ENVIRONMENTAL AND WILDLIFE MANAGEMENT PLAN

Hornby Basin Property, NU

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1 Introduction

This Environmental Management Plan ("EMP") has been prepared on behalf of Future Fuels Inc. ("Future Fuels" or the "Company") in accordance with applicable legislation, guidelines, and best practices relevant to activities at the Hornby Basin Property (the "Property" or the "Project") in Nunavut, Canada.

The EMP will come into effect in November 2025, pending approval from all relevant regulatory bodies, and will be revised if there are any significant changes to the activities outlined in existing permits.

Along with this EMP, an Emergency Response Plan ("ERP"), Abandonment and Restoration Plan ("ARP"), Spill Contingency and Fuel Management Plan ("SCFMP"), Waste Management Plan ("WMP"), and Radiation Hazard Control Plan ("RHCP") will be created for the Property as part of a property-wide management system.

1.1 Project Description

The Hornby Basin Property (the "Property" or the "Project") consists of 232 contiguous mineral claims covering approximately 3,355 km^2 (335,518 hectares) and six contiguous mineral leases covering approximately 62 km^2 (6,195 hectares). It is located on NTS map sheets 086M08, 086N01–N03, 086N05–N07, 086O03–O04, 086K16, and 086J12–J14, and is centered at 523,237mE, 7,441,310mN (NAD83 UTM Zone 11N), approximately 95 km southwest of Kugluktuk. The Property overlaps with both Crown Land and partially overlaps Inuit Owned Lands ("IOL") parcels CO-52 , CO-53, and CO-60. Future Fuels Inc. ("Future Fuels" or the "Company") holds a 100% interest in the Property.

Exploration activities at the Property to date include ground geophysical surveys. No exploration activities are planned to take place on Inuit-owned lands.

Future Fuels is proposing a 2026 exploration program on the Property, anticipated to run for approximately 185 days beginning in May and ending in October (weather permitting). Similar field programs, including the same types of exploration activities, are expected to take place annually between May and October in subsequent years. Specific dates will be relayed to the CIRNAC engineer and any other necessary regulatory agencies.

The proposed exploration program will include general exploration activities, such as prospecting, geological mapping, geochemical sampling (rock, soil, till), drone photogrammetry, airborne or ground geophysics, downhole geophysics and core drilling for up to 2 diamond drill rigs. Drillhole depth is expected to average <500m with the total annual program expected to be less than approximately 10,000m. Drillhole locations are still to be determined, but locations will be submitted to the Nunavut Water Board ("NWB") and Crown-Indigenous Relations and Northern Affairs Canada ("CIRNAC") for approval prior to any ground disturbance. All planned drillhole pads will be inspected for the presence of archaeologically significant artifacts prior to commencement of drilling.

The 2026 program will include the establishment of a seasonal 25-person camp near Mountain Lake or Mouse Lake (see Map below for potential camp locations), including a storage facility and a dedicated fuel cache. Planned camp infrastructure consists of 10-12 canvas sleeper tents (or

similar), two kitchen tents/dry tents (with showers), one office tent, two core logging tents, a generator shack, a storage facility, a fuel cache, and incinerator, and outhouses or a pacto system. Most camp structures will be canvas prospector-style tents, or similar units, typically set up with plywood flooring. The final camp location will be communicated with the relevant regulatory bodies prior to mobilization.

If required, a short-term, smaller-scale fly camp may also be established to support work in the southeastern portion of the Property. Any such temporary camp would include only essential structures and would be demobilized once work in that area is complete.

Three to five camp construction personnel will be on site for approximately 15 days (9 days for set up and 6 days for take down). Staff on site for the duration of the work program will consist of up to 3 to 5 geologists, 2 helicopter-company personnel, 1 to 2 cooks, 1 camp manager, and up to 12 drill company-personnel. Total amount of time spent on site will amount up to approximately 4,625 man-days per calendar year. This man-day estimate assumes full occupancy (25 personnel) for the full 185-day operational window.

All waste, including organic and inorganic materials, will either be incinerated on-site in accordance with regulatory guidelines or transported to Kugluktuk, NU, or Yellowknife, NWT for proper disposal.

The proposed work will be helicopter-supported and require the occasional landing of the aircraft. To mitigate any potential impact on wildlife, the helicopter will always maintain a minimum altitude of 610 m (2,100 ft) above ground level except during landing, take-off or if there is a specific requirement for low level flying (e.g. airborne surveys, drill rig moves, camp assembly). Wildlife will be avoided, and the helicopter will not land in the presence of wildlife except in an emergency.

All empty fuel drums will be brought back to Kugluktuk, NU, or Yellowknife, NWT for disposal.

The Nunavut Planning Commission (“NPC”) previously reviewed works associated with the Property and issued conformity determination (August 15, 2025), confirming that the Project is located outside the area of an applicable regional land use plan. The associated NPC File number is 150888. Activities on the Property have not been previously screened by the Nunavut Impact Review Board (“NIRB”) or other regulatory agencies.

Absolutely no activities will be conducted that will interfere with caribou cows and calves, and no exploration activities will cause a diversion in the migration patterns of any caribou. Future Fuels will communicate with all interested parties regarding caribou sightings and appraised movements in the area.

Notifications will be sent to the Hamlet and the Hunter and Trappers Organization, and in the event that further consultation is required, Future Fuels will ensure that best efforts are made to engage with the community and organizations as advised by regulatory agencies.

1.2 Future Fuels Environmental Statement

Future Fuels is committed to developing the Hornby Basin Property in a socially and environmentally responsible manner, in full compliance with all applicable federal, territorial, and local environmental laws and regulations. We aim to actively collaborate with regulatory agencies,

Indigenous organizations, environmental groups, and the public to address concerns, enhance transparency, and promote environmental stewardship throughout the life of the project.

To achieve these goals, Future Fuels has established the following environmental objectives for the Hornby Basin Property:

1. Develop the project in a socially and environmentally responsible manner.
2. Ensure full compliance with all relevant federal, territorial, and local environmental legislation, regulations, and guidelines.
3. Identify and mitigate potential environmental impacts while minimizing risks to the health and safety of workers, contractors, and the public.
4. Develop and implement a site-specific Spill Prevention and Response Plan that meets all regulatory requirements, including federal and territorial notification and reporting obligations.
5. Establish clear responsibilities and protocols for spill reporting, emergency response, and site-specific infrastructure details, including the use of the Hornby Basin Property SCFMP.
6. Implement and maintain an emergency response plan to mitigate the effects of unexpected incidents.
7. Promote the safe handling, management, and use of potentially hazardous materials, and encourage efficient, secure containment and recovery of spills to minimize environmental damage to both land and water.
8. Provide easily accessible emergency information to cleanup crews, project management, employees, contractors, and relevant regulatory agencies.
9. Maintain open and transparent communication with employees, contractors, inspectors, government entities, and regulatory bodies regarding project activities and any site changes.
10. Collaborate with federal, territorial, local, and Indigenous organizations, as well as other stakeholders, to address environmental concerns and support sound environmental policy.
11. Conduct regular training for employees and contractors on environmental policies, spill prevention, and emergency response procedures.
12. Require all contractors to adhere to the Property's environmental policies, procedures, and site-specific requirements.
13. Encourage continuous improvement by fostering a proactive environmental culture among personnel and contractors.
14. Provide site-specific details regarding facility infrastructure, emergency procedures, and environmental safeguards.
15. Address and comply with all environmental requirements related to diamond drilling activities.

2 Designated Environmental and Socio-Economic Areas

The Hornby Basin Property does not overlap any federally or territorially designated Protected Areas, as defined by Environment and Climate Change Canada. The nearest protected area is the Tuktut Nogait National Park of Canada which lies approximately 81 km northwest of the Property. The Caribou Point Conservation Zone in the Northwest Territories (NWT) is located roughly 3 km west of the Property's western boundary. Other nearby protected areas include Kugluk Territorial Park (~70

km northeast), Cape Parry Migratory Bird Sanctuary (~400 km northwest, NWT), and Ahiak Migratory Bird Sanctuary (~430 km northeast).

According to the Draft Nunavut Land Use Plan, portions of the Property are located within areas identified as Valued Socio-Economic Components, including the Canadian Heritage Rivers conservation area and the Community of Kugluktuk Drinking Water Supply Watershed. A section of the Property also falls within the Ghotelnene K'odtineh Dene area of asserted rights.

The Draft Plan also identifies parts of the Property as falling within Valued Ecosystem Components, including Caribou Summer and Lake Summer Areas, Rutting Areas, and Migration Corridors. Additionally, the Recommended Nunavut Land Use Plan identifies portions of the Property as Caribou Calving Grounds.

3 Environmental Protection Measures

Exploration activities at the Hornby Basin Property will be subject to rigorous assessment to identify and mitigate potential environmental impacts. Future Fuels is committed to protecting the natural environment and will implement all reasonable measures to minimize disturbance. Detailed documentation and photographic records of site activities will be maintained throughout the program to support environmental due diligence.

All on-site personnel, including employees and contractors, will receive comprehensive environmental training to ensure regulatory compliance. The Project Supervisor will be responsible for overseeing the implementation of environmental policies, training initiatives, and the management of ongoing environmental monitoring.

3.1 Archaeological or Paleontological Sites

To safeguard archaeological and palaeontological sites and artifacts, Future Fuels will implement the following measures:

1. All staff, contractors, and visitors are prohibited from operating vehicles over known or suspected archaeological or palaeontological sites.
2. The disturbance or removal of artifacts, fossils, or heritage sites is strictly prohibited.
3. If any archaeological or palaeontological site or specimen is encountered or disturbed, the **Nunavut Department of Culture and Heritage ("CH") must be notified immediately at (867) 934-2046 or (867) 975-5500**. A detailed report, including GPS coordinates, a description, and photographs (if available), will be submitted to CH and CIRNAC.
4. Any activity that may disturb a discovered site must stop immediately, pending direction from CH.
5. Restoration of disturbed sites will follow directives issued by CH and CIRNAC.
6. Full cooperation will be provided to CH in documenting and managing any encountered heritage resources.
7. Field personnel involved in geochemical sampling, geological mapping, prospecting, and ground geophysical surveys will be supplied with maps identifying known archaeological and palaeontological sites.

8. Prior to any ground-disturbing activities, surveys will be conducted to identify potential heritage resources.
9. The construction of inuksuk structures is strictly prohibited.
10. Future Fuels will ensure that all personnel under its authority are informed of and comply with these requirements.

CONTACT	CONTACT NUMBERS
Nunavut Department of Culture and Heritage	867-975-5500
Jeremy Fraser | CIRNAC Field Operations Manager	Telephone: 867-975-4553 Alternate Telephone: 867-975-2761 Fax: 867-979-6445 Email: jeremy.fraser@rcaanc-cirnac.gc.ca

3.2 Air and Noise Quality

Exploration programs in northern regions are typically small-scale, seasonal, and short in duration due to weather limitations. Given their limited scope, low-impact nature, and remote settings, these programs are not expected to cause significant effects on air or noise quality.

Potential impacts on air and noise quality resulting from activities on the Hornby Basin Property for the program are from usage of helicopters, emissions from generators, emissions from incineration, and drilling operations. If caribou and/or muskoxen are observed within the survey area, operations will be postponed until the animals have moved at least five (5) kilometres away. To mitigate any potential impact on wildlife, the helicopter will always maintain a minimum altitude of 610 m (2,100 ft) above ground level except during landing, take-off or if there is a specific requirement for low level flying (e.g. airborne surveys, drill rig moves, camp assembly). Helicopters will maintain a minimum altitude of 610 metres when at least one wildlife is present and avoid flying over caribou calving grounds while travelling to or from the site. Additional wildlife mitigation measures are outlined in Section 4 of this plan.

3.3 Vegetation and Soil Disturbance Mitigation

The Hornby Basin Property is predominantly characterized by moss, lichens, stunted vegetation, and Arctic grasses, with grasses more commonly found at lower elevations near river drainage basins. Camp and drilling activities have the potential to impact vegetation and permafrost. To mitigate these effects, measures such as limiting vegetation disruption, marking footpaths, and elevating heated camp structures to prevent permafrost thaw are implemented. Sumps are placed in areas lacking vegetation, with topsoil set aside for later reclamation, and all sumps barricaded until they are backfilled.

Soil quality may be affected by fuel spills and waste discharge, necessitating preventative measures like proper storage, ensuring all fuel, hazardous materials, and drilling are a minimum of 31 meters away from any watercourses, and careful refueling procedures. Regular inspection of equipment and placement of absorbent materials in fuel transfer areas are also employed. For detailed protocols, refer to the Hornby Basin Property's Spill Contingency and Fuel Management Plan (SCFMP).

3.4 Groundwater Impacts and Mitigation Measures

Drilling activities can affect groundwater quantity and quality through flow disruption, contamination, and elevated solids or metals. Future Fuels is committed to safeguarding water resources and will implement appropriate environmental measures to mitigate these potential impacts.

- Drilling fluids will be directed into a designated sump or suitable natural depression (or other approved containment) located at least 31 metres from the high-water mark, ensuring no direct discharge to water bodies.
- If artesian flow is encountered, the drill hole will be promptly sealed and cemented in bedrock to prevent uncontrolled flow.
- Future Fuels will confirm that selected water sources can support drilling requirements without altering lake levels or natural flow patterns.
- Drilling operations will incorporate recirculation and filtration systems to reduce water consumption and minimize the loss of additives. Whenever feasible, non-toxic, biodegradable drilling fluids will be used.
- Fuel and hazardous materials stored at drill sites or remote caches will be placed within secondary containment systems such as Arctic Insta-Berms, with hydrocarbon filtration products like RainDrain used to manage accumulated water safely.
- All hazardous materials will be handled at least 31 metres from water bodies, and spill kits and firefighting equipment will be strategically positioned at drill sites, fuel caches, and in helicopters.
- All containers will be inspected before and after fuel or material transfer, and routinely throughout storage.

4 Potential Impacts to Wildlife and Mitigation Measures

While all interaction with wildlife is discouraged, employees and contractors will receive training on how to respond appropriately when encountering animals in the field. Intentionally approaching, disturbing, or feeding wildlife is strictly prohibited, and any such incidents will be fully investigated and addressed. All personnel are expected to respect wildlife and their habitats, record observations, and follow established reporting protocols.

All wildlife sightings will be documented in the Wildlife Record Log and submitted to the appropriate authorities through the Annual Reports. If wildlife enters the operational area, protective measures will be initiated and work will be paused until the animal has safely moved on. Any encounters involving bears or nuisance wildlife must be reported immediately to project supervisors and relevant authorities.

Exploration activities at the property—such as geochemical sampling, mapping, and ground surveys—are generally low impact. Drilling activities may produce noise that could temporarily disturb wildlife; therefore, drill pads will be located away from nests, dens, or other sensitive areas wherever possible. Habitat disturbance is expected to be short-term, and progressive reclamation will be applied throughout the program to restore affected areas. The potential risk of fuel or oil spills

at the camp or drill sites will be addressed through proper spill-prevention practices, with all measures outlined in the SCFMP strictly followed.

Aircraft support, primarily through helicopter operations, is required for daily activities including crew transport, drill moves, and fuel hauling. Measures will be taken to reduce impacts from noise and the potential for fuel spills. Helicopters will maintain a minimum altitude of 610 metres when wildlife is observed and avoid caribou calving areas when traveling to or from the project site. Low-altitude flights near wildlife, nests, or dwellings will be avoided, and pilots will only land in their vicinity if necessary for safety. Landings in the presence of wildlife are not permitted except in emergencies, and any such incidents will be documented and reported in the Annual Reports.

To reduce the risk of fish entrapment, proper intake screens will be installed on all water-withdrawal systems at both the camp and drill sites.

4.1 Species at Risk

According to the "Species at Risk in Nunavut 2021" document, here are some of the wildlife that will be looked out for at the Property:

4.1.1 Caribou

The Species at Risk (SAR) at the Property includes:

- Barren-ground Caribou – Napaaqtuqangituqmiut Tutungit
- Dolphin and Union Caribou – Qikitaqmiut Tutugit Tulvin Ammalu Junian

These mitigation measures are based on the Draft Nunavut Land Use Plan (2023) for the Kitikmeot region and will be updated in Future Fuels' EWMP if regulatory guidance changes. Future Fuels has also reviewed the Kivalliq Inuit Association's Mobile Caribou Conservation Measures: 2022 Update, which outlines seasonal timing windows, buffer distances, and thresholds that trigger activity suspensions. Although these measures were developed for Inuit-Owned Lands in the Kivalliq Region, comparable proactive triggers will be applied to Crown lands within the Project Area.

For consistency and accuracy, the EWMP will reference the original KivIA measures directly rather than summarizing them in tables. Where timing inconsistencies occur—for example, June 30 versus July 31 for the post-calving closure period—Future Fuels will apply the earlier June 30 date unless revised guidance is provided. Boundaries for designated calving grounds identified in the Draft NLUP (2023, Appendix C) will be used to inform implementation of these measures.

The Mobile Caribou Conservation Measures operate with three concentric zones, as a hierarchy of increasing surveillance effort (Fig. 2). An outer 'Early Warning Zone' relates to the presence or absence of collared caribou, or an estimated likelihood of caribou presence based on local or scientific knowledge. The size of the Early Warning Zone is scaled to the caribou season as movement rates and directionality varies seasonally (Tables 1, 2). For example, a smaller Early Warning Zone is used during winter when movement rates are generally lower and less directional. A larger Early Warning Zone is used during spring migration/pre-calving when distances moved are generally larger and more directional.

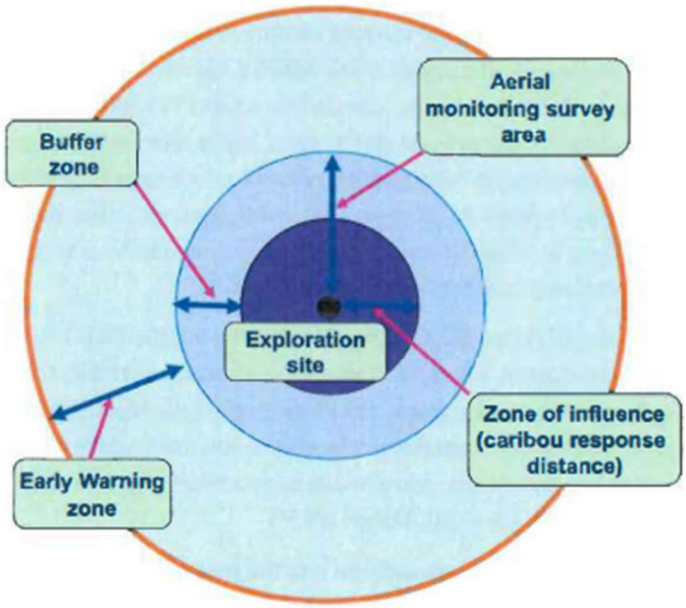


Figure 2. Schematic relationship between an exploration site, Zone of Influence, Buffer Zone, Early Warning Zone, and monitoring survey area.

Observed Caribou(s)

Future Fuels will follow the thresholds outlined in Table 2 of the Kivalliq Inuit Association's Mobile Caribou Conservation Measures: 2022 Update for the Nunavut Planning Commission, as referenced in the Draft Nunavut Land Use Plan (2023). These thresholds specify seasonal timing windows, buffer zones, and the number of observed collared or adult caribou that trigger the suspension of exploration activities, including drilling.

Future Fuels is proposing a late Spring–Fall field program for the Property, expected to run for approximately 185 days between May and October (weather permitting). This operational period overlaps with the "Calving/Post-calving, and Summer" seasonal ranges identified in Table 2 of the KivIA Mobile Caribou Conservation Measures (2022 Update). The Hornby Basin Property lies within mapped calving areas; therefore, exploration activities will be subject to the corresponding seasonal restrictions and zone-based mitigation measures (EWZ/ZOI thresholds). Please refer to Appendix 2 on mitigation measures Future Fuels will take when caribous are observed.

Flights

During seasonal sensitivities (i.e., pre-calving, calving, and post-calving caribou conservation periods, as well as near identified caribou water crossings), helicopters (drill equipment and personnel transport) and fixed-wing aircraft (airborne geophysical survey) will maintain a minimum altitude of 610 m (2,100 ft) above ground level except during landing, take-off or if there is a specific requirement for low level flying (e.g. airborne surveys, drill rig moves, camp assembly). Aircraft will never fly below this altitude in the presence of wildlife unless required for extreme emergency or safety reasons. No landings are permitted where migrating caribou, caribou with calves, or muskox nurse groups are present. Pilots are directed to avoid caribou calving grounds during transit.

For approved low-level airborne geophysical surveys, detailed work plans will be submitted to relevant authorities prior to commencement. Fixed-wing aircraft used for such surveys will typically operate at approximately 60 m above ground level and may only do so when no wildlife is present within the operational area.

Crossings

Between May 15th and September 30th, no camps will be established, fuel-caches, or blasting conducted within 10 kilometers of designated caribou crossings, and no exploration activities such as drilling operations will take place within five (5) kilometers of these areas. Activities must not impede or divert caribou migration. Currently, there are no designated crossings on the Hornby Basin Property.

Future Fuels will implement the following measures, consistent with the Kivalliq Inuit Association's Mobile Caribou Conservation Measures: 2022 Update for the Nunavut Planning Commission (as referenced in the Draft Nunavut Land Use Plan, 2023):

- *If collar data or caribou observations indicate that there are one (1) or more collared caribou or twenty-five (25) or more caribou observed within twenty-five (25) km of the boundary of the Property that appear to be moving in the direction of the activities, then monitoring within a five (5) km buffer zone around the water crossing shall be conducted every second day (e.g., height of land surveys, remote camera surveys).*
- *If monitoring indicates that there are fifty (50) or more caribou within five (5) km of the boundary of the Property that appear to be moving in the direction of the water crossing, then the Tenant shall conduct monitoring within a five (5) km buffer zone on a daily basis, and shall immediately suspend any activities that have the potential to disturb caribou, including suspension of drill operations, blasting activities and nonessential ground movements and aircraft traffic below 300 m above ground level (except as necessary for emergency purposes), suspension of all ground operations, camp closure, and removal of all non-essential personnel, until caribou numbers are below the threshold within the buffer zone.*

Calving Areas

Between May 28 to July 3, no work is permitted in the regions of the Property deemed Calving Grounds for the Bluenose East Caribou Herd. Portions of the Hornby Basin Property intersect Calving and Post-Calving Grounds, according to the 2021 Draft Nunavut Land Use Plan during which times mineral exploration is prohibited and will not be performed during the date range outlined above.

If one or more pregnant cows or cow–calf pairs are observed within designated key access corridors, calving grounds, or post-calving areas prior to May 28, exploration activities—including high-altitude reconnaissance flights—will be suspended. Activities may resume on or after July 3, once monitoring confirms that cows and calves have left the area and the calving and post-calving periods have concluded.

Diamond Drilling

Drilling activities will be planned to avoid caribou whenever possible. Future Fuels will implement a caribou alert system to monitor and inform personnel of caribou presence near the camp, drill sites, and mapping, prospecting, or sampling areas. Future Fuels will follow the thresholds in Table 2 of the "Kivalliq Inuit Association's Mobile Caribou Conservation Measures: 2022 update for the Nunavut Planning Commission," which specify seasonal and timing considerations, zone radii, and observed numbers of collared or adult caribou to determine when to suspend drilling activities.

Future Fuels is proposing a late Spring–Fall field program for the Property, expected to run for approximately 185 days between May and October (weather permitting). This operational period overlaps with the "Calving/Post-calving, and Summer" seasonal ranges identified in Table 2 of the KivIA Mobile Caribou Conservation Measures (2022 Update). The Hornby Basin Property lies within mapped calving areas; therefore, exploration activities will be subject to the corresponding seasonal restrictions and zone-based mitigation measures (EWZ/ZOI thresholds). Please refer to Appendix 2 on mitigation measures Future Fuels will take when caribous are observed

Monitoring for Mobile Measures

Telemetry data will be utilized, where available, to anticipate caribou movements near the Project area, guiding operational planning and the implementation of avoidance measures. During active exploration periods, dedicated wildlife monitors will be stationed at camp(s) and potentially at drill sites to observe and report wildlife presence, including caribou. Height-of-land monitoring will be conducted, where feasible, around key sites to improve early detection of approaching caribou, and additional tools such as binoculars and spotting scopes may be employed to enhance "over-the-horizon" detection capabilities.

High-Altitude Reconnaissance Flights

High-altitude reconnaissance flights will be conducted using a Cessna A-185F fixed-wing aircraft, or a helicopter, equipped for safe wildlife observation. Flights will generally be conducted at altitudes sufficient to minimize disturbance to caribou and other wildlife while allowing effective detection from the air; specific altitudes will be selected based on terrain, weather, and operational conditions. Each flight is expected to last approximately 30 minutes to 1 hour and will be scheduled to align with active exploration periods, with timing and frequency adjusted according to the presence of wildlife and operational needs. Flight paths will follow planned transects designed to maximize coverage around drill sites and camp locations while avoiding direct overflights of wildlife groups, with flexibility to adjust paths in response to observed animal activity. Typically, one to two trained wildlife observers will be on board each flight to identify and report wildlife presence, including caribou. Reconnaissance flights will be conducted prior to geomatics surveys to provide baseline wildlife observations and, when necessary, may also occur around camp(s) and drill sites to monitor caribou

movements and inform operational decisions. The selected flight altitudes and timing are intended to optimize caribou detection probability while minimizing disturbance, consistent with northern wildlife best practices and co-management guidance.

4.1.2 Carnivores

The Species at Risk (SAR) at the Property includes:

- Grizzly Bear – Akłait
- Wolverine – Qavvik

Proper food and waste storage measures will be implemented in camp, at drill sites, and in the field to minimize wildlife attraction. In the presence of bears, work activities must halt until they have safely left the area. Any human-bear interactions must be reported promptly to the Government of Nunavut (GN) Wildlife Biologist and any other relevant authorities.

Carnivore dens, both known and newly discovered, are to be avoided and reported to the regional wildlife biologist and any other relevant authorities. GPS coordinates of den sites will be recorded and provided to regulatory authorities, with no disturbance permitted. Exploration within specified den buffers, determined by the Government of Nunavut, must cease immediately upon discovery of the den. Buffer distances include:

- Grizzly Bear: 300m
- Wolverine: 2km

4.1.3 Birds

The Species at Risk (SAR) at the Property includes:

- Eskimo Curlew - Akpingak
- Harris's Sparrow – Qupanuaq or Qupanuarjuk (general songbird name)
- Peregrine Falcon – Kiggaviarjuk or Kigavik
- Red-necked Phalarope – Aupaluktuq Saurraq or Aupaqtuq Saarvaq
- Short-eared Owl – Siutikituq Ukpik

No eggs or nests are to be disturbed by any activities and special care and concern, including monitoring, will take place during migratory bird nesting periods in the area (May to mid-August). If an employee or contractor encounters an active nest, all activities must cease immediately to avoid disturbance. Coordinates of the nest location should be recorded in the wildlife incidental observation log and reported to Environment Canada. Disturbing or moving the nest of a migratory bird is a violation of the Migratory Birds Convention Act.

The peregrine falcon, designated as a species of Special Concern by COSEWIC, requires special attention. A buffer zone of 1.5 kilometers is recommended around peregrine falcon nests. Any discovered nests must be recorded in the wildlife incidental observation log, and their GPS coordinates provided to relevant regulatory authorities and interested parties.

4.2 Aquatic Life

To safeguard aquatic life on the Hornby Basin Property, the following measures are implemented:

- Activities in and around waterbodies must be conducted in ways that prevent disturbance to aquatic life and their habitats.
- Waterlines must be properly positioned and screened as per the "Freshwater Intake End-of-Pipe Screen Guideline" from the Department of Fisheries and Oceans (DFO).
- No wastes, including from exploration camps, are permitted to enter water bodies.
- Sumps, fuel caches, and camps must maintain a distance of at least 31 meters from the high-water mark of any water body, unless authorized otherwise by regulatory authorities.
- Fishing while representing Future Fuels is strictly prohibited.

Additionally, the Hornby Basin Property is not situated near any aquatic species at risk or their critical habitats, according to the "Aquatic Species at Risk Maps" provided by the Department of Fisheries and Oceans.

4.3 Firearms

Registered 12-gauge shotguns will be available in camp and at drill sites for personnel safety, as they can fire both non-lethal deterrents and lethal rounds. All firearms will be stored unloaded, with those in camp regulated by the Project Supervisor and those at drill sites kept in gun cases.

Only individuals with a valid Firearms License and Project Supervisor approval may carry or handle firearms. Hunting is strictly prohibited and will result in immediate termination and potential legal action. Any firearm discharge must be reported immediately to the Project Supervisor. Firearms will only be used against aggressive wildlife as a last resort, with non-lethal deterrents being the preferred method whenever possible.

5 Property-Wide Management System

Along with this EMP, the Abandonment and Restoration Plan (“ARP”), Spill Contingency and Fuel Management Plan (“SCFMP”), and Waste Management Plan (“WMP”) will be used in conjunction to safeguard, preserve, and protect the natural environment at the Hornby Basin Property.

5.1 Abandonment and Restoration Plan (“ARP”)

Before permits or leases are terminated, all structures, equipment, supplies, fuel, and waste will be removed from the property, except for secured core box stacks. Salvageable materials will be salvaged, and locals can salvage remaining items. Contaminated areas will be treated as per the Spill Contingency and Fuel Management Plan. Inspection findings, documented with photos, will be reported to regulatory agencies. Wooden floors will be burned following guidelines, with regulatory approval. Disturbed areas will be fertilized if recommended for revegetation and eroded areas filled and re-contoured. Annual monitoring may include soil and water testing, documenting plant regrowth, runoff and erosion checks, and core rack stability assessments. Details are in the Hornby Basin Property ARP.

5.2 Spill Contingency and Fuel Management Plan (“SCFMP”)

All hazardous materials at the Property will adhere to the site's spill and fuel management plan, ensuring secondary containment with products like "Arctic Insta-Berms". Fuel and hazardous substance storage will be positioned at least 31 meters from water bodies. Transfers of diesel, jet

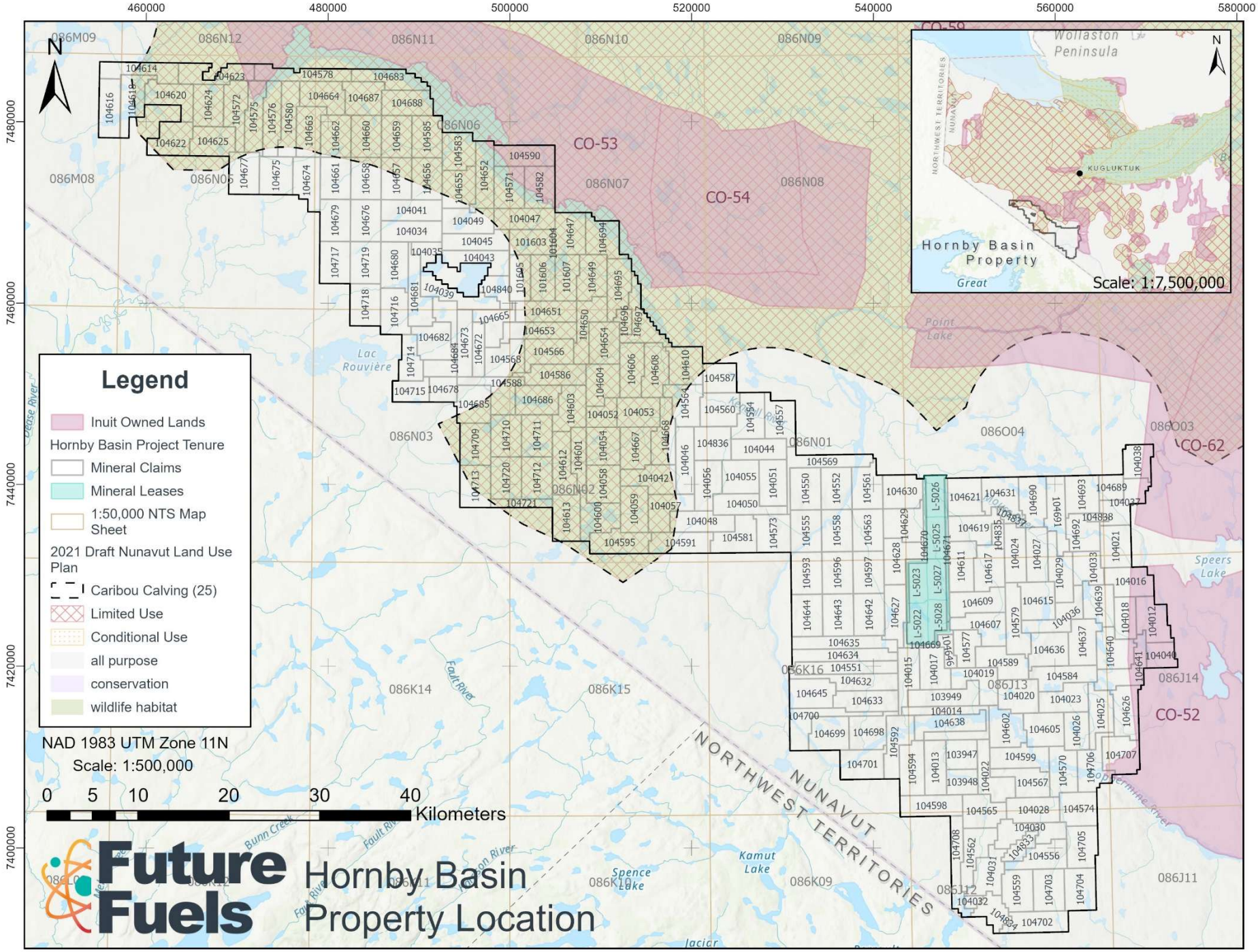
fuel, and gasoline will use electric or hand wobble pumps with filtration devices. Measures like portable drip trays and fully stocked spill kits will mitigate spill risks. Proper labeling, WHMIS compliance, and training in spill and emergency response plans will be provided to all personnel handling hazardous materials. Details are in the Hornby Basin Property SCFMP.

5.3 Waste Management Plan ("WMP")

Waste management at the Property follows a plan aligned with federal and territorial regulations. Various strategies are employed to minimize waste and ensure responsible disposal, including segregation into categories like combustible and hazardous materials. Inert materials are stored in sealed containers and removed for recycling or proper disposal. Hazardous waste is carefully sealed, labeled, and transported to licensed facilities. Greywater is treated in designated sumps, and pacto waste to be stored, sealed, and transported to Kugluktuk for proper disposal. Details are in the Hornby Basin Property WMP

APPENDIX 1

FIGURES


Legend
Inuit Owned Lands
Hornby Basin Project Tenure
Mineral Claims
Mineral Leases
1:50,000 NTS Map Sheet
2021 Draft Nunavut Land Use Plan
Caribou Calving (25)
Limited Use
Conditional Use
all purpose
conservation
wildlife habitat
NAD 1983 UTM Zone 11N
Scale: 1:500,000
0 5 10 20 30 40
Kilometers
Future Fuels
Hornby Basin Property Location
Wollaston Peninsula
KUGLUKTUK
Hornby Basin Property
Scale: 1:7,500,000
CO-52
CO-53
CO-54
CO-62
NUNAVUT
NORTHWEST TERRITORIES
Great Bear River
Point Lake
Lac Rouvière
Kamut Lake
Spence Lake
Speers Lake
Fault River
Bunn Creek
Jaciar

APPENDIX 2

KIVALLIQ INUIT ASSOCIATION'S MOBILE CARIBOU CONSERVATION MEASURES: 2022 UPDATE FOR THE NUNAVUT PLANNING COMMISSION

Kivalliq Inuit Association's Mobile Caribou Conservation Measures: 2022 update for the Nunavut Planning Commission

Mobile Caribou Conservation Measures (thence Mobile Measures) are flexible (i.e., follow the caribou), protect caribou within all seasonal ranges, and offer a greater balance between protection of caribou and mineral exploration. Mobile Measures have three components: (i) monitoring, the results of which are compared to pre-assigned thresholds; (ii) thresholds which trigger decisions about the intensity of tiered mitigation; and (iii) mitigation. Mitigation is implemented to avoid or minimize sensory disturbance to caribou. In turn, monitoring can be used to gauge the effectiveness of the mitigation.

The Kivalliq Inuit Association (KivIA) brought Mobile Measures forward as part of their recommendations to the Nunavut Planning Commission (NPC) on the Draft Nunavut land Use Plan (DNLUP) in 2015 and again in 2021. KivIA's approach to Mobile Measures was presented, for example, at the November 2015 NWMB workshop[1]. During reviews of the 2021 DNLUP, while the Kitikmeot and Qikiqtani Regional Inuit Associations (RIAs) and Kivalliq Wildlife Board are supportive of Mobile Measures, the 2021 DNLUP did not recommend Mobile Measures as a tool for protecting caribou and their habitat[2]. During the public hearings and commentary phase on the 2021 DNLUP, there was both support for and questioning of Mobile Measures. During conversations with NPC staff, they expressed a willingness to have more information on the Mobile Measures which is provided in the following text.

KivIA's Mobile Measures have been applied to Inuit Owned Lands (IOL) in the Kivalliq Region since 2016. They are an additional level of protection for caribou within Nunavut's integrated regulatory approach to land management which requires that NPC determines whether a land use project will conform with land use plans and be exempt from screening. If a project is not exempt, the Nunavut Impact Review Board (NIRB) screens the land-use activity and through public and land use agency input may include recommendations to protect caribou. NIRB's recommendations in the screening reports are a Nunavut-wide approach to protecting caribou during permitted land use activities, while KivIA's Mobile Measures are more specific conditions applied to exploration on IOL in the Kivalliq Region.

The following text summarizes the KivIA's Mobile Measures as to what they do, how they work, whether they protect caribou habitat, and how they relate to Nunavut's integrated regulatory approach to land use management. We offer a possible pathway forward for Mobile Measures based on concerns raised during the 2021 DNLUP hearings and on the Government of the Northwest Territories (GNWT's) recent framework and implementation guides for Mobile Measures. The pathway will also be included in KivIA's updated final comments on the 2021 DNLUP. We recognize that any wider application of Mobile Measures in other regions will have to be tailored using Inuit Qaujimajatuqangit, community knowledge and technical information for the different caribou herds and their ecology.

1. KivIA's Mobile Caribou Conservation Measures

KivIA's Mobile Measures are a follow-up to the longstanding Caribou Protection Measures in the Kivalliq Region where the Qamanirjuaq caribou herd migrates within the region for calving, post-calving through

[1] http://www.nwmb.com/en/public-hearings-a-meetings/workshops/november-2015-protecting-caribou-and-their-habitat-workshop#document-mobile-caribou-conservation-measures-eng

[2] NPC Options and Recommendations Document- page 71

to the winter. Minimizing or avoiding any impacts of mineral exploration on the caribou has been incrementally developed since the 1970s. Relying on applying protection such as seasonal restrictions to fixed areas (DIAND's original Caribou Protection Measures) was effective unless caribou moved out of the Caribou Protection Area and were not monitored[3]. Land manager's attention shifted to considering protection that would move with the caribou – mobile measures[4] - to counter the disadvantages of area-specific protection. The DIAND's original Caribou Protection Measures are still included in the 2000 Keewatin Land Use Plan[5] which is applicable to Crown land. The Caribou Protection Measures are applied to a fixed area of calving, post-calving and water-crossings mapped in the late 1990s and are typically referenced in NIRB's screening reports for land use projects.

The KivIA subsequently developed Mobile Caribou Conservation Measures (Mobile Measures) in 2016 for land-use activities such as mineral exploration on IOL within the Kivalliq Region. KivIA's Mobile Measures work through monitoring caribou in the vicinity of a land use site to give early warning for mitigation. The monitoring component is flexible, does not rely on or require aerial monitoring, and can accommodate innovative technologies including drones or ground-based surveillance. The monitoring triggers mitigation based on pre-assigned thresholds (numbers and proximity of caribou to development coupled with seasonal sensitivity and movement rates). The thresholds trigger tiered mitigation applied with increasing intensity as increasing numbers of caribou approach the project, to avoid or minimize any potential sensory disturbance to caribou.

KivIA applies Mobile Measures in conditions attached to Land Use Licenses[6]. KivIA's Schedule B attached to licenses and leases is the guideline to Mobile Measures[7]. Schedule B provides for closure during calving and Mobile Measures for other seasons on calving grounds and for other seasonal ranges including water-crossings. Schedule B provides seasonal thresholds to trigger mitigation and the types of mitigation and for illustration, it is attached here as Appendix A.

Mobile Measures are only applicable to mineral exploration and not for mineral development such as active mine development sites, which are governed by NIRB's terms and conditions. NIRB's terms and conditions are determined during and following an environmental assessment that is part of Nunavut's robust regulatory system. With respect to enforcement of conditions attached to Land Use Licenses, KivIA relies on its land-use inspectors.

2. Mobile Measures and caribou habitat protection

Mobile Measures are designed to avoid and minimize indirect habitat loss by reducing or halting activities that would otherwise displace caribou from their habitat. Mobile Measures themselves do not protect against direct impacts to habitat, however, the KivIA's Mobile Measures are part of Land Use Licenses issued for access to IOL, that include conditions to avoid or minimize direct impacts to habitat from mineral exploration, inspection for compliance and the need for reclamation if habitat was

[3] Gunn, A., K.G. Poole, J. Wierzchowski, and M. Campbell. 2007. Assessment of Caribou Protection Measures. Unpublished report submitted to Indian and Northern Affairs Canada, Gatineau, Québec, 45pp.
[4] Weihs, F.H., and P.J. Usher. 2001. Towards the development of a policy on the management of human activities in caribou calving and post-calving grounds. Contract # 00-0210 for Department of Indian Affairs and Northern Development, Ottawa.
[5] Keewatin Regional Land Use Plan, NPC Public Registry: https://lupit.nunavut.ca/portal/registry.php?public=docs
[6] https://www.kivalliqinuit.ca/access-to-inuit-owned-lands-2/
[7] https://www.kivalliqinuit.ca/wp-content/uploads/2022/02/KIA-Land-Use-License-Terms-Conditions.pdf

damaged. However, Mobile Measures benefit caribou habitat through their role in reducing caribou disturbance which otherwise can limit caribou habitat use.

3. Nunavut's integrated regulatory system for mineral exploration.

Mineral exploration proposals within the Kivalliq Region start with the NPC who determines whether the proposal conforms to the land use plan and whether the proposal is exempt from screening[8] (typically government activities or small-scale activities only requiring a Class B permit[9]). If the activity is not exempt, the proposal goes to NIRB for screening. NIRB's screening includes public consultation and management agency review which lead to project-specific terms and conditions with monitoring and reporting requirements. NIRB's screening requirements for mineral exploration apply to both Crown lands and IOL. NIRB's screening terms for caribou vary (Table 1) and how they depend on conditions such as the likelihood of caribou exposure or type of mineral exploration activity is not always specified. NIRB's terms in the screening reports for mineral exploration specific to caribou typically include that the proponent should cease activities when caribou (a specified number or sex and age class) are in the vicinity (specified distance) so as to avoid diverting or blocking migration or movements. NIRB's screening recommendations are consistent with the intent of Mobile Measures in the sense that the terms apply to the caribou where they are relative to an exploration site and may be triggered by the approach of caribou within threshold distances (Table 1).

KiviA's Mobile Measures are more detailed about seasons and thresholds than NIRB's terms for screening (Table 2). KivIA applies monitoring based on caribou sightings within two concentric zones centered on the exploration site, with surveillance effort to assess the likely arrival or presence of caribou. Monitoring includes Height-of-land surveys, ground observations and collared caribou. An 'Early Warning Zone' varies in size with caribou season (15–45 km radius which begins at the outer extent of the 5 km Zone of Influence [ZOI]). For example, a smaller Early Warning Zone is used during winter when movement rates are generally lower and less directional, and a larger Early Warning Zone is used during spring migration when distances moved daily are generally higher and more directional. The 5 km radius ZOI is the area around a project site where the behaviour and distribution of caribou may change in response to the site's activities. The level of mitigation depends on the caribou numbers and the season.

Both KivIA and NIRB screening have requirements for the proponent to provide annual reports. NIRB's reporting requirements are detailed and include for wildlife a summary of results and mitigation actions, wildlife observations, potential impacts from the project, and an analysis of the effectiveness of mitigation measures for wildlife.

[8] https://www.nirb.ca/sites/default/files/Integrated_Process_NuPPAA.pdf

[9] https://www.nunavut.ca/sites/default/files/2020-10-23_revised_conformity_determination_internal_procedure.pdf

Table 1. Examples of Terms recommended in NIRB screening reports (not all Terms would be applied to any one project). We add bold font to emphasize the reference to caribou

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.
The Proponent shall not block or **cause any diversion to caribou** or muskox migration and shall cease activities likely to interfere with migration such as airborne geophysics surveys drilling or movement of equipment or personnel until such time as the caribou or muskox have passed.
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 over flights, drilling, blasting/trenching, and use of snow mobiles and all-terrain vehicles outside the immediate vicinity of the camp, until caribou are no longer in the immediate area.
The Proponent shall implement **mobile caribou conservation measures** and immediately cease activities that may interfere with the migration or calving of caribou or muskox, until the caribou or muskox have passed.
The Proponent shall not construct or operate any camp cache any fuel or conduct **blasting within ten (10) kilometers or conduct any drilling operation within five (5) kilometers of any paths or crossings** known to be frequented by **caribou** (e.g., designated caribou crossings), the Proponent shall also suspend all operations in the vicinity including low-level over flights, blasting and use of snow mobiles and all-terrain vehicles until caribou are no longer in the immediate area.
During the period of May 15 to July 15, the Proponent shall suspend all project operations, including low-level over flights, drilling, blasting/trenching, and use of snow mobiles and all-terrain vehicles outside the immediate vicinity of the camp. Should the results of localized monitoring satisfy the Land Use Inspector that project operations may resume without **disturbing pregnant caribou cows or cows with young calves**, the suspension may be lifted for the period specified.
During the period of May 15 to July 15, the Proponent shall suspend all project operations outside of the . . . Camp, and activities at the . . . Camp are limited to those necessary to maintain the camp for occupation. Restricted activities include, but are not limited to, air and vehicle traffic, loud or repetitive noise or vibration disturbances, low-level overflights, 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.
The Proponent shall retain independent wildlife monitors provided through the [named] Hunters and Trappers Organizations to **undertake monitoring for caribou** in proximity to project operations and ensure compliance with associated wildlife protection measures.

Table 2. Seasons, zone sizes and thresholds of caribou numbers counted in the Early Warning Zone (EWZ) and Zone of Influence (ZOI) to trigger corresponding mitigation actions (from Schedule B[10], KivIA land access license applicable to IOL) Analysis of movement rates and local input are needed to refine the dates and number of seasons for other regions.

Season	Timing	Suggested zone radii (km)		Threshold number of collars/adult caribou		Summarized mitigation actions if thresholds passed in the ZOI
		EWZ[2]	ZOI	EWZ	ZOI[5]	
Within designated calving grounds						
Calving / Post-calving	1 May – 31 Jul	N/A	N/A	N/A	N/A	Closed
Summer	1 Aug – 30 Sep	30	5	1/25	25	Immediately suspend drill operations, blasting activities and non-essential ground movements and aircraft traffic below 300 m above ground level (except as necessary for emergency purposes); Suspend ground operations and camp closure.
Fall/winter	1 Oct – 15 Apr	30	2.5	1/50	50	immediately reduce above-ground activities that have the potential to disturb caribou, including non-essential ground movements and aircraft traffic below 300 m above ground level (except as necessary for emergency purposes).
Spring migration (pre-calving)	16 Apr – 30 Apr	50	5	1/25	25	Immediately suspend drill operations, blasting activities and non-essential ground movements and aircraft traffic below 300 m above ground level (except as necessary for emergency purposes); Suspend ground operations and camp closure.
Other seasonal ranges (outside of designated calving grounds)						
Calving / Post-calving	1 Jun – 15 Jul	50	5	1/10	10	Immediately suspend drill operations, blasting activities and non-essential ground movements and aircraft traffic below 300 m above ground level (except as necessary for emergency purposes); Suspend ground operations and camp closure.
Summer	16 Jul – 30 Sep	30	5	1/25	25	Immediately suspend drill operations, blasting activities and non-essential ground movements and aircraft traffic below 300 m above ground level (except as necessary for emergency purposes) and camp closure.

[10] https://www.kivalliqinuit.ca/wp-content/uploads/2022/02/KIA-Land-Use-License-Terms-Conditions.pdf

Season	Timing	Suggested zone radii (km)		Threshold number of collars/adult caribou		Summarized mitigation actions if thresholds passed in the ZOI
		EWZ[2]	ZOI	EWZ	ZOI[5]	
Fall/winter	1 Oct – 15 Apr	30	2.5	1/50	50	immediately reduce above-ground activities that have the potential to disturb caribou, including non-essential ground movements and aircraft traffic below 300 m above ground level (except as necessary for emergency purposes).
Spring migration (pre-calving)	16 Apr – 31 May	50	5	1/25	25	Immediately suspend drill operations, blasting activities and non-essential ground movements and aircraft traffic below 300 m above ground level (except as necessary for emergency purposes); Suspend ground operations and camp closure.

[1] Dates provided for the Qamanirjuaq herd from Caslys (2016). The actual dates will differ among herds.

[2] The Early Warning Zone radius begins at the outer extent of the 5 km radius Zone of Influence.

[3] Proposed numbers based on differences in relative risk among seasons. Caribou thresholds (generally collared individuals or incidental sightings) within the Early Warning Zone would justify notice to the exploration manager and the land use inspector of a potential suspension of flights and operations should caribou enter the Zone of Influence, and would trigger monitoring surveys within the Zone of Influence (generally ground observations or incidental aerial observations).

[4] xx/yy represent thresholds of number of collared/observed caribou within the Early Warning Zone. The lower value of the collars or caribou will trigger a response. Thresholds triggered within the Early Warning Zone trigger increased monitoring.

[5] yy represent thresholds of number of observed caribou within the Zone of Influence to trigger main sets of mitigation responses.

4. Mobile Measures and GNWT's Bathurst Caribou Range Plan

KivIA was developing Mobile Measures in 2016, and by 2018 Mobile Measures were also being developed as a requirement for the Bathurst Caribou Range Plan (Range Plan)[11]. The Range Plan was co-developed by Indigenous governments and organizations, GNWT, Government of Nunavut (GN) and industry partners. Between 2018 and 2020, GNWT led a collaboration to develop Mobile Measures[12] built on the KivIA's measures and updated with minimum standards of monitoring and mitigation. Minimum standards were also a recommendation from GN's draft 2016 review of KivIA's Mobile Measures[13].

Developing Mobile Measures for the Bathurst caribou herd included a framework document and considerable implementation detail, especially on government and the land use permit operator's roles and responsibilities, as well as reporting templates. The NWT government will provide mapping and advice to land use permit operators, but the costs of site monitoring and mitigation are borne by land use permit operator. COVID-19 limiting testing of the Range Plan Mobile Measures to desktop exercises but the intent is to implement the measures in 2022 (K. Clark, GNWT, pers. comm. 2022).

5. Future application of Mobile Measures in Nunavut

Future application of Mobile Measures across Nunavut to avoid and minimize impacts of mineral exploration on caribou will draw on the existing KivIA's Mobile Measures, the GNWT framework and implementation guidelines, and NIRB's conditions applied to screening reports. The outcome will be a relatively standardized but adaptable conditions for land use permits and licenses applicable to barren-ground caribou seasonal ranges on IOL and Crown lands. The updated Mobile Measures would be applied as a condition, for example, within NPC's Conditional Use Areas.

Coordination among government, RIAs and land use operators will be essential to successfully implement Mobile Measures (Table 3). Land use operators will be provided with Mobile Measures documentation early in their planning to be aware that they will be expected follow the intent of the Mobile Measures to avoid disturbance to caribou. The land use operator is responsible for understanding the Mobile Measures as they apply to their proposed land use activity, to implement monitoring and mitigation actions, and to annually report on caribou protection.

[11] Government of the Northwest Territories (GNWT). 2019. Bathurst Caribou Range Plan. August 2019. Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT. 86 + iii pp.

[12] Government of the Northwest Territories (GNWT). 2022a. An Implementation Framework for Mobile Caribou Conservation Measures on the Bathurst Caribou Range. Environment and Natural Resources, February 2022.
Government of the Northwest Territories (GNWT). 2022b. Mobile Caribou Conservation Measures – Operational Guidance. Environment and Natural Resources, February 2022.

[13] Atkinson, S. 2016. Implementing Mobile Protection Measures for Caribou in Nunavut: Challenges, Costs and Effectiveness. Prepared for the Department of Environment, Government of Nunavut. September 2016 (draft v3). 90 pp.

Table 3. Suggested progression of activities for a land use operation using Mobile Caribou Conservation Measures within Nunavut caribou range.

	Task	Land Agency and NIRB	Land Use Operator
1	Planning	CIRNAC (Crown lands) and RIAs (on IOL) publicizes the need for Mobile Measures through Chamber of Mines, Mining Recorders Office, NIRB website, RIAs, etc.	Land use operator is made aware of requirements for Mobile Measures through Chamber of Mines, Mining Recorders Office, NIRB website, RIAs, etc.
2	Planning	CIRNAC/RIAs has point of contact for Mobile Measures oversight.	Land use operator contacts CIRNAC (or RIA on IOL).
3	Planning	CIRNAC/RIAs provides and discusses Operational Guidance document and clarifies expectations/requirements.	Discusses Operational Guidance document and clarifies expectations/requirements.
4	Planning	Discusses and determines location relative to range assessment area and season of proposed operation.	Discusses and determines location relative to range assessment area and season of proposed operation.
5	Planning	Summary of expected seasonal caribou abundance and residency provided in Operational Guidance document.	Reviews caribou information and responds with proposed schedule of operations.
6	Planning	Size of Early Warning Zone and trigger levels of caribou are discussed and understood.	Size of Early Warning Zone and trigger levels of caribou are discussed and understood.
7	Planning	Reviews and agrees upon suggested list of tiered mitigations.	Provides potential list of tiered mitigations based on mineral cycle stage and type of activity.
8	Planning	Ensures project site contact information is received for information sharing.	Provides project site contact information to CIRNAC/RIAs for information sharing (e.g., emailing collar location maps).
9	Operations	CIRNAC/RIAs provides timely emails with maps of collar locations relative to Early Warning Zone, Zone of Influence and project site.	Receives emails with maps of collar locations relative to Early Warning Zone, Zone of Influence and project site.
10	Operations	CIRNAC/RIAs available to respond to any questions or concerns during operations.	Monitors collar locations in the Early Warning Zone; ground or aerial observations.
11	Operations	CIRNAC/RIAs expects the operator to implement mitigation, and is available to respond to any questions and concerns during operations.	If caribou threshold exceeded, the land use operator will implement mitigation; monitoring within the Zone of Influence is advised.
12	Operations	CIRNAC/RIAs available to respond to any questions concerns during operations.	Continued monitoring and mitigation until caribou move out of the Early Warning Zone.
13	Reporting	CIRNAC/RIAs to provide an annual report on Mobile Measures-related activities within caribou ranges.	Land user to provide an annual report on Mobile Measures-related activities.
14	Review	Assess the effectiveness of the Mobile Measures including consideration of costs,	Assess the effectiveness of the Mobile Measures including actions taken, costs,

	Task	Land Agency and NIRB	Land Use Operator
		personnel requirements and achievement of desired outcomes.	personnel requirements and consequences to operations.

The current experience of NIRB's screening recommendations and KivIA's Mobile Measures have not revealed problems (although COVID-19 reduced activities over the past 2 years). However, overall review of terms and their effectiveness would increase confidence in the applicability of Mobile Measures. Questions about monitoring requirements and capacity are addressed through reliance on the land use proponent rather than needing to establish costly herd level monitoring programs including an expansion of existing, government-led GPS collaring programs. Mobile Measures are already part of existing land use regulatory systems with their existing enforcement potential, which addresses concerns about compliance. In summary, Mobile Measures are a flexible tool to reduce the potential impacts to caribou of industrial activity associated with exploration sites. Mobile Measures are a component of a regulatory system that also has provisions to protect caribou habitat.

Prepared for Kivalliq Inuit Association

Anne Gunn and Kim Poole

3 January 2023

APPENDIX A.

Schedule B is part of https://www.kivalliqinuit.ca/wp-content/uploads/2022/02/KIA-Land-Use-License-Terms-Conditions.pdf

Schedule "B"

MOBILE CONSERVATION MEASURES GUIDELINES

Introduction

The Tenant shall comply with the measures set out herein. The Tenant shall immediately report to the Landlord any deviation from these measures, including the reason for the deviation.

The Landlord reserves the right, based on the presence of caribou within the area of the Land in any year, to vary the dates set out herein and shall provide notice to the Tenant of any such variation.

Wildlife Monitoring Personnel

The Tenant shall have wildlife monitoring personnel present at the Property during any season when caribou are reasonably expected to be present. The names of such personnel shall be sent to the Landlord and they shall maintain communication at all reasonable times. The Tenant shall monitor and immediately report the presence of caribou to the Landlord in accordance with the following directives. The report shall specify the location and estimated numbers.

A. IOL within designated calving grounds

Section 1. On IOL within designated calving grounds (as designated by the Government of Nunavut) between May 1st and July 31st (the closure period):

1) No activities shall occur except as authorized by the Landlord.

Section 2. On IOL within designated calving grounds between August 1st and September 30th, the Tenant shall conduct monitoring and mitigation as follows:

2i) If collar data or observations indicate that there are one (1) or more collared caribou or twenty-five (25) or more caribou observed within the thirty (30) km early warning zone from the boundary of the Property, then monitoring within a five (5) km buffer zone shall be conducted every second day (e.g., height of land surveys, road surveys, remote camera surveys).

2ii) If monitoring indicates that there are twenty-five (25) or more caribou within five (5) km of the Property boundary, then the Tenant shall monitor within a five (5) km buffer zone around the Property on a daily basis, and shall immediately suspend work that has the potential to disturb caribou, including suspension of drill operations, blasting activities and non-essential ground movements and aircraft traffic below 300 m above ground level (except as necessary for emergency purposes), suspension of all ground operations and camp closure, until caribou numbers are below the threshold within the buffer zone.

Section 3. On IOL within designated calving grounds between October 1st and April 15th, the Tenant shall conduct monitoring and mitigation as follows:

(3i) If collar data or observations indicate that there are one (1) or more collared caribou or fifty (50) or more caribou observed within thirty (30) km of the boundary of the Property, then monitoring within a five (5) km buffer zone shall be conducted every second day (e.g., height of land surveys, road surveys, remote camera surveys).

(3ii) If monitoring indicates that there are fifty (50) or more caribou within two and a half (2.5) km of the Property, then the Tenant shall immediately reduce above-ground activities that have the potential to disturb caribou, including non-essential ground movements and aircraft traffic below 300 m above ground level (except as necessary for emergency purposes), until caribou numbers are below the threshold within the buffer zone.

Section 4. On IOL within designated calving grounds between April 16th and April 30th, the Tenant shall conduct monitoring and mitigation as follows:

(4i) If collar data or observations indicate that there are one (1) or more collared caribou or twenty-five (25) or more caribou within fifty (50) km of the boundary of the Property that appear to be moving in the direction of the activities, then monitoring within a five (5) km buffer zone shall be conducted every second day (e.g., height of land surveys, road surveys, snow track counts (if appropriate), remote camera surveys).

(4ii) If monitoring indicates that there are an estimated twenty-five (25) or more caribou within the five (5) km buffer zone for the Property, then the Tenant shall conduct monitoring within a five (5) km buffer zone on a daily basis, and shall immediately suspend any activities that have the potential to disturb caribou, including suspension of drill operations, blasting activities and non-essential ground movements and aircraft traffic below 300 m above ground level (except as necessary for emergency purposes), suspension of all ground operations, and camp closure, until caribou numbers are below the threshold within the buffer zone.

B. IOL within other seasonal caribou ranges

Section 5. On IOL between June 1st and July 15th outside of designated calving grounds, the Tenant shall conduct monitoring and mitigation as follows:

(5i) If collar data or observations indicate that there are one (1) or more collared caribou or ten (10) or more caribou observed within the fifty (50) km early warning zone for the Property, then monitoring within a five (5) km buffer zone shall be conducted every second day (e.g., height of land, road surveys, snow track counts (if appropriate), remote camera surveys).

(5ii) If monitoring indicates that there are an estimated ten (10) or more caribou within the five (5) km buffer zone for the Property, then the Tenant shall conduct monitoring within a five (5) km buffer zone on a daily basis, and shall immediately suspend any activities that have the potential to disturb caribou, including suspension of drill operations, blasting activities and non-essential ground movements and aircraft traffic below 300 m above ground level (except as necessary for emergency purposes), suspension of all ground operations and camp closure until caribou numbers are below the threshold within the buffer zone.

Section 6. On IOL between July 16th and September 30th outside of designated calving grounds, the Tenant shall conduct monitoring and mitigation as follows:

(6i) If collar data or observations indicate that there are one (1) or more collared caribou or twenty-five (25) or more caribou observed within thirty (30) km of the Property, then monitoring within a five (5) km buffer zone shall be conducted every second day (e.g., height of land surveys, road surveys, snow track counts (if appropriate), remote camera surveys).

(6ii) If monitoring indicates that there are twenty-five (25) or more caribou within five (5) km of the boundary of the Property, then the Tenant shall conduct monitoring within a five (5) km buffer zone on a daily basis, and shall immediately suspend any activities that have the potential to disturb caribou, including suspension of drill operations, blasting activities, non-essential ground movements and aircraft traffic below 300 m above ground level (except as necessary for emergency purposes), and camp closure until caribou numbers are below the threshold within the buffer zone.

Section 7. On IOL between October 1st and April 15th outside of designated calving grounds, the Tenant shall conduct monitoring and mitigation as follows:

(7i) If collar data or observations indicate that there are one (1) or more collared caribou or fifty (50) or more caribou observed within thirty (30) km of the boundary of the Property, then monitoring within a five (5) km buffer zone shall be conducted every second day (e.g., height of land surveys, road surveys, remote camera surveys).

(7ii) If monitoring indicates that there are fifty (50) or more caribou within 2.5 km of the boundary of the Property, then the Tenant shall immediately reduce aboveground operations that have the potential to disturb caribou, including non-essential ground movements and aircraft traffic below 300 m above ground level (except as necessary for

emergency purposes), and suspension of above ground operations, until caribou numbers are below the threshold within the buffer zone.

Section 8. On IOL between April 16th and May 31st, the Tenant shall conduct monitoring and mitigation as follows:

(8i) If collar data or observations indicate that there are one (1) or more collared caribou or twenty-five (25) or more caribou observed within fifty (50) km of the boundary of the Property that appear to be moving in the direction of the activities, then monitoring within a five (5) km buffer zone shall be conducted every second day (e.g., height of land surveys, road surveys, snow track counts (if appropriate), remote camera surveys).

(8ii) If monitoring indicates that there are an estimated twenty-five (25) or more caribou within the five (5) km buffer zone for the Property, then then the Tenant shall conduct monitoring within a five (5) km buffer zone on a daily basis, and shall immediately suspend any activities that have the potential to disturb caribou, including drill operations, blasting activities and non-essential ground movements and aircraft traffic below 300 m above ground level (except as necessary for emergency purposes), suspension of all ground operations and camp closure, until caribou numbers are below the threshold within the buffer zone.

C. Freshwater crossings

Section 9. On IOL between May 15th and September 30th, the Tenant will not construct camps or other permanent structures or conduct blasting within ten (10) km of designated caribou freshwater water crossings. Exploration activities will not be permitted within five (5) km of water-crossings between May 15th and September 30th. Between May 15th and September 30th, the Tenant shall conduct monitoring and mitigation as follows:

(9i) If collar data or observations indicate that there are one (1) or more collared caribou or twenty-five (25) or more caribou observed within twenty-five (25) km of the boundary of the Property that appear to be moving in the direction of the activities, then monitoring within a five (5) km buffer zone around the water crossing shall be conducted every second day (e.g., height of land surveys, remote camera surveys).

(9ii) If monitoring indicates that there are fifty (50) or more caribou within five (5) km of the boundary of the Property that appear to be moving in the direction of the water crossing, then the Tenant shall conduct monitoring within a five (5) km buffer zone on a daily basis, and shall immediately suspend any activities that have the potential to disturb caribou, including suspension of drill operations, blasting activities and non-essential ground movements and aircraft traffic below 300 m above ground level (except as necessary for emergency purposes), suspension of all ground operations,

camp closure, and removal of all non-essential personnel, until caribou numbers are below the threshold within the buffer zone.

D. Aircraft

Section 10. The Tenant shall ensure that aircraft (fixed-wing and helicopter) flights over occupied calving and post-calving areas shall be at least 610 m above ground level and avoid areas of known caribou concentrations (subject to pilot discretion regarding aircraft and human safety). In other seasons aircraft shall be at least 300 m above ground level.