adverse effects on surface water quality, and fish and fish habitat, from the establishment and operation of a camp, the storage, transportation, and use of fuel, and exploration drilling activities.
Nature of Impacts:	The potential for impact is considered to be limited due to the withdrawal of water from a waterbody for Project use.
Mitigating Factors:	The Proponent proposes to ensure that water use would not exceed 299 m ³ /day, and the water conservation and recirculation measures would be implemented in association with drilling activity and all water uptake lines would be equipped with screens which prevent the entertainment or impingement of fish. The Proponent would follow Department of Fisheries and Oceans (DFO) guidance and implement recommended protective measures where possible.
Proposed Terms and Conditions:	<p>Water courses/Water bodies (including fresh and marine waters) – 6 through 9 Fuel and Chemical Storage – 12 through 21 Drilling – General – 47 through 49 Drilling on Land – 50, 53 Drilling on ice – 55 and 56</p>
Related Acts and/or Regulations:	<ol style="list-style-type: none"> 1. The <i>Fisheries Act</i> (http://laws-lois.justice.gc.ca/eng/acts/F-14/index.html). 2. The <i>Nunavut Waters and Nunavut Surface Rights Tribunal Act</i> (http://laws-lois.justice.gc.ca/eng/acts/n-28.8/). 3. The <i>Transportation of Dangerous Goods Regulations</i> (http://www.tc.gc.ca/eng/tdg/clear-tofc-211.htm), <i>Transportation of Dangerous Goods Act</i> (http://laws-lois.justice.gc.ca/eng/acts/t-19.01/), and the <i>Canadian Environmental Protection Act</i> (http://laws-lois.justice.gc.ca/eng/acts/C-15.31/).

Valued Component	Noise
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Potential effects:	Increase in noise.
Nature of Impacts:	Operation of equipment, generators and aircraft.
Mitigating Factors:	Noise generated in association with camp areas, drilling locations, and helicopter use would be localized, discontinuous, and short term in nature, ensure equipment is appropriately maintained, and minimizing idling and flights.
Proposed Terms and Conditions:	Aircraft Flight Restrictions – 33 through 38
Related Acts and/or Regulations:	N/A

Valued Component	Air Quality
Potential effects:	Potential effects on air quality of fossil fuel combustion and burning or incineration of waste may influence air quality.
Nature of Impacts:	The potential adverse impacts to air quality are considered to be of low magnitude, short-term, and reversible.
Mitigating Factors:	The Proponent has committed to reduce emissions where practical by preventative maintenance and limiting idling, reduce unnecessary flights by consolidating waste and utilizing backhaul capacity, operate the incinerator in accordance with its design and manufacturer recommendations, and minimize open burning and only burn suitable wastes such as untreated wood, paper and cardboard.
Proposed Terms and Conditions:	Waste Management – 11 Air Quality – 22 and 23 Road and Ground Disturbance – 46
Related Acts and/or Regulations:	1. The <i>Canadian Environmental Protection Act</i> (http://laws-lois.justice.gc.ca/eng/acts/C-15.31/). 2. The <i>Transportation of Dangerous Goods Act</i> (http://laws-lois.justice.gc.ca/eng/acts/t-19.01/) and the <i>Transportation of Dangerous Goods Regulations</i> (http://www.tc.gc.ca/eng/tdg/clear-tofc-211.htm).

Valued Component	Wildlife harvesting and traditional land use activities.
Potential effects:	Potential adverse to traditional land use pursuits in the area from caribou migration disruptions and other wildlife disturbances from increased noise associated with the operational and drilling activities at the proposed exploration site, the transportation of personnel and equipment to and from the drill locations, the construction of the temporary camp, and the mineral exploration activities. The Proponent is proposing to work in an area in proximity to caribou calving, post calving, and caribou migration routes and the potential disruption may cause stress and avoidance of critical caribou habitat. As a result, local caribou populations may be reduced and subsequently the availability of caribou as country food.

Nature of Impacts:	Although the proposed project would include temporary and intermittent activities that may have limited potential for direct interaction with traditional land use activities, potential long-term impacts are possible from increased stress to wildlife (particularly to caribou) in key habitat areas. Unmitigated project impacts could affect the migratory patterns of the caribou herds and could result in indirect impacts.
Mitigating Factors:	The Proponent has committed to executing its work in a way that minimizes the negative effects to wildlife and has developed a draft <i>Wildlife Management and Monitoring Plan</i> that it has shared with the Kugluktuk HTO and the Kitikmeot Inuit Association that WCM has committed to finalizing with input from both parties. WCM has also committed to stop exploration activities during the Bluenose East caribou calving and post calving periods. The Board is also recommending terms and conditions that ensure that the affected communities and organizations are informed about the project proposal, and that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities in the area. Further, the Board is recommending annual reporting to assist with monitoring how exploration activities are progressing in the area.
Proposed Terms and Conditions:	Wildlife General – 25 through 30 Migratory Birds and Raptors Disturbance – 31 and 32 Aircraft Flight Restrictions – 33 through 38 Caribou and Muskox Disturbance – 39 through 45 A finalized <i>Wildlife Monitoring and Management Plan</i> is required that is also supported by local Hunters and Trappers Organization to protect the herds in the area. The Board will require an annual report.
Related Acts and/or Regulations:	1. The <i>Nunavut Act</i> (http://laws-lois.justice.gc.ca/eng/acts/N-28.6/). 2. The <i>Wildlife Act (Nunavut)</i> and its corresponding regulations (http://www.canlii.org/en/nu/laws/stat/snu-2003-c-26/latest/snu-2003-c-26.html).

Socio-economic effects on northerners:

Valued Component	Historical and archaeological sites.
Potential effects:	Archaeological and cultural historic sites may be disturbed by Project ground disturbance activities, including the establishment of camp and drill sites.
Nature of Impacts:	Direct disturbance of archaeological sites related to Project footprint.
Mitigating Factors:	The Proponent would conduct archaeological assessments prior to disturbing ground, apply buffer distances recommended by the GN Department of Culture and Heritage to any identified archaeological sites and educate Project personnel on archaeological detection, avoidance, and notification procedures.

Proposed Terms and Conditions:	Heritage Sites – 64 through 66
Related Acts and/or Regulations:	1. The <i>Nunavut Act</i> (http://laws-lois.justice.gc.ca/eng/acts/N-28.6/). The Proponent must comply with the proposed terms and conditions listed in the attached Appendix B .

Valued Component	Potential positive effects the project might have on socio-economics including employment, hiring and training.
Potential effects:	Employment and business opportunities associated with Project activities.
Nature of Impacts:	The Proponent committed to Source personnel, services and supplies preferentially from the Kitikmeot region, provide entry-level and skilled job opportunities for camp roles, such as cook, laborer, drill support, community research assistant, and wildlife monitor. WCM would provide on-the-job training and other training where possible and practical and support community initiatives were requested and financially able.
Mitigating Factors:	The Board is recommending terms and conditions to ensure that the Proponent continues to inform the communities of the ongoing site activities and to ensure community members are aware of and best able to successfully connect with hiring opportunities. The Proponent has also committed to preferential use of Kugluktuk, Kitikmeot, and Nunavut-based businesses, maximizing local employment, providing on-the-job and other training opportunities, and supporting community initiatives were requested and feasible. As a demonstration of this, in 2024 WCM sponsored a Kugluktuk community first aid course, provided helicopter support to the Kugluktuk HTO for their monitoring activities, employed a Kugluktuk community member as part of their small (3-person) July ground sampling program and 4-person archaeological assessment (commencing in early September), and made a concerted effort to direct project expenditures towards Kugluktuk-based businesses.
Proposed Terms and Conditions:	Other – 67 through 70 An annual report will be required including information regarding community engagement and local hiring.
Related Acts and/or Regulations:	N/A

Significant public concern:

Valued Component	Public Concern
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Potential effects:	KHTO expressed concern and was the only party with significant public concern during the comment period. The Board included the KHTO's comments as part of its decision-making.
Nature of Impacts:	The potential for impacts is considered given the location and nature of the proposed activities as the proposed project is in a caribou calving and post calving grounds that the community and HTO avoids hunting and/or disturbing. There may also be potential for disturbance to the Dolphin Union Caribou herd as Kugluktuk is at the western edge of the herd's habitat.
Mitigating Factors:	The Board is recommending terms and conditions to ensure that the Proponent continues to inform Kugluktuk of the ongoing site activities and any exploration or baseline results to ensure community members are aware of and best able to successfully connect with hiring opportunities.
Proposed Terms and Conditions:	Other – 67 through 69
Related Acts and/or Regulations:	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 following project-specific terms and conditions have been recommended: 1-5.

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. White Cliff Minerals Ltd (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.
2. The Proponent shall operate in accordance with all commitments stated in correspondence provided to the Nunavut Planning Commission (NPC File No.: 150522), and the NIRB (Online

Application Form, September 20, 2024). This information should be accessible to enforcement officers upon request.

3. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.
4. 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.
5. The Proponent shall ensure that all personnel, staff and contractors are adequately trained prior to commencement of all project activities, and shall be made aware of all operational plans, management plans, guidelines and Proponent commitments relating to the project.

Water courses/Water bodies (including fresh and marine waters)

6. The Proponent shall not extract water from any fish-bearing water body unless the water intake hose is equipped with a screen of appropriate mesh size to ensure that there is no entrapment of fish. Small lakes or streams should not be used for water withdrawal unless otherwise authorized by the appropriate authorizing agency.
7. The Proponent shall ensure that no disturbance of the stream bed, lakebed or the banks of any definable watercourse be permitted, except where deemed necessary for maintaining project-specific operational commitments or approved by a responsible authority in cases of spill management.
8. The Proponent shall implement erosion and sediment suppression measures on all areas during all project activities in order to prevent sediment or fugitive dust from entering any water body or surrounding environment. Erosion prevention measures may include berms or silt fences.
9. The Proponent shall not deposit, nor permit the deposit of any fuel, chemicals, wastes (including wastewater) or sediment into any water body. The Proponent should have in place an Emergency Spill Response Plan that is approved by the appropriate authorizing agency(ies).

Waste Management

10. 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.
11. 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

12. The Proponent shall locate all fuel and other hazardous materials a minimum distance away from the high-water mark of any water body and environmentally sensitive areas as required by the appropriate authorizing agencies. The materials shall be stored in such a manner as to prevent their release into the environment.

13. 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.
14. The Proponent shall ensure that re-fuelling of all equipment occurs a minimum distance away from the high-water mark of any water body as required by the appropriate authorizing agencies.
15. Fuel and hazardous material storage areas and fuel lines should be clearly marked with signs or flagging to avoid accidental breaks and punctures, and to ensure areas remain visible during the winter months.
16. All fuel and chemical storage containers must be clearly marked with the Proponent's name for ease of identification.
17. 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.
18. 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.
19. 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).
20. 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.
21. The Proponent shall ensure that all spills of fuel or other deleterious materials of 100 litres or more must be reported immediately to the 24-hour Spill Line at (867) 920-8130.

Air Quality

22. The Proponent shall take appropriate dust suppression measures in conducting all activities for this Project including using approved dust suppression additives and techniques as necessary to maintain ambient air quality.
23. The Proponent shall eliminate unnecessary idling to reduce greenhouse gas emissions as much as possible.

Noise

24. All construction and road vehicles must be fitted with standard and well-maintained noise suppression devices.

Wildlife – General

25. 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.

26. 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.
27. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.
28. The Proponent shall ensure that all wildlife have the right-of-way on any roads or trails. Vehicles are required to slow down or stop and wait to permit the free and unrestricted movement of wildlife across roads or trails at any location.
29. The Proponent shall enforce safe speed limits for vehicles travelling along the road to ensure drivers have sufficient time to react in a safe manner if wildlife are encountered on or adjacent to the road or trail.
30. The Proponent shall ensure that drivers maintain spacing appropriate for driving and road conditions, and speed limits, to ensure drivers have time to safely react to any wildlife on the road.

Migratory Birds and Raptors Disturbance

31. The Proponent shall carry out all phases of the project in a manner that protects migratory birds and avoids harming, killing or disturbing migratory birds or destroying, disturbing or taking their nests or eggs. In this regard, the Proponent shall take into account Environment and Climate Change Canada's *Avoidance Guidelines*. The Proponent's actions in applying the *Avoidance Guidelines* shall be in compliance with the *Migratory Birds Convention Act, 1994* and with the *Species at Risk Act*.
32. The Proponent shall not disturb or destroy the nests or eggs of any birds. If active nests of any birds are discovered or located (i.e., with eggs or young), the Proponent shall avoid these areas until nesting is complete and the young have naturally left the vicinity of the nest by establishing a protection buffer zone¹ appropriate for the species and the surrounding habitat.

Aircraft Flight Restrictions

33. The Proponent shall not alter flight paths to approach wildlife and avoid flying directly over animals.
34. The Proponent shall plan flight paths that minimize flights over known habitat likely to have birds or concentrations of wildlife. Aircraft should avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors.
35. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum flight altitude of 610 metres (2,100 ft) above ground level except during landing, take-off or if there is a specific requirement for low-level flying, which does not disturb wildlife or migratory birds.
36. The Proponent shall avoid known concentrations of birds (e.g., bird colonies, moulting areas) by a lateral distance of 1.5 kilometre. If avoidance is not possible maintain a minimum flight altitude of 1,100 metres (3,500 feet) over these areas.

¹ Recommended setback distances to define buffer zones have been established by Environment and Climate Change Canada for different bird groups nesting in tundra habitat and can be found at www.ec.gc.ca/paom-itmb.

37. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.
38. The Proponent shall advise all pilots of relevant flight restrictions and enforce their application over the project area, including flight paths to/from the project area.

Caribou and Muskoxen Disturbance

39. The Proponent shall avoid interfering with any paths or crossings known to be frequented by caribou during periods of migration as identified by current land use plans in place and/or by Inuit Qaujimaningit.
40. The Proponent shall not locate any operation or undertake activities that could block or cause any diversion to migration of caribou or muskoxen.
41. The Proponent shall immediately cease activities likely to interfere with the migration or calving of caribou or muskoxen until such time as the caribou or muskox have passed.
42. The Proponent shall not construct or operate any camp, cache any fuel or conduct blasting within ten (10) kilometres, or conduct any drilling operation within five (5) kilometres of any designated caribou water crossings.
43. During the period of May 15 to July 15, the Proponent shall suspend all operations and activities outside the immediate vicinity of the camps. Restricted activities include, but are not limited to, air and vehicle traffic, loud or repetitive noise or vibration disturbances, low-level over flights, blasting, and use of mobile equipment including snowmobiles and all terrain vehicles, and personnel walking within sight of the caribou group(s), until the caribou are no longer in the immediate area. Should the results of localized monitoring satisfy the land use inspector the project operations may resume without disturbing pregnant caribou cows or cows with young calves the suspension may be lifted for the periods specified.
44. Should pregnant caribou cows, cows with young calves, or groups of 50 or more caribou be observed within one (1) kilometer of project operations at any time, the Proponent shall suspend all operations in the vicinity, including low level overflights, drilling, blasting/trenching, and use of snowmobiles and all terrain vehicles outside the immediate vicinity of the camp, until caribou are no longer in the immediate area.
45. During the period of April 14 to June 1 when muskoxen are present, the Proponent shall not approach muskoxen closer than one (1) kilometer. This includes all operations, including low-level over flights, blasting, and use of snowmobiles and all-terrain vehicles outside the immediate vicinity of the camps.

Road and Ground Disturbance

46. 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.

Drilling – General

47. The Proponent shall not allow any drilling wastes to spread to the surrounding lands or water bodies.

48. The Proponent shall ensure that that any deleterious substances (as defined in the *Fisheries Act*) resulting from its activities do not enter into any water bodies frequented by fish.
49. The Proponent shall ensure that all drill areas are constructed to facilitate minimizing the environmental footprint of the project area.

Drilling on Land

50. The Proponent shall not conduct any land-based drilling or mechanized clearing activities a minimum distance of the normal high-water mark of any water body as required by an authorizing agency.
51. If an artesian flow is encountered, the Proponent shall ensure the drill hole is immediately plugged and permanently sealed.
52. The Proponent shall ensure that all sump/depression capacities are sufficient to accommodate the volume of wastewater and any fines that are produced. The sumps shall only be used for inert drilling fluids, and not any other materials or substances.
53. The Proponent shall not locate any sumps within a minimum distance of the normal high-water mark of any water body as required by an authorizing agency.
54. The Proponent shall ensure all drill holes are backfilled or capped prior to the end of each field season. All sumps must be backfilled and restored to original or stable profile prior to the end of each field season.

Drilling on Ice

55. The Proponent shall ensure that drill muds and additives are not used in connection with holes drilled through lake ice unless they are re-circulated or contained such that they do not enter the water body, or are demonstrated to be non-toxic.
56. The Proponent shall ensure that all drill cuttings are removed from ice surfaces daily.

Land Use and Restoration of Disturbed Areas

57. The Proponent shall use existing trails where possible during project activities on the land.
58. The Proponent shall ensure that the land use area is kept clean and tidy at all times.
59. The Proponent shall avoid disturbance on slopes prone to natural erosion, and alternative locations shall be utilized.
60. The Proponent shall remove all garbage, fuel and equipment at the end of each field season and/or upon completion of work and/or upon abandonment.
61. The Proponent shall ensure that all disturbed areas are restored to a stable or pre-disturbed state using Best Available Technology Economically Achievable (BATEA) upon completion of work and/or abandonment.

Camps

62. The Proponent shall ensure that all camps are located durable surfaces, such as gravel or sand that is consolidated and can withstand repeated, heavy use. Measures shall be put in place to prevent erosion, trail formation and damage to the ground.

63. The Proponent shall not erect camps or store materials on the surface ice of lakes or streams, except that which is for immediate use.

Heritage Sites

64. The Proponent shall ensure that archaeological and paleontological sites are not purposely or inadvertently disturbed by clients or staff as a result of project activities.

65. The Proponent shall ensure that all personnel are aware of the Proponent's responsibilities and requirements regarding archaeological or palaeontological sites that are encountered during land-based activities. This should include briefings explaining the prohibitions regarding removal of artifacts, and defacing or writing on rocks and infrastructure.

66. No activities shall be conducted in the vicinity (50 metres buffer zone) of any archaeological/historical sites. If archaeological sites or features are encountered, activities shall immediately be interrupted and moved away from this location. Each site encountered needs to be recorded and reported to the Government of Nunavut-Department of Culture and Heritage.

Other

67. 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.

68. The Proponent should consult with local residents regarding their activities in the area and solicit available Inuit Qaujimaningit and information that can inform project activities.

69. The Proponent shall ensure that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities.

70. The Proponent should, to the extent possible, hire local people and access local services where possible.

MONITORING AND REPORTING REQUIREMENTS

In addition, the Board is recommending the following:

Wildlife Mitigation and Monitoring Plan

1. Prior to the start of project activities, the Proponent shall submit a finalized *Wildlife Mitigation and Monitoring Plan* (WMMP) to the Nunavut Impact Review Board, Government of Nunavut Department of Environment, Kitikmeot Inuit Association, and Kugluktuk Hunters and Trappers Organization. At a minimum, this plan should include proposed template for a wildlife log/record of observations and proposed mitigation measures for caribou, migratory birds, grizzly bear and other sensitive species that may be encountered within the project area. The Proponent is encouraged to consult with the Government of Nunavut's Regional Biologists, Kugluktuk Hunters and Trappers Organization, and the Kitikmeot Inuit Association during the finalization of the WMMP,

regarding project schedule and timelines to ensure adequate mitigation of potential wildlife impacts and incorporation of Inuit Qaujimagatuqangit.

Abandonment and Restoration Plan

2. Once finalized in the regulatory process with the Nunavut Water Board, the Proponent shall submit the *Abandonment and Restoration Plan* to the Nunavut Impact Review Board, Kitikmeot Inuit Association, Crown Indigenous and Northern Affairs Canada, and Government of Nunavut- Department of Environment prior to undertaking activities in the area. The Plan should include procedures for using native plant species for re-vegetation in order to eliminate risk of introducing invasive species to the area pursuant to the *Wildlife Act*.

Waste Management Plan

3. Once finalized in the regulatory process with the Nunavut Water Board, the Proponent shall submit the *Waste Management Plan* to the Nunavut Impact Review Board and Kitikmeot Inuit Association prior to undertaking activities in the area. The Proponent is encouraged to consult with the Kitikmeot Inuit Association during the finalization of the plan.

Community Consultation Report

4. The Proponent shall submit a *Public Consultation Report* prior to the commencement of project activities. The report shall include a copy of materials presented to community members, a description of issues and concerns raised, and advice offered to the company as well as any follow-up actions that were required or taken to resolve any concerns expressed about the project proposal.

Annual Report

5. The Proponent shall submit a comprehensive annual report with copies provided to the Nunavut Impact Review Board, Kitikmeot Inuit Association, Hamlet of Kugluktuk, Kugluktuk HTO, and Crown-Indigenous Relations and Northern Affairs Canada, by March 31st of each year of permitted activities beginning March 31, 2025. The annual report must contain at least the following information:
 - a. A summary of activities undertaken for the year, including:
 - a map showing the approximate location of drill sites;
 - a map showing the location of the fuel cache;
 - a description of local hires, contracting opportunities, and initiatives;
 - flight altitudes, frequency of flights and anticipated flight routes; and
 - site photos;
 - b. A work plan for the following year, including any progressive reclamation work undertaken;
 - c. A summary of community consultations undertaken throughout the year, providing copy of materials presented to community members, a description of issues and concerns raised, discussions with community members and advice offered to the company as well as any

follow-up actions that were required or taken to resolve any concerns expressed about the project proposal;

- d. A log of instances in which community residents occupy or transit through the project area for the purpose of traditional land use or harvesting. This log should include the location and number of people encountered, activity being undertaken (e.g., berry picking, fishing, hunting, camping, etc.), date and time; and any mitigation measures or adaptive management undertaken to prevent disturbance;
- e. A discussion of issues related to wildlife and environmental monitoring, including the number of cease-work orders required as a result of proximity to caribou and any other wildlife;
- f. A brief summary of WMMP results as well as any mitigation actions that were undertaken. In addition, the Proponent shall maintain a record of wildlife observations while operating within the project area and include it as part of the summary report. The summary report based on wildlife observations should include the following:
 1. Locations (i.e., latitude and longitude), species, number of animals, a description of the animal activity, and a description of the gender and age of animals if possible.
 2. Prior to conducting project activities, the Proponent should map the location of any sensitive wildlife sites such as denning sites, calving areas, caribou crossing sites, and raptor nests in the project area, and identify the timing of critical life history events (i.e., calving, mating, denning and nesting).
 3. Additionally, the Proponent should indicate potential impacts from the project and ensure that operational activities are managed and modified to avoid impacts on wildlife and sensitive sites.
- g. An analysis of the effectiveness of mitigation measures for wildlife;
- h. Summary of any heritage sites encountered during the exploration activities, any follow-up action or reporting required as a result and how project activities were modified to mitigate impacts on the heritage sites;
- i. Summary of its knowledge of Inuit land use in/near the project area and explain how project activities were modified to mitigate impacts on Inuit land use; and
- j. A summary of how the Proponent has complied with conditions contained within this Screening Decision, and all conditions as required by other authorizations associated with the project proposal.

OTHER NIRB CONCERNS AND RECOMMENDATIONS

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

Change in Project Scope

1. Responsible authorities or Proponent shall notify the Nunavut Planning Commission and/or Parks Canada as appropriate, and the NIRB of any changes in operating plans or

conditions, including phase advancement, associated with this project prior to any such change.

Copy of licences, etc. to the Board and Commission

2. 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 or upload a copy to the NIRB's online registry at www.nirb.ca.

Use of Inuit Qaujimaningit

3. 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, and reports 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.

Bear and Carnivore Safety

4. 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. 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.
5. 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.
6. Any problem wildlife or any interaction with carnivores should be reported immediately to the local Government of Nunavut, Department of Environment Conservation Office (Conservation Officer of Kugluktuk, phone: (867-982-7450).

Species at Risk

7. 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://www.sararegistry.gc.ca/virtual_sara/files/policies/EA%20Best%20Practices%202004.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

8. 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.
9. 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://publications.gc.ca/collections/collection_2013/ec/CW66-324-2013-eng.pdf.

Heritage Resources

10. During the assessment, the NIRB has identified that no archaeology surveys were conducted in the proposed project areas and that potential for the presence of archaeological resources is likely, therefore the Proponent shall contact the Department of Culture and Heritage to initiate a field archaeology assessment program prior to undertaking any land disturbance activities.

Incineration of Wastes

11. 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.

Transport of Dangerous Goods and Waste Management

12. Environment and Climate Change Canada recommends that all hazardous wastes, including waste oil, receive proper treatment and disposal at an approved facility.
13. The Proponent shall ensure that proper shipping documents (waste manifests, transportation of dangerous goods, etc.) accompany all movements of dangerous goods. Further, the Proponent shall ensure that the shipment of all dangerous goods is registered with the Government of Nunavut Department of Environment, Department of Environment Manager. Contact the Manager (867) 975-7748 to obtain a manifest if dangerous goods including hazardous wastes will be transported.
14. 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.

Aircraft Identification

15. The Proponent shall provide the community of Kugluktuk the planned helicopter activities, including photo(s) of the helicopter to be used, approximate flight paths, plans and times as available prior to commencement of activities to ensure community members are aware of the planned activities.

Caribou Management

16. Territorial and federal government agencies in Nunavut should work together with Regional Inuit Associations, co-management boards and industry to develop an action plan to identify and mitigate potential cumulative effects of human land use activities, including mineral exploration, on barren-ground caribou. This assessment of cumulative effects should occur at a regional scale (i.e., larger than individual project areas).
17. As a result of expressed concerns regarding mineral exploration and the associated potential for cumulative effects on caribou and caribou habitat within the Kitikmeot region, the NPC, territorial and federal government agencies should work together with Regional Inuit Associations, co-management boards, the public, and industry to develop a plan that identifies appropriate land use in these areas prior to potential mineral exploration. The plan should identify and mitigate potential cumulative effects of human land use activities on barren-ground caribou on both localized and regional scales.
18. The NPC should be aware of the public concerns regarding a perceived lack of protection for caribou and caribou habitat within the Kitikmeot region of Nunavut. In developing a Nunavut-wide land use plan, the NPC may wish to consider formalized protection of important caribou habitat, and seasonal restrictions on potentially disruptive activities in these areas to minimize disturbance to caribou lifecycles and Inuit harvesting activities.

CONCLUSION

The foregoing constitutes the Board's screening decision with respect to the White Cliff Minerals Ltd.'s "Rae Copper Exploration Project". The NIRB remains available for consultation with the Minister regarding this report as necessary.

Dated December 5, 2024 at Baker Lake, NU.



Kaviq Kaluraq, 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

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) to get the current status of a species.

Updated: September 2019

Terrestrial Species at Risk ²	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility ³
Migratory Birds			
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
Vegetation			
Porsild's Bryum	Threatened	Schedule 1	Government of Nunavut (GN)
Arthropods			
Transverse Lady Beetle	Special Concern	No Schedule	GN
Terrestrial Wildlife			
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
Marine Wildlife			
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

² The Department of Fisheries and Oceans has responsibility for aquatic species.

³ 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.

Terrestrial Species at Risk²	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility³
Beluga Whale (Eastern High Arctic-Baffin Bay Population)	Special Concern	No Schedule	DFO
Beluga Whale (Western Hudson Bay Population)	Special Concern	No Schedule	DFO
Fish			
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 B: ARCHAEOLOGICAL AND PALAEOLOGICAL 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:

	Types of Development (See Guidelines below)	Function (See Guidelines below)
a)	Large scale prospecting	Archaeological/Palaeontological Overview Assessment
b)	Diamond drilling for exploration or geotechnical purpose or planning of linear disturbances	Archaeological/Palaeontological 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*⁴ to issue such permits.

⁴P.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*⁵, 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*⁶, 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)

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.

CH is the Nunavut Government agency which oversees the protection and management of

⁵ s. 51(1)

⁶ P.C. 2001-1111 14 June, 2001

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.