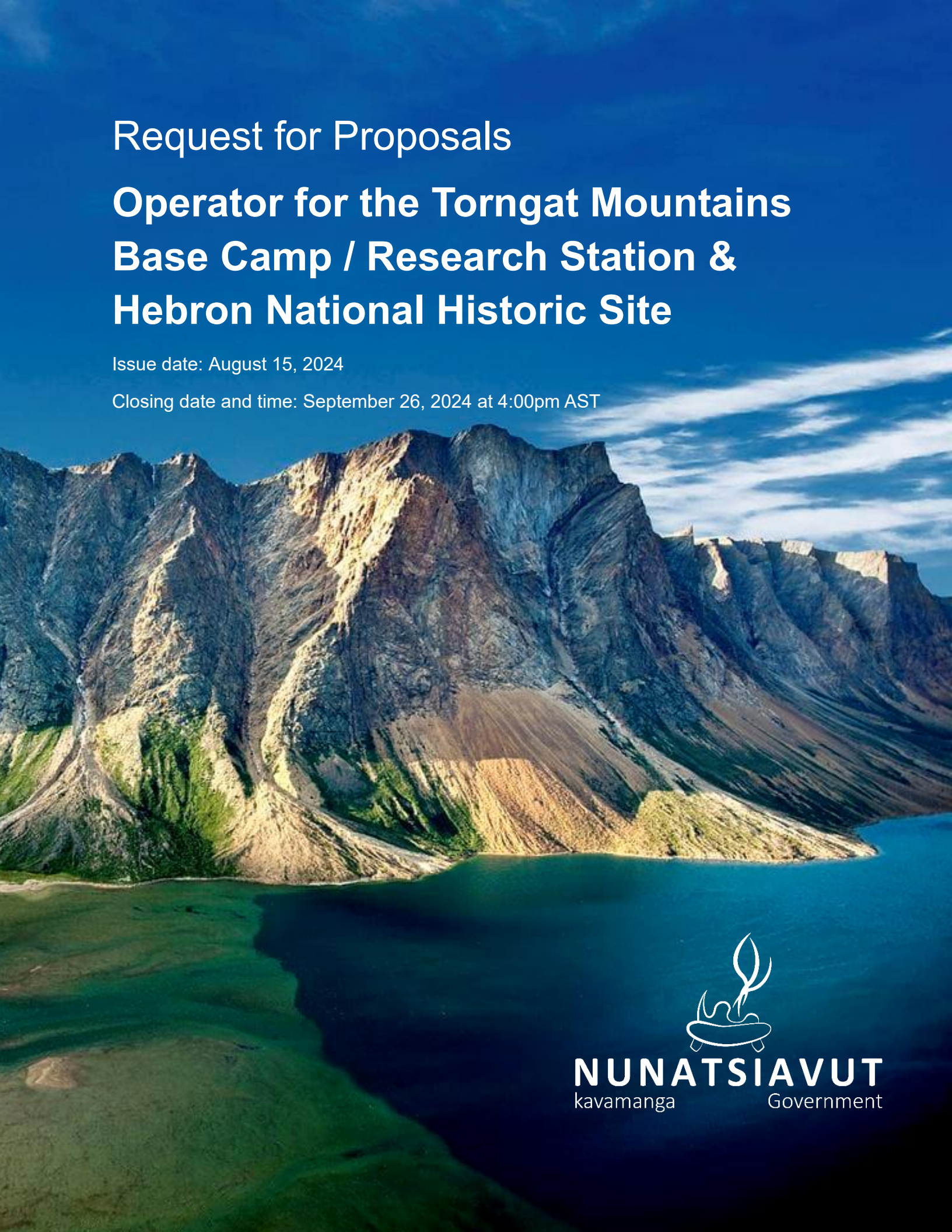
Request for Proposals

Operator for the Torngat Mountains Base Camp / Research Station & Hebron National Historic Site

Issue date: August 15, 2024

Closing date and time: September 26, 2024 at 4:00pm AST



NUNATSIAVUT
kavamanga Government

Request for Proposals (RFP)

Operator for the Torngat Mountains Base Camp / Research Station & Hebron Mission National Historic Site

In 2005, the Nunatsiavut Government (the NG) was established, following the finalization of the *Labrador Inuit Land Claims Agreement* (LILCA). LILCA includes self-government provisions, rendering the NG a regional Inuit government within the province of Newfoundland and Labrador.

The NG has authority over many central governance areas, including health, education, housing, culture and language, justice, economic development, and community matters.

Proposals in the form described herein will be received by the NG's Department of Language, Culture and Tourism on / or prior to September 26, 2024 at 4:00 PM Atlantic Time (the "**Closing Date**") for the operations of the Torngat Mountains Base Camp / Research Station and Hebron Mission National Historic Site.

Please submit proposals by email to:

> Jenna Gilbride, Deputy Minister of the Department of Language, Culture, and Tourism, NG
> **To:** jenna.gilbride@nunatsiavut.com
> **Subject:** OPERATOR: BASE CAMP AND HEBRON HISTORIC SITE - Proposal Submission
> **Cc:** jillian.larkham@nunatsiavut.com

If the proponent prefers to submit a hard copy, these must be clearly marked "OPERATOR: TORNGAT MOUNTAINS BASE CAMP AND HEBRON HISTORIC SITE" and mailed to:

> Jenna Gilbride, Deputy Minister
> Department of Language, Culture and Tourism
> Nunatsiavut Government
> P.O. Box 92, Makkovik, NL A0P 1J0
> Attn: Jenna Gilbride, Deputy Minister of Culture, Language and Tourism
>
> NOTE: FACSIMILE TRANSMISSIONS WILL NOT BE ACCEPTED.

Hard copy submissions must be received at the above noted address on or before the Closing Date in order to be considered. Proponents shall accept all risks incurred by submitting a hard copy proposal including but not limited to mail interruption, damage or loss.

QUERIES / CLARIFICATIONS

All queries and requests for clarification shall be submitted in writing on or before September 6 at 4:00 pm Atlantic Time. If deemed necessary by the NG, responses to such queries and requests for clarification will be issued by the NG in the form of an addendum to the RFP, which

shall form a part of the RFP. Any addenda issued for the RFP shall be posted on the NG website at www.nunatsiavut.com. It is the responsibility of the proponent to ensure that it has received any addenda issued prior to the proposal submission deadline. Upon submitting a proposal, a proponent shall be deemed to have received notice of all addenda that have been issued. The NG will only respond to inquiries sent in writing.

Questions must be submitted by email to:

> **Subject:** OPERATOR: BASE CAMP AND HEBRON HISTORIC SITE - Proposal Detail
>
> **To:** jenna.gilbride@nunatsiavut.com
>
> **Cc:** jillian.larkham@nunatsiavut.com

1 Purpose of the RFP

The purpose of this RFP is to identify a highly qualified firm that has the resources, experience, skill, capacity, and willingness to work collaboratively with the NG to operate both the Torngat Mountains Base Camp and Research Station and the Hebron Mission National Historic Site (the "**Sites**") for a five season period from 2025-2029. The Sites are operational for approximately six-eight weeks, typically from late July to early September.

The NG intends to enter into a management contract and service agreement with the most qualified firm selected according to the requirements of the *Procurement Act* (CIL 31-12-2012 P-1) which includes an objective proposal adjudication process. The successful proponent will be asked to provide site management services including site operations planning, implementation, monitoring, reporting, evaluation, site start-up and closing procedures, and other key service requirements listed herein. If the application requires a financial contribution from the NG, the proponent must indicate the proposed contribution amount and reason why.

The NG is not bound to accept any or the lowest cost proposal through this process.

The NG reserves the right to cancel, postpone, or stop the procurement process at any time, at the sole discretion of the NG.

Proponents interested in becoming the Operator for the Sites shall submit a detailed response document covering the services in the following general categories, described in further detail throughout this RFP:

- Five-Year Strategic Operations & Implementation Plan
  - Annual Operation Plans & Implementation Plan Updates
  - Risk Register
  - Health, Safety & Security
  - Transportation & Logistics
  - Maintenance & Winterization
  - Accommodations & Guest Services
  - Infrastructure

- Environmental Protection
- Legal
- Finances
- Human Resources
- Communications and marketing
- Evaluation

The successful proponent will be responsible for delivering these services to both researchers and tourists, considering these two visitor types as unique, separate entities with separate needs.

2 Background

The Torngat Mountains National Park is located at the northern tip of Nunatsiavut and was established in 2008 after the signature of the Labrador Inuit Land Claim Agreement (2005).

The **Torngat Mountains Base Camp and Research Station (Base Camp)** is located on Labrador Inuit Lands approximately 200 kilometers north of Labrador's most northerly community (Nain) and is adjacent to the southern boundary of Torngat Mountains National Park.

2.1 Torngat Mountains National Park

The Torngat Mountains National Park is an area of supreme natural beauty and a traditional Inuit homeland. Year after year, visitors express total awe from their experience visiting the Torngat Mountains.[1]

The Torngat Mountains are a spiritual place for Inuit. Before the presence of Moravian missionaries in the 18th century, the Torngat Mountains were a place that Inuit not only lived but thrived from living off the land. The mountains represented a strong connection to the Inuit spirit world. Inuit lived in the Torngat Mountains up until the 1970s, when the community of Killinek was shut down.[2]

The Torngat Mountains are also home to rock formations that are approximately 3.92 billion years old, making them the second oldest in the world. To this day, the Torngat Mountains remain a

[1] Tourism Nunatsiavut: Torngat Mountains
[2] Brice-Bennett, Carol. 2017. *Dispossessed: The Eviction of Inuit from Hebron, Labrador*, Montreal: International Laboratory for the Comparative Multidisciplinary Study of Representations of the North, Université du Québec à Montréal.

place of energy and power. Community members from Nunatsiavut and visitors from throughout the world consistently express a newfound sense of self when they visit.

2.2 Torngat Mountains Base Camp and Research Station

From 2006-2010, the NG and Parks Canada piloted a Base Camp Project to support their staff, researchers, and visitors in the Park while also addressing the questions and concerns of Nunatsiavut Beneficiaries. In 2011, the NG constructed the research station on Labrador Inuit Lands.

The Base Camp is critical to the operations of long-term research and monitoring programs of importance to Nunatsiavut Beneficiaries, the NG, and Parks Canada. These research programs document important species and address concerns and questions of Nunatsiavut Beneficiaries, while also meeting the mandate of Parks Canada for inventory, research, and monitoring. The

Base Camp is also essential to tourism operations, which is a priority for both Parks Canada and the NG. As such, the Base Camp is critical to the summer operations of Parks Canada for Torngat Mountains National Park and for many operations of the NG.

2.3 Hebron Mission National Historic Site of Canada

Hebron has been an Inuit homeland for centuries. Long before Moravian missionaries embarked on their evangelizing journey across Labrador in the 1770s, the Inuit fished and hunted in the region. Hebron was also an important meeting site for the Inuit.[3]

The Hebron Mission was established by Moravian Brethren missionaries in the 1830s as part of their expansion and religious missionizing of the Inuit in northern Labrador. At the station, the Moravians provided religious instruction to the local Inuit. It also served as an educational, commercial, and medical center.

The architectural style of the Hebron Mission is particularly representative of 19th-century Moravian design; Germanic features include its dormer windows and steep, thin roof.

Hebron was a thriving small community for the next 130 years. The community's population stabilized at around 200-250 Inuit in the mid-1800s to early-1900s.

In 1959, the Provincial Government, Moravian Church, and International Grenfell Association made a surprise announcement to Hebron Inuit residents that they were closing the community. The community was shut down, resulting in a forceful mass eviction of Hebron residents to communities further south in Nunatsiavut. Residents felt anguish and shock after the surprise community closure, and it is still considered a traumatic event for many that live in the Nunatsiavut communities.

Today, the Hebron Church still stands abandoned. The Hebron Mission is one of the most historically significant mission-built structures still standing in the province of Newfoundland and Labrador.

The NG purchased the Hebron Church from the Moravian Church and is actively working to restore the buildings at Hebron to preserve them for future generations. The NG also operate a Hebron Ambassador Program each summer, through which staff share the story of Hebron to visitors—a role that the selected Operator would adopt.

2.4 The Role of the NG and Parks Canada in Site Operations

The NG and Parks Canada each have unique roles in operating the Sites. These are summarized below.

Key Roles:

1. **NG**
    a. Language, Culture and Tourism
        i. Responsible for the drafting and administration of the Operator's contract
        ii. Responsible for tourism operations / considerations
        iii. Support marketing initiatives in collaboration with partners
        iv. Participating in various meetings relating to Base Camp
        v. Lead the coordination of Base Camp with other NG Departments

b. Infrastructure
    i. Responsible for physical infrastructure (main building, washrooms, power generation, water, fuel tank maintenance, etc.)
    ii. Responsible for marine transportation (Zodiacs)
    iii. Responsible for camp start up and shut down each year
    iv. Responsible for fuel tanks at the Base Camp, specifically for operations
c. Lands and Natural Resources
    i. Regulator of the *Nunatsiavut Environmental Protection Act* (applies to Base Camp and surrounding land)
    ii. Responsible for research programs (internal and external) and research permitting
    iii. Responsible for the Land Use Permit on Labrador Inuit Lands
    iv. Responsible for the establishment and implementation of a new Inuit Protected Area under the National Marine Conservation Areas Act, using the Base Camp as the operational hub
    v. Responsible for the implementation of relevant laws and regulations under the Minister of Lands and Natural Resources

2. Local points of contact for environmental emergencies (within the Nunatsiavut, the provincial, and federal governments), including with the oil handling facility fuel tanks
    a. Responsible for the delivery of visitor experience to operations that take place in Torngat Mountains National Park
    b. Responsible for inventory, research, and monitoring within Torngat Mountains National Park

3 The Inuit Content Factor and Inuit Inclusion

The NG is committed to reinvesting in its communities through training and engaging Nunatsiavut Beneficiaries' business in the procurement process wherever possible. The overall operational philosophy is to create lasting value at every stage of the NG's procurement. Equally important to the quality of the services provided is the NG's commitment to growing human capital among Nunatsiavut Beneficiaries during the process.

There are two methods by which Inuit Inclusion is evaluated:

1. As per section 17 of *the Procurement Act*,[4] an Inuit Content form is required with each proposal submission in order to determine a proponents Inuit Content Factor (**Appendix A**).
2. Proposals or tenders will also be evaluated based on criteria included within the RFP. This includes technical evaluation criteria and an assessment of value for money.

Operating the Sites presents a unique avenue through which to cultivate training, professional development, employment, and apprenticeship opportunities, as well as training in project management, accommodations and visitor services, research programs (i.e., teams will provide

[4] https://www.nunatsiavut.com/wp-content/uploads/2021/06/IL-2011-04-Procurement-Act.pdf

briefings for the operator on existing research programs and the context of the work), management processes, and technologies for Nunatsiavut Beneficiaries.

Specifically, the NG wants to know how proponents will set goals for training, professional and skills development, and employing Inuit community members, how these goals will be achieved, and how achievement will be demonstrated.

For example, the NG expects that the Operator will provide reports on hours of Inuit employment and other economic indicators may be required by funding entities throughout the project.

Additionally, the NG wants to know how the successful Operator will work to set goals for engaging Inuit-owned companies, leading to possible teaming arrangements or mutually beneficial collaborations, how these goals will be achieved, and how achievement will be demonstrated.

The NG is open to proponents' proposals for direct benefits (i.e., employment opportunities and management training), as well as indirect benefits, such as sponsoring Nunatsiavut Beneficiaries in training, internships through scholarships, and endowments to support specific program development activities at the community level that will lead to enhanced labour market opportunities for Nunatsiavut Beneficiaries when the project is complete.

Therefore, in addition to the Inuit Content form, the NG requires all proponents to provide an Inuit Inclusion statement, detailing how Inuit inclusion and community benefits are addressed in their proposals and how these will contribute to value for money within the RFP.

Proposals should detail the proponent's specific approach to ensuring equity and inclusion in hiring, training, and subcontracting practices. For example, where applicable to this project, proponents should explain how their proposals will **support local entrepreneurship** and **education and training** opportunities that build beneficiaries' capacity.

The NG seeks innovative approaches in proponents' Inuit Inclusion plans with specific, measurable targets and is open to other ideas that meet the goals of this process.

The successful proponent will be expected to collaborate closely with the NG and Nunatsiavut Beneficiary stakeholders throughout the project to ensure that it aligns with the NG's commitment to Inuit inclusion.

4 Service Requirements

This RFP is intended to procure the services of a highly qualified Operator of the Sites to support the needs of:

1. Tourists
    a. The Base Camp is the operational hub for tourist operations in the area, bringing tourists to different locations within Nunatsiavut and Torngat Mountains National Park. Throughout the years, investments have been made to turn the Base Camp into an Indigenous tourism destination. With Indigenous tourism on the

rise, the experience offered at the Base Camp is an example of how Nunatsiavut Beneficiaries are preserving and celebrating their rich culture and history while sharing their stories with the world. These operations are delivered via a combination of boats, vessels, and helicopters, and require a specific set of support from the selected Operator.

Hebron is normally a day trip for tourist. Tourist who visit Hebron include people at the Base Camp, Fully Independent travelers (FIT) who arrive in Hebron by helicopter, sailboat, kayak and other means.

2. Researchers and scientific professionals
    a. The Base Camp was established and built to deliver research programs. There are a variety of long-term (greater than 10 years) and short-term (one-three years) marine and terrestrial research programs that operate out of the Base Camp. Many of these programs are partnerships between the NG and Parks Canada, external researchers, non-governmental agencies, and other Federal Government Departments. The projects are meeting the mandates of multiple departments of the NG as well as the requirements of Parks Canada for inventory, research, and monitoring. Each of the research projects are unique, and many have specific requirements related to equipment, location, and support required from the Operator. Researchers generally have specific requirements for shipping and using equipment and research samples, storage, timing, and locations of their research activities.
    b. Researchers do not always require accommodations to be provided by the Operator; they typically bring their own tents and require an area to set them up. Unlike tourists, they do not purchase tourist packages. Given that the NG is making significant investment in the park and that research / NG staff related service needs are not at the same level as visitors, the proponents is expected to develop a differential pricing scheme to provide services for this group. Researcher pricing packages should reflect the variability of their needs with a flexible and adaptable pricing scheme.
    c. The Operator must make the researcher aware that they need to apply for research permits from both the NG and Parks Canada. To date no researchers or scientific professionals visit Hebron.
3. Visiting Nunatsiavut Beneficiaries
    a. Inuit regularly travel via boat to the Base Camp and Hebron throughout the operation season, typically visiting either for a few hours, overnight, or to refuel their boats. Many times, the Operator is not aware of these visitors until arrival, so plans should be in place to consider how best to support these visitors if they arrive unexpectedly.
    b. Various departments in the NG bring Inuit to the Base Camp and Hebron for programming. Examples include Youth Programs and the Inuit Connections Program.

   c. There are a number of Nunatsiavut Beneficiaries who own cabins in Hebron, because of this there are more Nunatsiavut Beneficiaries and people from Labrador who visit Hebron than Base Camp.
4. Staff and support crew
   a. The Operator will have many staff and support crew as part of the operations, which will require unique supports. Many of the staff will be leaving family and friends for the duration of Base Camp and Hebron operations, and understanding how to support them with this is critical. The proponent must outline how they will integrate staff accommodations and considerations in their proposal related to working in remote and isolated areas.
5. Parks Canada staff

   Parks Canada is an anchor tenant at Basecamp and provides funding for accommodations and administrative spaces via a service contract with the Basecamp operator for a yearly amount of $200,000 at the time this RFP is released. This includes a visitor orientation tent, storage space, an administrative office tent, and 12 domes for staff and resource people. Parks Canada is responsible for supporting programming that takes place in Torngat Mountains National Park, including youth programs, research programs, Inuit access to the national park, and visitor experience programs.
   a. Parks Canada is responsible for the marketing of Torngat Mountains National Park.
   b. Parks Canada is responsible for operations that take place in Torngat Mountains National Park, including inventory, research, and monitoring within the park.
   c. Parks Canada secures an ongoing helicopter presence at Basecamp, and this is used for Parks Canada operations and for health and safety reasons if need be.
6. NG Staff
   a. The NG have a variety of staff from different departments that operate out of the Base Camp and Hebron to meet organizational mandates, including from Infrastructure, Lands and Natural Resources, and Language, Culture and Tourism.
7. Operational Hub for the Torngat Area of Interest
   a. The Torngat Mountains Base Camp and Research Station has been identified as the operational hub for the Torngat Area of Interest, which is an Inuit Protected Area under the Canada National Marine Conservations Area Act. This is in the process of being established, with a goal of fully being established by the end of 2025. There will be specific operational requirements for the NG staff as they implement the management, research, and monitoring of this area through the Base Camp. It will also come with significant resource and infrastructure investment and development for the NG at the Base Camp throughout the period of this Operator contract. The Operator must understand that the parameters of the service agreement may change over the course of the five-year contract as the NG adapts their operations to establish the Torngat Area of Interest.

As the services relate to visitors, the Operator will provide a high-end experiential tourism product. For researchers, the Operator will provide the appropriate resources needed for the completion of research projects (these resources are detailed in Section 4.4.5.3).

The Operator must have a proven track record of successfully managing similar sites or equivalent experience.

4.1 Five-Year Strategic Operations & Implementation Plan

The first task for the successful proponent will be to develop a **five-year strategic operations and implementation plan** focused on ensuring optimal use of the Sites through an annual continuous improvement cycle over the tenure of the 2025 to 2029 operations performance-based renewable contract, verified and validated by the independent assessment of results annually.

The operations and implementation plan will address all the key service requirements inventoried below. Once approved by the NG and finalized, the operations and implementation plan will become the manual to guide the Operator in managing all aspects of the Sites.

In addition to the Key Service Requirements, and as a minimum implementation of the Operator's plan, this plan will detail and deliver key objectives in the following five areas:

1. **Economic Opportunities** including local employment and recruiting prestigious research projects and researchers;
2. **Experiential Tourism Opportunities** including adventure tourism, Inuit cultural experiences, language learning opportunities, educational programs and innovative opportunities related to activities such as aurora borealis (northern lights) displays and attracting tourists interested in experiencing the northern environment;
3. **Experiential Research Opportunities** including engagement of guests with visiting researchers, a broad understanding of the existing research work and how it relates to Nunatsiavut Beneficiaries;
4. **Nunatsiavut Beneficiaries Workforce Development and Park Operations Succession**, including mentorship and training opportunities for Nunatsiavut Beneficiaries and those living in the claim area in all roles associated with Base Camp operations; and
5. **Education Opportunities** including research, internships, fellowships, and field courses in partnership with universities and educational institutions

Proponents are invited to augment their response to address innovative features that they bring to this operation to enhance its innovation quotient and overall success.

4.2 Annual Operation Plans & Implementation Plan Updates

In addition to the initial five-year strategic operations and implementation plan, the successful proponent will develop annual operational plans (or updates of the initial plan) for prior submission and approval six months in advance of the following year's operating season. The annual plans or implementation plan updates, due November 30th each year, should provide:

- An overview of Base Camp operations, guest services and human resource management
- Overview of sales
- Overview of fuel sales including daily fuel tracking for invoicing purposes
- Overview of marketing plans that aligns with the NG's marketing plans for Base Camp
- Financial report including an audited statement and annual project cash flow (form provided by the NG)
- Incident reports with details (based on an agreed to and NG-approved report format)
- Wildlife report detailing any issues either at the Base Camp or while away from the Sites on land or on water. The reports should document incidents with any wildlife, including bear incidents, as well as when marine vessels were within certain critical distances of marine mammals, thereby impacting vessel use / operations
- Identification of non-compliance within existing regulations or laws, including a clear rationale
- Equipment inventory
- A Visitor Demographics Report
    - Inuit Access
    - Inuit Employment and Training
        - Number of Beneficiaries hired
        - Number of Beneficiaries who travelled to the Base Camp and Hebron as well as what type of transportation, and what programming they attended
        - Number of Beneficiaries that came to base camp through programming, whether through the NG, Parks Canada, Operator or other
        - Number of Beneficiaries who travel to base camp on their own leisure time
    - NG Staff
    - Parks Canada Staff
    - Operator Staff
    - Tourists
    - Researchers
    - Demographic details on visitors

4.3 Risk Register

The operating plans will be developed within a risk managed framework using a comprehensive Operator-created *risk register* that will be approved by the NG. From the end of year one forward, the results of the prior year's monitoring and evaluation results will be used to inform the subsequent annual operating plan toward process improvement.

At a minimum, the risk management plan and accompanying risk register will address the following risks:

- **Environmental:** Harsh climate, hazardous materials spills, environmental response, waste management, wildlife, and natural hazards
- **Logistical:** Remote location, supply chain disruptions

- **Safety risks:** Health and safety, medical emergencies (including medical emergencies nearby but not involving anyone from Base Camp where assistance may be requested), wildlife encounter management
- **Financial risks:** Cost overruns, revenue disruption and volatility
- **Regulatory and compliance risks:** Permitting, licensing, community engagement
- **Security risks:** Safety and security, data security
- **Operational risks:** Staff turnover, infrastructure failures, resource mitigation (water, energy, consumables, waste)
- **Community and stakeholder relations risks:** Community impact

For all requirements, the Operator is required to have demonstrated knowledge of and compliance with the NG, federal, provincial, and local laws, acts, and regulations in all operations. All the NG's legislation can be found at this website. Additional laws and regulations include, but are not limited to, the following:

- Guidelines for the Operation of Passenger Vessels in Canadian Arctic Waters
- Nunatsiavut Environmental Protection Act
- National Marine Conservation Act
- Marine Mammal Regulations
- Notices to Mariners
- Canadian Protected and Conserved Areas
- Canada Wildlife Act
- Migratory Birds Convention Act
- Species at Risk Act
- Canadian Environmental Assessment Act
- Oceans Act
- Wildlife Area Regulations
- Migratory Bird Sanctuary Regulations
- Migratory Birds Regulations
- Other regulations administered by Environment and Climate Change Canada
- Marine Acts and Regulations in Canada
- Canadian Potable Water Regulations
- Canadian Drinking Water Guidelines
- Transport Canada Regulations
- WWF Canadian Arctic Shipping Regulations
- NG Tourism Strategy
- NG Procurement Act
- Food Establishment Licence
- Food Premises Regulations
- Newfoundland and Labrador Storage and Handling of Gasoline and Associated Products Regulations

Please note that the above list of acts, regulations, and other documentation is **not exhaustive.** Operators are responsible for aligning with and abiding by relevant federal, provincial and local laws, acts, and regulations.

4.4 Key Service Requirements

The following overview of key service requirements is not an exhaustive overview of everything that the successful Operator would need to address in their year one operating plan and subsequent annual plan updates. Rather, the following is illustrative of what the NG would consider to be a comprehensive annual plan to give a general idea of a complete annual plan for the Sites. This would not include the Nunatsiavut Beneficiaries and others who visit Hebron and stay in other cabins.

4.4.1 Health, Safety, & Security

The following provides further detail on the key service requirements the NG is seeking for operations of the Sites.

4.4.1.1 Medical Facilities and First Aid Services

- Provide and put in place medical facilities and first aid services, including telemedicine support utilizing personnel with appropriate training (specify the minimum number of onsite medical personal), 24/7 Telemedicine (i.e., PRAXES Emergency Specialists) and an on-site EMT
    - Mandatory forms such as medical disclosure and emergency contact
    - Require medical insurance from all visitors and researchers
    - Encourage Medevac coverage
    - Provide sharps containers
    - Mental health support: provide information on resources, supports and crisis outreach resources
    - Medication policy (i.e., reminding visitors to bring enough medication, EMT will not have all medications on site)

4.4.1.2 Protocols For Operations & Emergency Response

These operational and emergency response protocols are subject to change as the Torngat Area of Interest (AOI) is established, and the roles of the Operator and the NG will be discussed collectively:

- Develop and / or implement safety protocols for operations and emergency response for staff, researchers, and visitors (respectively). Where protocols already exist, these should be adopted by the Operator, and where they do not exist, they should be developed by the Operator and approved by NG. These protocols should cover the following areas (depending on the season) and be reviewed and approved:
    - Briefing to all visitors and guests (the briefing must be approved by the NG in advance)
    - Incident reporting and near-miss reporting
    - Hazardous materials
    - Fuel use and gas stove use
    - Food safety
    - Science equipment and instruments
    - Firearms safety

- Large and dangerous wildlife – how to deter and mitigate wildlife interactions; meet extant standards stating required distance from marine and land mammals; anti-harassment of wildlife (including drone / UAV interference)
- Glacier travel
- Small vessel travel
- Fishing – regulations, processing, and storing
- Cold water immersion
- Chemical manifest
- Emergency action plan for medical emergencies, aircraft incidents, emergency evacuation procedures
- Bloodborne pathogen exposure control plan
- Transportation safety
- Medevac coverage guide
- Carbon monoxide poisoning
- Waterborne illnesses
- ATV travel
- Knife use
- Fixed wing aircraft safety
- Safe lifting
- Rotorcraft safety
- Open ocean travel
- River crossings
- Truck travel

4.4.2 Security

- Develop and implement security measures for personnel, researcher, visitors, and Base Camp assets

4.4.2.1 Records & Communications

- Develop and implement medical records / health declaration information collection, review, privacy protection and approval process for personnel, researchers, and visitors to Base Camp
- Develop policy and content for safety briefings for all visitors, for onboarding all staff, and researchers/educators

4.4.2.2 Wildlife Safety

- Bear safety
  - Implement a Bear safety system consistent with current standards
  - Support services that include bear safety training for visitors / researchers
  - Ensure systems are consistent with Parks Canada and the NG practices and implement, maintain, and provide guidelines for visitor and research with respect to minimal disturbance to bears and their habitat
  - Monitor, maintain, check, and repair bear fencing so that it is operational 24/7 during the season
  - Set up, maintain, monitor, repair, take down, and properly store all related safety equipment and gear and ensure replacement parts are noted and ordered so that there is no down-time
  - Review the Bear Safety protocols with the Department of Lands and Natural Resources and Parks Canada to ensure that it meets their requirements
  - Submit Bear Safety plan, differentiated by polar and black bears, for review and approval by the NG

    - Standardize regulations for defense kills and firearm selection
    - Report on wildlife defensive kills following existing protocols
- Fox safety
    - Implement a fox safety / risk mitigation plan (considering that foxes are a known carrier of rabies in Newfoundland and Labrador and Quebec)
- Marine mammal safety
    - Implement a marine safety system to mitigate risks while out on tours

4.4.2.3 Field Safety for Staff, Researchers, Visitors

- Follow and implement the Torngat Mountains Base Camp and Research Station and Hebron operations manual (attached hereto as Appendix B)
- Development and implement researcher / visitor / staff training on the following areas (depending on season of operation):
    - Boat safety
    - Bear safety and bear fence safety
    - High altitude
    - Insects
    - Wildland fire
    - Alpine terrain
    - Avalanche / landslide / rockslide hazard
    - Extreme cold / storm conditions
    - Remote camp set up and operation

4.4.3 Transportation & Logistics

4.4.3.1 Access & Transportation Services

- Provision of reliable fly-in and boat access services for personnel, equipment, and supplies. Fly-in and boat access services will depend on activities per week as determined by the Operator
- Provision of a tour boat and a speed boat
- Recognition that other NG or partnered resources may be operating out of the Base Camp that are not **entirely** managed / controlled by the Operator, such as those related to the developing Torngat Area of Interest as an operational hub
- Emergency evacuation plans and services, including air, land, and marine options
- Emergency materials / food / provision of supply plans and services
- Emergency plans that include protocols for polar bear encounters / hazardous events / sudden severe weather events
- Spill response plans

4.4.3.2 Logistics & Supplies

- Plan, schedule, and implement regular supply orders and logistics coordination for needed equipment, consumables, and waste pack-out. Track usage / consumption of supplies and reduce/mitigate the volume of waste materials and packaging
    - Food and water
    - Fuels
    - Wood
    - Power tools
    - Vessels
    - Other equipment needed
- Disembarkation protocol for all staff, researchers, and visitors
- Field equipment loans for researchers

- Coordinate logistics related to preparing Base Camp for arrival of marine vessels, helicopters, large group events, etc.
- Wherever possible, the Operator should use marine based transportation (i.e., for dry-non-perishable consumables).

4.4.3.3 Fuel

- Track daily usage of Jet A, Diesel and Gasoline and provide weekly reports to the NG for billing purposes
- Provision propane for use in the kitchen, domes and bathrooms
- Work closely with NG on any reporting and training required by Transport Canada

4.4.4 Maintenance & Winterization

4.4.4.1 Maintenance

- Plan, schedule, and implement regular maintenance and repair condition assessment related to camp facilities and develop remediation plans for how to address these issues
- NG should be immediately notified of the need for repairs and the repair should be immediately performed by the Operator
- Complete incident reports for each repair (minor and major), reflecting details about the required repair. Incident reports should identify who is responsible and qualified to complete the repair
- Plan, schedule, and implement regular maintenance and repair services for equipment.
- Assess inventory of equipment before and after each operational season, including storage location, assessment of condition and identification of what equipment should be replaced and when. The inventory should include photos of equipment in their current condition
- Utilize Computerized Maintenance Management Software (CMMS) provided by the NG to record, report, and track the following:
    - Work orders
    - Asset and material information
    - Maintenance and repairs

4.4.4.2 Winterization Preparations

- In partnership with the NG, mobilization and demobilization of Base Camp at the beginning and end of each season including winterization at season end
- Ensure clear and timely communication with NG regarding repairs, maintenance, and other work, to ensure that proponents can complete any required work during the pre and post season timeframes

- Follow specific camp abandonment procedures before the building systems are de-activated and disconnected by the NG proponents for winterization. This includes stacking furniture, organizing materials in sea cans, and storing linens in waterproof bags, remove all dry and freezer food, adding fuel stabilizers in gas engines, check / change oil in motorized equipment, garbage removal, final cleanup of general tidiness of buildings and grounds, etc. Identify and track closing camp activities, leaving the Base Camp in a state that allows the NG to carry out their winter operations

4.4.5 Accommodations & Guest Services

Note that, while visitors and research teams / the NG staff will need similar service categories, the standards required for research teams / the NG staff is not at the same level / standard as would be required for paying visitors. The services required for research teams are highly variable, dependant on the needs of each unique research team (pricing packages must also reflect this variability with an adaptable researcher pricing scheme).

Note as well that overnight guests (tourists) are not anticipated at Hebron. The Operator will be responsible for services at Hebron to day visitors / helicopter tour visitors arriving at Hebron from either Base Camp or elsewhere. These services will include having staff on site to deliver tours (sometimes in collaboration with other Departments), including day trips from Base Camp to Hebron as part of tourism packages, and welcoming visitors arriving from other locations by various transportation modalities (sailboat, kayak, helicopter, etc.).

The Operator is not responsible for accommodations and guest services for NG community members who may stay overnight at their own cabins / camps at Hebron.

4.4.5.1 Operator Staff and NG Visitors Accommodations & Living Facilities

- Maintenance, cleaning, and housekeeping of durable, weather-resistant accommodations
- Areas for dining, meetings, and down-time
- Access to kitchen services, including meal planning and food supply management
    - Food supply, with a focus on waste reduction
    - Meal preparation with an emphasis on traditional Inuit meals
    - Dietary accommodations policy
    - Field camp provisions policy
- Janitorial services, including:
    - Cleaning
    - Floor maintenance
    - Waste management
    - Litter control
    - Laundry
    - Snow removal
    - Preventative pest control

4.4.5.2 Tourist Accommodations & Living Facilities

- A focused customer-service approach is required for tourist accommodations and living facilities, as tourist services will be part of experiential tour packages
- Maintenance, cleaning, and housekeeping of durable, weather-resistant accommodations
- Common areas for dining, meetings, research presentations and leisure
- Kitchen services, including meal planning and food supply management
    - Food supply
    - Meal preparation with an emphasis on traditional Inuit meals
    - Dietary accommodations policy
    - Field camp provisions policy
- Janitorial services
    - Cleaning
    - Floor maintenance

  - Waste management
  - Laundry
  - Litter control
  - Snow removal
  - Preventative pest control

4.4.5.3 Research Team Accommodations & Living Facilities

- Research teams often bring their own tents and require a space to set those up. Other times, they will borrow tents from the NG; in that latter case, the Operator would be responsible for maintenance, cleaning, and housekeeping of durable, weather-resistant accommodations
- When required, common areas for dining, meetings, research presentations, and leisure
- Research teams sometimes bring their own food supply; other times, they will need access to Base Camp kitchen services, including meal planning and food supply management:
  - Food supply
  - Dietary accommodations policy
  - Field camp provisions policy
- Janitorial services
  - Cleaning
  - Floor maintenance
  - Waste management
  - Laundry
  - Litter control
  - Snow removal
  - Preventative pest control

4.4.5.4 Guest Services

- Administer and oversee of all aspects of *tourist* travel and accommodations from Happy Valley-Goose Bay, including reservations, travel arrangements, and activities during weather delays for visitors waiting to visit and those that are in Base Camp waiting to leave, packages and communications at Base Camp
- Support all aspects of *research* travel including reservations, travel arrangements, and communications at Base Camp
- Coordinate the oversight of needs and requirements of researchers in conjunction with the Department of Lands and Natural Resources of the NG and with Parks Canada
- Support all aspects of travel and accommodations for *visitors from the NG departments* putting on programming at Base Camp and Hebron
- Implement appropriate booking systems capable to re-book guest travel and accommodations in the event of travel delays
- Develop and implement guest experiences that are authentic and highlight the stories of Nunatsiavut Beneficiaries and the region in partnership with the NG and Parks Canada
- Provide entertainment packages for delayed guests in Happy Valley-Goose Bay and at Base Camp including payment of any cultural performers and knowledge keepers
- Develop a safety orientation and camp welcome program for all visitors throughout the length of the contract and is reviewed and approved by the NG annually. Any changes must be approved by the NG ahead of implementation

- Oversee all aspects of the visitor experience for visitors which will begin when they arrive in Happy Valley-Goose Bay
- Operate a gift shop that sells crafts from Nunatsiavut Beneficiaries, confectionary items, toiletries, bug jackets, bug spray, sunscreen, and other small supplies
- Ensure all Base Camp staff members share the story of Nunatsiavut, the Torngat Mountains National Park and Inuit culture and history by utilizing resources provided by the NG & Parks Canada
- Ensure that tourism activities are environmentally friendly, safe, culturally appropriate, and imbued with Inuit values
- Establish visitor policies that align with Park policies for conduct on Labrador Inuit Lands and in the Labrador Inuit Settlement Area
- Ensure that appropriate permits are obtained for certain activities (i.e., fishing)

4.4.6 Infrastructure

4.4.6.1 Utilities & Infrastructure

- Renewable energy sources (solar, wind) for electricity with backup generators
- Water purification and sewage treatment systems
- Energy and water services that consider local wildlife conservation
- Use of non-invasive infrastructure / equipment that minimizes impact on flora / fauna
- Resource use and mitigation plan for all people at Base Camp (including for use of electricity)
- Communication services (satellite internet, radio communication)
- Systems monitoring and reporting protocols
- Supplying and transporting propane in and out of camp

4.4.6.2 Waste Management

- Implement a waste management system that minimizes environmental impact and is compliant with the NG and other levels of government's laws and regulations
- Implement and enforce a waste diversion system
- Develop and implement a waste-systems monitoring plan and schedule
- Plan for waste mitigation and reduction

4.4.7 Environmental Protection

4.4.7.1 Environmental Protection and Sustainability:

- Ensure the Nunatsiavut Environmental Protection Act and associated regulations are followed
- Develop a clear plan on how to deal with garbage, recyclables, and perishables that minimizes environmental impact
- No burning of plastics or any harmful material
- Clear plan for smoking / cigarette butts
- Provide briefings on flora and fauna
- Protocols for wildlife encounters and habitat preservation
- Sustainable sourcing and use of materials and supplies
- Clear rules and protocols for garbage / waste while outside of the Base Camp facility

- Facilities and associated plan that ensure all waste is managed to avoid attracting wildlife
- Clear plan developed with Lands and Natural resources on any wildlife deaths and appropriate reporting and process
- Develop fuel caching and use policy in collaboration with NG and Parks Canada
- Plan to minimize the use of vehicles within the Base Camp and promote walking when driving is unnecessary
- Facilitate / provide advice on appropriate community engagement where necessary
- Comply with the NG's and Parks Canada's policies for conducting research in the Canadian arctic
- Best practices in selecting and maintaining a campsite, including consideration of garbage and human waste

4.4.8 Legal

4.4.8.1 Permits Related to Operations

- Obtain permits required for operation from NG and the Government of Newfoundland and Labrador. These include (but are not limited to) permits related to the following activities:
    - Fishing
    - Food
    - Woodcutting
    - Fuel caches
    - Access to Labrador Inuit Land for non-beneficiaries

4.4.8.2 Agreements & Contracts Related to Operations

- Coordinate and maintain agreement with Parks Canada and the NG as a tenant of Base Camp and as a partner in programming for bringing visitors to Base Camp
- Oversee and coordinate contracts with air charters, helicopters, tour boats and others
- Coordinate with the NG who are stewards of the Torngat Area of Interest and owners of the facility

4.4.8.3 Insurance

- Operator must carry a minimum of $2,000,000 in liability insurance and be responsible for insuring their assets. This would include but not limited to:
    - Workers' Compensation / Workplace NL
    - General Liability
    - Errors and Omissions

4.4.9 Finances

4.4.9.1 Payments & Spending

- Operate and maintain a POS system
- Implement a cost accounting tracking system for invoicing and cost of good sold record keeping

4.4.9.2 Pricing Strategy

As noted, given the NG's investment in the facilities and operations, and given that the needs of research teams / the NG staff are not at the same standard of customer service as would be required for visitors, the proponent is expected to develop a differential pricing scheme for these groups.

- Develop and implement a fair, clear, transparent, and consistent pricing system for visitors, researchers, the NG's users, Parks Canada, tour groups and tour operators
    - Develop a rate in collaboration with the NG on marketing and to identify tour operators that meets tourism industry standards
    - Develop a rate in collaboration with the NG to identify Travel Trade partners that meet tourism industry standards. Travel Trade is the buying and selling of travel products that are either sold directly to consumers or to other tour operators and buyers. It is a distribution network for travel. Products include accommodations, attractions, transportation, food and beverage, etc
    - Develop a rate for Familiarization (FAM) tours that meet tourism industry standards. A familiarization tour, or FAM for short, is a trip designed for traditional media, social media influencers and bloggers to learn about a destination, a tourism operator, a hotel chain, or a tourism board, and sometimes, all of the above
    - Develop a rate, in full partnership with the Department of Lands and Natural Resources of the NG, for researchers that reflect the reality of their actual costs to being in the Base Camp and that this facility is owned by the NG
    - Develop a rate for Inuit programming and the NG's meetings
    - Develop a rate in partnership with Parks Canada
- Collect guest information and visitor / researcher / group tours characteristics for trancing, evaluation, and marketing purposes

4.4.10 Human Resources

4.4.10.1 Employment / Participation Requirements

- Provide a detailed overview of full-time and seasonal positions with brief description of each
- Operator will be responsible for recruiting, hiring, and training staff, including:
    - Pre-season training
    - Determining training competencies / requirements for staff such as (not exhaustive, more areas in section 10-b)
        - First aid
        - Safety and crisis management skills
        - Electronic communications competencies
        - Navigation
        - Small boats
        - Firearms
        - Polar bear
        - Onboard ships
        - Cultural competency
        - Waste management, mitigation, and resource use
    - Prioritize hiring Nunatsiavut Beneficiaries

    - Preference for re-hiring staff who worked at Base Camp in past seasons

- Local Community Employment
    - Prioritizing hiring from Inuit communities in Nunatsiavut
    - Training and development programs to build local capacity

- Supplier Arrangements
    - Preference for local Inuit suppliers for food, materials, and other supplies
    - Development of partnerships with local Inuit Businesses for sustainable supply chains
    - Clear plan on mitigation and reduction of resource use and waste

- Community Engagement and Benefits
    - Educational outreach and involvement programs to share knowledge and engage with local schools and groups

- Cultural Sensitivity and Inclusion
    - Ensuring that operations respect local Inuit cultures and traditions
    - Inclusion of local communities in decision-making processes where relevant
    - Following the NG's laws and regulations, including the LILCA and the associated Labrador Inuit Constitution

- Economic Development
    - Initiatives that support local economic development beyond direct employment, such as supporting local entrepreneurship

4.4.11 Communications

4.4.11.1 Telecommunications & Internet

- Provision of telecommunications at base camp for tourists and researchers
- Provision of satellite internet at base camp for tourists, researchers, Base Camp Staff, and Parks Canada

4.4.11.2 Marketing & Public Engagement

- Support the NG's marketing and promotion strategy in collaboration with the Department of Language, Culture and Tourism and Department of Lands and Natural Resources and Parks Canada that highlights the camp's commitment to safety and conservation, research, and visitor experience
- Develop a plan to recruit and attract researchers and research projects that align with the priorities of Nunatsiavut Beneficiaries and the Torngat Mountains National Park, Cooperative Management Board, and the NG
- Market the educational opportunities / potential associated with the facility, in the surrounding environment, on Labrador Inuit Lands, and within Torngat Mountains National Park
- Leverage key influencers and social media to design meaningful, authentic, and immersive experiential tourism experiences
- Invite documentary filmmakers and others to promote the facility, the Nunatsiavut region and Torngat Mountains National Park, in collaboration with the NG Communications division

- Develop and implement a social media campaign that educates on Base Camp services and experiences, conservation and promotes responsible wildlife tourism and research
- Ensure that the content on www.thetorngats.com is up to date and relevant, with relevant contact information
- Work closely with the Department of Language, Culture and Tourism to ensure there is a presence at major tourism trade shows such as Rendez-vous Canada
- Work closely with the Department of Lands and Natural Resources to ensure there is a presence at major research conferences and trade shows such as the ArcticNet Annual Scientific meeting
- Monitor the effectiveness of marketing and promotional efforts to determine the most effective marketing tools

4.4.11.3 Visitor Code of Conduct

- Develop and implement a Code of Conduct:
    a. Scope
    b. Requiring signed acknowledgment by personnel
    c. Footwear / clothing policy
    d. Energy and resource use policy or guidelines
    e. Hunting / fishing policy for non-beneficiaries
    f. Alcohol, drug, smoking policies
    g. Policy reviews every year, in partnership with NG

4.4.11.4 Coordinating with Key Stakeholders

- Establish and follow protocols for collaboration, coordination, and communication with NG, Parks Canada Staff, and research teams, including actively participating in planning meetings
- Report to, or designate, the NG Operations Manager

4.4.11.5 Collaborate and Support Research Teams

- Support field research activities using bear guards, liaising with helicopter companies, boat rentals, etc.
- Support need for storage facilities (i.e., for materials, samples, and equipment)
- Respect the dry and wet laboratory spaces for use by researchers
- Provide guides, Bear guards, and field equipment as requested
- Implement a robust system to track research support activities separately to allow cost recoveries where appropriate
- Develop a fair pricing strategy in partnership with the Lands and Natural resources and provide a rationale for the strategy

4.4.12 Evaluation & Reporting

4.4.12.1 Performance Monitoring, Reporting, & Issue Management

- Develop and design a performance monitoring, reporting, and management system that will include:
    a. Environmental impact (parameters may include water, land, and air impacts, energy use, human impact, sustainability practices, regulatory compliance, cumulative impacts, etc.)
    b. Safety incidents
    c. Wildlife interactions

    d. Polar bear sightings
    e. Visitor safety incidents
- Financial report including an audited statement and an annual project cash flow form that will be provided by the NG
- Incident reports with details
- Inventory of equipment / supplies, including NG-owned supplies
- A “People at Base Camp” report on staff and visitors
    - Number of beneficiaries hired
    - Number of beneficiaries who travelled to the Sites and attended Site programming
    - Number of non-affiliated guests / tourists (non-affiliated with the NG, Parks Canada, or partners)
    - Number of affiliated guests / tourists
    - Number of researchers
    - Number of PCA staff
    - Number of NG staff
    - Demographic details on visitors
- Report annually on the above and include conclusions and lessons learned / implications for the subsequent years
- Implement an issues management protocol for timely addressing and mitigating any negative impacts on wildlife or visitors

4.4.12.2 Customer Relations Management (CRM) and Researcher Engagement

- Develop and implement a CRM system to support visitor engagement and continuous service improvement
- Develop and implement a similar system to support researcher engagement and continuous service improvement

5 Responsibilities of the NG

The NG will be responsible for the following:

- Ensure various systems (including power, potable water, wastewater, freezer, heating, window guards, etc.) are connected and in working order before the Operator arrives prior to each season
- Ensure fuel (Jet A1, gasoline, diesel) is appropriately supplied and stored
- The NG will review the Year One Operating Plan, annual evaluation reports and annual operating plans from the end of Year One onward
- The NG will complete any required major repairs as reported on and tracked by the Operator.
- Provide resources relating to sharing stories of the NG / Torngat Mountains
- Liaising with research partners on projects connected to the NG
- Once established, staffing, management, research, and monitoring of the Torngat Area of Interest Inuit Protected Area
- In conjunction with the Operator, ensuring reporting, compliance and enforcement of Labrador Inuit Laws, including the Nunatsiavut Environmental Protection Act on operations of the Base Camp

- Coordination within relevant NG Departments
- Review the approach for planning meetings and debriefs
- Review the pricing strategy for the NG's staff, researchers, and visitors

Note: the NG is currently reviewing infrastructure requirements for the Sites and any resulting infrastructure improvements or upgrades may impact the Operator's duties with respect to maintenance and monitoring. Any resulting changes will be discussed with the Operator.

6 Evaluation Criteria for Proposals

The NG will evaluate each Proposal received in response to this RFP using the following criteria, which is not ranked in order of preference or priority:

a) Completeness, thoroughness, and relevance of the Proposal submitted in response to this RFP
b) Relevant experience of the firm
c) Relevant experience and knowledge of key personnel
d) References, including the contact information of former clients
e) Experience running isolated camps and/or locations
f) Inuit Content as outlined in the NG's *Procurement Act* and Inuit Inclusion statement

The NG reserves the right to discuss any and / or all proposals with proponents, and to request additional information from the proponents.

The NG may not accept the lowest cost nor any proposal. The NG reserves the right to cancel this RFP at any time. Any proposal that is accepted may be accepted in whole or in part.

In addition to the above evaluation criteria, proposals shall be evaluated on the principles of value for money, which includes an evaluation of Inuit content and the application of the Inuit content factor.

The *Procurement Act* will be used to determine the preferred supplier and Inuit Content Factor of the submissions. **It is the responsibility of proponents to show, in their proposal, a calculation of the Inuit Content Factor for the proponent.**

7 Proposal Format and Content

7.1.1 Cover Letter

Not to exceed two pages.

7.1.2 Table of Contents

Proposals should include a table of contents properly indicating the section and page numbers of the information included.

7.1.3 Executive Summary

Responses shall include an abstract of no more than one (1) page on the information presented in the proposal and the proponent's unique qualifications and services.

7.1.4 Understanding

Provide an overview of your understanding of what the NG is seeking to accomplish though this RFP process and the role that the Sites play in social, cultural, and economic development for the NG.

7.1.5 Outline Operating Plan to Address Service Requirements

Noting that the first deliverable under the resulting contract will be a detailed Year 1 Operating Plan, proponents are not expected to provide this as part of their submission. However, proponents are required to describe how they will prepare the Operating Plan to address the Service Requirements (Section 4). This includes describing the Operator's approach, methodology, timelines, and the nature of the deliverables to be provided to the NG for their review and approval prior to the commencement of Year 1 Operations.

7.1.6 Background Information

Provide general information on the proponent, including a brief history of the firm and the number of years in business. The proposal should include resumes, relevant project experience, availability, current workload, and office location of all key personnel.

7.1.7 Project Experience

Project experience should include a comprehensive list of all relevant policy research, analysis and writing completed by key personnel, including links to publicly available examples where possible.

7.1.8 Organizational Chart

The chart should indicate the names of the individuals to be involved in the major tasks of the project and the lines of responsibility. The organizational chart should also include the specific responsibilities of the key personnel and their role on the project team.

7.1.9 References

The proponent should include references related to relevant work experience.

7.1.10 Budget / Pricing

The proponent should include a comprehensive budget for each year of the proposed operations. This budget should also include all anticipated Operator spending, revenues, and

sources of funds. Please note that the Operator will be expected to maintain detailed financial records of all activities.

Further, note that the Operator should be prepared to provide the NG with full visibility of detailed expenses and revenues, including receipts, during annual reporting and / or when requested.

7.1.11 NG Content

The proponent should address Section 3 and specific activities, measurables, and outcomes with respect to including Nunatsiavut Beneficiary Content.

7.1.12 Other Benefits

The proponent should describe any other services or benefits the NG may realize through these services.

Appendix A- Inuit Content Scoresheet Inuit Content Factor Calculation (section 17 Nunatsiavut Procurement Act)

a) A maximum of 20 points related to the percentage of Inuit ownership of the supplier calculated as 0.5 points per 1% of Inuit participation in excess of 50% of the ownership and control of the supplier with 0 points being awarded to a supplier that is not at least 50% owned and controlled by Inuit or Inuit Businesses.
/20

b) A maximum of 10 points related to the physical location of the head office and operating offices of the supplier where 10 points is awarded to a supplier having both its head office and principal operating office in an Inuit Community and 6 points is awarded to a company having an operating or a head office in an Inuit Community and 4 points is awarded for a head office or operating office elsewhere in Labrador.
/10

c) A maximum of 10 points related to training for Inuit calculated as 0.1 point per 1% of all training money spent by the supplier on the training of Inuit employees.
/10

d) A maximum of 20 points related to the percentage of the supplier's employees who are Inuit calculated as 0.2 points per 1% of employees who are Inuit.
/20

e) A maximum of 10 points related to the proportion of wages paid to Inuit by the supplier calculated as 0.1 point per 1% of payroll paid to Inuit employees.
/10

f) a maximum of 10 points related to the percentage of goods and services purchased by the supplier from Inuit Businesses in relation to the procurement calculated as 0.1 point per 15 of the value of all purchases obtained from Inuit businesses.
/10

g) A maximum of 10 points related to the commitment by the supplier to utilize Inuit Businesses as subcontractors calculated as 0.1 point per 1% of the value of all sub-contracts awarded to Inuit Businesses.
/10

Total (out of possible 90) /90

NG reserves the right to update the Inuit Content Scoresheet for Inuit Content Factor Calculation prior to the commencement of each season of operation.

Appendix B- Torngat Mountains Base Camp and Research Station and Hebron Operations Manual

TORNGAT MOUNTAINS BASE CAMP AND RESEARCH STATION AND HEBRON OPERATIONS

Pat Bellemare

Contents

1. PURPOSE

1.1. To define how the Nunatsiavut Government's (NG) Torngat Mountains Base Camp and Research Station (Base Camp) and Hebron operates and functions to ensure that illnesses or injuries are prevented or mitigated.

2. SCOPE

2.1. This program is applicable to all activities associated with the operations and maintenance of Base Camp and Hebron.

3. DEFINITIONS

3.1. **Base Camp-** Torngat Mountains Base Camp and Research Station.
3.2. **BCOC –** The Base Camp Operating Contractor.
3.3. **BCWHSC –** The Base Camp Workplace Health and Safety Committee.
3.4. **Base Camp Tenant –** Any individual, entity or organization who attends Base Camp to perform work not directly related to Base Camp operations. Ex. Parks Canada, research organizations, military, etc.

3.5. **Food Safety-** Food safety describes all processes necessary to handle, prepare and store food in ways that prevent food-borne illness resulting from contaminated food, pathogenic bacteria, viruses, or parasites.
3.6. **Fire Safety-** Fire safety is a set of practices intended to reduce the destruction caused by fire and includes measures that are intended to prevent ignition and measures that limit the development and effects of a fire after it started.
3.7. **Laboratory -** Is a location in a facility that provides controlled conditions where physical, chemical, and biological testing is performed.
3.8. **Visitors –** Any individual attending Base Camp as a tourist or scientific researcher.

4. Roles and Responsibilities

4.1. NG Management

4.1.1. Provide leadership and assume overall responsibility for this program.
4.1.2. Define roles, assign responsibilities, establish accountability, and delegate the authority to implement this program.
4.1.3. Ensure all employees, Workplace Health and Safety Committees (WHSC) and the Health and Safety Representatives are consulted with the establishment and annual review of this program.
4.1.4. Ensure adequate resources are available for the successful implementation and execution of this program.
4.1.5. Ensure all Contractors and Subcontractors have provided the necessary pre-qualification documentation and review whether the Contractor has a system in place to carry out the work under the legislation in a safe manner prior to awarding work.
4.1.6. Identify a Contract Manager who will be the primary contact for Contractors working at Base Camp.
4.1.7. Ensure adequate resources are available for the successful implementation and execution of this program.
4.1.8. Ensure Contractors that have been flagged for serious Non-Compliance of regulatory requirements or NG policies and procedures are not awarded future contracts to complete work.

4.2. NG Contract Manager

4.2.1. Ensure all Contractors have provided the necessary pre-qualification documentation by having them complete a Contractor Pre-Qualification Form (NG-OHS-FOR-023) prior to awarding work.
4.2.2. Ensure Contractors receive a Contractor Safety Orientations (NG-OHS-FOR-022) and have attended a pre-job meeting prior to starting work.
4.2.3. Ensure Contractors are provided with a list of known hazards for the project or task.
4.2.4. Ensure Contractors are monitored as necessary.
4.2.5. Ensure Contractors report all incidents to NG.
4.2.6. Ensure Contractors are notified of changes in contracts or scope of work.
4.2.7. Ensure work is completed to specifications.

4.2.8. Ensure any alignment concerns (Corporate, Company, Customer, or Regulatory requirements) have been addressed prior to starting work. Where the alignment concerns do not immediately impact the work, corrective actions may be implemented but must be closed out prior to that phase of the work beginning. (ex. Fall protection course required, work at heights will not take place before course is taken.)

4.2.9. Ensure an evaluation of the Contractor is completed at the end of the project or work term.

4.3. NG Maintenance Contractors

4.3.1. Complete a Contractor Pre-Qualification Form (NG-OHS-FOR-023) based on the scope of work identified in the NG Tender/Contract.

4.3.2. Ensure that all work performed under the contract is conducted in compliance with the Site-Specific Safety Plan submitted by the contractor during Pre-Qualification.

4.3.3. Provide the names and training records of their employees and subcontractor employees who will be working as part of the contract.

4.3.4. Ensure that their own subcontractors are aware of and comply with all Health & Safety requirements and the applicable regulations.

4.3.5. Provide adequate supervision of their employees and subcontractors.

4.3.6. Inform NG of any changes in personnel at the workplace.

4.3.7. Ensure employees and visitors that are granted access to the workplace have the prescribed safety materials, equipment, devices, and clothing to complete the work safely.

4.3.8. Attend all site orientations and safety meetings as required.

4.3.9. Participate in “self-monitoring” of their employees and subcontractors’ compliance to Safe Work Practices.

4.3.10. Provide NG copies of their Safety Meeting minutes upon request.

4.3.11. Report to NG Contract Manager, all vehicle accidents, property damage, environmental releases, high-potential incidents, medical aid injuries or illnesses, and WCB reportable injuries.

4.3.12. Investigate all incidents and report to NG the details of the event, immediate and root causes, and the corrective actions taken.

4.3.13. Immediately report all directives, orders, citations, warnings, inspections, or site visits by Federal or Provincial Occupational Health & Safety Regulators, Transport Canada, or any other government inspector.

4.3.14. Provide NG with any Occupational Health & Safety documentation upon request.

4.3.15. Allow NG to perform Health & Safety Program audits.

4.3.16. Ensure that equipment, tools, vehicles, and personal protective equipment brought on to NG workplaces are installed, operated, inspected, and maintained in accordance with the Manufacturers specifications and legislative regulations.

4.3.17. Ensure that products controlled under WHMIS / GHS are labeled and SDS’s are used to determine that the proper use, care, control and disposal methods for the product are followed.

4.3.18. Ensure current SDS’s are available onsite for all controlled products used.

4.3.19. Maintain the workplace in a manner that eliminates or reduces the health and safety risks to persons who are on or enter the workplace.

4.4. Base Camp Operations Contractor (BCOC)

4.4.1. Complete a Contractor Pre-Qualification Form (NG-OHS-FOR-023) based on the scope of work identified in the NG Tender/Contract.
4.4.2. Ensure that all work performed under the contract is conducted in compliance with the Site-Specific Safety Plan submitted during Pre-Qualification.
4.4.3. Develop a specific safety management system based on this program and their site-specific safety plan.
4.4.4. Develop Emergency Response Plans (ERP) for the Base Camp and excursions.
4.4.5. Provide the names and training records of their employees and subcontractor employees who will be working as part of the contract.
4.4.6. Ensure all employees and contractors are adequately trained as required by legislation to perform all duties and tasks at Base Camp.
4.4.7. Ensure that their own subcontractors are aware of and comply with all Health & Safety requirements and the applicable regulations.
4.4.8. Provide adequate supervision of their employees and subcontractors.
4.4.9. Inform NG of any changes in personnel at the workplace.
4.4.10. Ensure BCOC employees and visitors that are granted access to Base Camp have the prescribed safety materials, equipment, devices, and clothing to complete work safely.
4.4.11. Attend all site orientation and safety meetings as required.
4.4.12. Participate in “self-monitoring” of their employees and subcontractors’ compliance to Safe Work Practices.
4.4.13. Provide NG copies of their Safety Meeting minutes upon request.
4.4.14. Report to NG Contract Manager, all vehicle accidents, property damage, environmental releases, high-potential incidents, medical aid injuries or illnesses, and WCB reportable injuries.
4.4.15. Investigate all incidents and report to NG the details of the event, immediate and root causes, and the corrective actions taken.
4.4.16. Immediately report all directives, orders, citations, warnings, inspections, or site visits by Federal or Provincial Occupational Health & Safety Regulators, Transport Canada, or any other government inspector to NG Contract Manager.
4.4.17. Provide NG with any Occupational Health & Safety documentation upon request.
4.4.18. Allow NG to perform Health & Safety Program audits.
4.4.19. Ensure that equipment, tools, vehicles, and personal protective equipment brought on to NG workplaces are installed, operated, inspected, and maintained in accordance with the Manufacturers specifications and legislative regulations.
4.4.20. Ensure that products controlled under WHMIS / GHS are labeled and SDS’s are used to determine that the proper use, care, control and disposal methods for the product are followed.
4.4.21. Ensure current SDS’s are available onsite for all controlled products used.

4.4.22. Maintain the workplace in a manner that eliminates or reduces the health and safety risks to persons who are on or enter the workplace.

4.5. Base Camp Contractor Supervisor

4.5.1. Take all reasonable precautions to see that the health and safety of every worker and visitor is protected.
4.5.2. Make sure that employees comply with applicable OHS regulations and the company and site-specific SWPs.
4.5.3. Develop and implement site specific SWPs, based on this program and as required.
4.5.4. Advise workers of hazards in the workplace – actual and potential and make sure employees are supplied with and trained to use the correct PPE.
4.5.5. Be trained and competent.
4.5.6. Immediately correct unsafe acts or conditions.
4.5.7. Set a good example with behavior that reflects a responsible attitude toward safety.

4.6. Base Camp Contractor Employees

4.6.1. Assist and look after the safety of themselves, coworkers, visitors, and the environment to the extent of their authority and ability.
4.6.2. Report hazards and safety concerns immediately to their supervisor/manager and NG Contract Manager.
4.6.3. Wear all necessary PPE and report, discard and replace any damaged or worn PPE.
4.6.4. Report non-compliance of this program immediately to their supervisor/manager and NG Contract Manager.
4.6.5. Work with co-workers and supervisors to “engineer out” unsafe designs and work practices.
4.6.6. Be trained to use equipment correctly and be familiar with the risks and hazards associated with the use of equipment.

4.7. Base Camp Workplace Health and Safety Committee (BCWHSC)

4.7.1. Shall consider and expeditiously dispose of complaints relating to the health and safety of employees.
4.7.2. Shall participate in the implementation and monitoring of the Base Camp Operations Contractors (BCOC) safety management system.
4.7.3. Shall participate in the development, implementation, and monitoring of a program for the prevention of hazards in the workplace that also provides for the education of employees and visitors in health and safety matters.
4.7.4. Shall participate in all inquiries, investigations, studies, and inspections pertaining to occupational health and safety of employees, including any consultations that may be necessary with persons who are professionally or technically qualified to advise the BCWHSC on those matters.
4.7.5. Shall participate in the development and monitoring of a program for the provision of personal protective equipment, clothing, devices, or materials.

4.7.6. Shall ensure adequate records are maintained on work accidents, injuries and health hazards relating to the health and safety of employees and regularly monitor data relating to those accidents, injuries, and hazards.
4.7.7. Shall cooperate with the Head of Compliance and Enforcement.
4.7.8. Shall participate in the implementation of changes that might affect occupational health and safety, including work processes and procedures.
4.7.9. Shall assist the BCOC in investigating and assessing the exposure of employees to hazardous substances.
4.7.10. Shall inspect each week all or part of the workplace.

4.8. Base Camp Tenants

4.8.1. Follow all Base Camp policies and safe work practices established by NG and the BCOC.
4.8.2. Appoint an employee to participate in the BCWHSC that is established during Base Camp Operations.

5. Base Camp Policies

5.1. Workplace Harassment and Violence Prevention Policy and Program

5.1.1. The BCOC will develop a clear and concise policy and program that addresses the prevention of workplace harassment and violence.
5.1.2. The workplace harassment and violence prevention policy and program should address the following:
5.1.2.1. Must provide a mission statement regarding the prevention of and protection against harassment and violence in the workplace.
5.1.2.2. The program must provide a description of the respective roles of the BCOC, designated recipient appointed by the BCOC, employees, visitors, tenants and BCWHSC in relation to harassment and violence in the workplace.
5.1.2.3. Must provide a description of risk factors, internal and external to the workplace, that contribute to workplace harassment and violence.
5.1.2.4. Must provide a summary of training that will be provided regarding workplace harassment and violence.
5.1.2.5. Must provide a summary of the resolution process including name of designated recipient of occurrence and means of notification of occurrence.
5.1.2.6. Must provide a reason for review and update of the workplace assessment.
5.1.2.7. Must provide a summary of emergency procedures that must be implemented when an occurrence poses an immediate danger to the health and safety of an employee.
5.1.2.8. Must provide a description of how the employer will protect the privacy of the persons involved.
5.1.2.9. Must provide a description of any recourse that may be available to the persons involved in the occurrence.

5.1.2.10. Must provide a description of the support measures that are available to the employees.
5.1.2.11. Must provide the name of the person who is designated to receive a complaint made under this program.
5.1.3. During the first week of operations the BCOC management team and the BCWHSC will jointly identify the risk factors, internal and external to the workplace, that contribute to harassment and violence in the workplace and document them and develop plans to manage these risk factors.
5.1.4. All NG employees, contract employees, camp tenants and visitors will be orientated to the Workplace Harassment and Violence Prevention policy and program upon arrival at Base Camp.

5.2. Base Camp Alcohol and Drug Policy and Program

5.2.1. The BCOC will develop a clear and concise policy and program that addresses the presence and use of alcohol and illegal drugs at Base Camp.
5.2.2. The drug and alcohol policy should address the following:
5.2.2.1. The distribution, possession, consumption, or use of illegal drugs at base camp and during excursions.
5.2.2.2. Reporting to work or being at work under the influence of any drug or substance that may or will affect the employee's ability to work safely.
5.2.2.3. The operation of any vehicle, ATV, or boat while the driver is under the influence of alcohol or drugs.
5.2.2.4. The misuse of prescription or non-prescription drugs while at work.
5.2.2.5. The option for an employee to successfully complete a rehabilitation program and then be allowed to return to work.
5.2.2.6. Viable options for "dry" versus "wet" camps.
5.2.2.7. Workers who take a prescription or non-prescription drug for which there may be an unsafe side effect should report this potential to his or her supervisor. In addition, employees who require medication (e.g., insulin, epinephrine) should always keep a sufficient supply (perhaps a three-day supply) with them in case an emergency occurs away from Base Camp.
5.2.3. The BCOC will allow the BCWHSC to review the policy at their first meeting.
5.2.4. The BCWHSC will provide feedback to the BCOC who will then sign off on the policy and ensure it is posted at the Base Camp.
5.2.5. All NG employees, contract employees, camp tenants and visitors will be orientated to the Drug and Alcohol policy upon arrival at Base Camp.

5.3. Base Camp Firearms Policy and Program

5.3.1. The BCOC will develop a clear and concise policy and program that addresses the presence and use of non-restricted firearms at Base Camp.
5.3.2. Authorization for firearms use, transportation, and removal from storage must be for qualified employees and contractors only. Unqualified employees and contractors must not have access to firearms.

5.3.3. All employees and contractors permitted to use firearms must have appropriate training and a license in accordance with the codes, statutes or laws of the local jurisdiction.

5.3.4. The Base Camp Firearms policy and program should address the following:

5.3.4.1. Who is in charge of firearms.

5.3.4.2. Who is permitted to use firearms.

5.3.4.3. How access to firearms is controlled.

5.3.4.4. Requirements for transportation, storage and care of firearms and ammunition.

5.3.4.5. The circumstances when firearms may be used.

5.3.4.6. Who is designated to shoot should a bear or other wild animal invade camp.

5.3.4.7. Whether or not possession of personal firearms on site is permissible.

5.3.4.8. That all restricted firearms and prohibited weapons and devices are prohibited on site.

5.3.4.9. Disciplinary actions for violation of the firearms policy and program.

5.3.5. Contractors working on site are required to follow the Base Camp Firearms policy and program.

5.3.6. All NG employees, contract employees, camp tenants and visitors will be orientated to the Base Camp Firearms policy and program upon arrival at Base Camp.

6. HAZARD AWARENESS STRATEGIES

6.1. Risk Assessments

6.1.1. The BCOC will develop and utilize a risk assessment process for identifying hazards and developing controls for these hazards.

6.1.2. The risk assessment process should include the following steps:

6.1.2.1. The BCOC will establish a team of people with appropriate expertise who are familiar with the Base Camp and perform risk assessments by identifying potential hazards and hazardous situations based on the tasks they will be performing.

6.1.2.2. The team will analyze the likelihood that a particular hazard will result in harm or loss. Likelihood may involve a specific timeframe or seasonal element depending on the types of hazards under evaluation.

6.1.2.3. The team will determine the level of severity or impact.

6.1.2.4. The team will develop an action plan or strategy to manage and control the hazards in order of priority.

6.1.2.5. The BCOC will be required to develop and document Safe Work Practices (SWP)for all tasks where hazards were identified.

6.1.3. The risk assessment process should try to reduce employee exposure to hazards by using the following approaches:

6.1.3.1. Elimination of the hazard. (Remove a hazard)

6.1.3.2. Engineering controls. (Redesign a process)

6.1.3.3. Administrative controls. (Develop site specific SWPs)

6.1.3.4. Personal Protective Equipment

6.1.4. Communication and continuous improvement must be utilized by the BCOC during the time Base Camp is operating as part of the risk assessment process.
6.1.5. Monitoring and evaluation are key to ensuring the risk assessment process provides continuous improvement.

6.2. Weekly Base Camp Workplace Health and Safety Committee (BCWHSC) Meetings

6.2.1. The BCWHSC is an advisory body that helps to raise awareness of health and safety issues at Base Camp and during excursions, recognizes and identifies workplace risks, and develops recommendations for consideration by the Base Camp Operations Contractor (BCOC) to address these risks.
6.2.2. The BCWHSC will identify potential health and safety issues and bring them to the BCOC for resolution, and the BCWHSC will be kept informed of health and safety developments in the workplace by the BCOC.
6.2.3. Most importantly, BCWHSC members will promote Health and Safety awareness throughout the workforce.
6.2.4. The BCWHSC consists of at least 4 people.
6.2.5. They are appointed, in accordance with the following conditions:
    6.2.5.1. At least half of the committee members are BCOC employees who do not exercise managerial functions.
    6.2.5.2. Employee members are selected by the employees at large.
    6.2.5.3. A chairperson will be selected by the BCWHSC.
    6.2.5.4. Base Camp Tenants will be required to appoint a member.
6.2.6. Meetings will occur weekly unless a meeting is required to deal with an emergency or other special circumstances.
6.2.7. No BCWHSC member is personally liable for anything done, or not done, in good faith.
6.2.8. Information reviewed, recommendations and decisions made by the BCWHSC are to be documented in the meeting minutes.
6.2.9. Accurate records and minutes are to be maintained and posted within 7 days of the meeting.

6.3. Daily Safety Meetings

6.3.1. The BCOC must have daily safety meetings with all employees, contractors, and visitors.
6.3.2. Safety meeting should include:
    6.3.2.1. Highlighting the safety issues associated with the task to be performed.
    6.3.2.2. Ensuring that required written and verbal procedures are completed before daily work commences.
    6.3.2.3. For some jobs it is advisable to hold the meeting when shifts change so the “off” crew can talk about shift issues with the “on” crew.
    6.3.2.4. Check that PPE functions correctly.

6.3.2.5. Check that communication equipment is functioning and confirm the check-in schedule.

6.3.2.6. Excursion crews should check to confirm their location – drop off and pick up points, the placement of any survival caches and the means of transportation (aircraft, boat, or vehicle).

6.3.3. Safety meetings provide an effective tool for promoting safety awareness, raising concerns about safety at the work site, and communicating safe work procedures to all employees, contractors, tenants, and visitors.

6.3.4. At Base Camp, formal scheduled safety meetings provide an excellent way for the BCOC and supervisors to demonstrate leadership and commitment to working safely.

6.3.5. Informal safety meetings can provide the opportunity to emphasize safety on the job. For instance, a hands-on demonstration of how to safely perform a particular task can be given.

6.3.6. Both types of safety meetings are important to implement and continuously improve safety procedures, safety awareness and safety performance.

6.3.7. By requiring BCOC employees to attend safety meetings, the BCOC emphasizes their commitment to occupational health and safety for all employees and promotes a culture of safety at Base Camp.

6.3.8. Cover topics that directly relate to conditions at Base Camp and during excursions.

6.3.9. Prepare and organize the agenda. Employee attendance should be mandatory. Encourage them to discuss their concerns, “near misses” and observed hazards. Ask for suggestions for solutions to safety issues.

6.3.10. Keep good records of attendance, discussions, hazards, and issues that are raised.

6.3.11. Report topics of concern that require the attention of the BCOC to the appropriate management personnel. When issues have been addressed, report back at the next safety meeting with updates on corrections, hazard mitigation and unresolved issues.

6.3.12. One possible way of engaging employees is to assign a different person a specific topic to research and present at each meeting, rotating gradually through all employees at Base Camp.

6.3.13. Set a firm time limit (and agenda) to change the atmosphere if safety meetings become confrontational or are unproductive.

6.3.14. Document all safety meetings with minutes that include the agenda, issues discussed, proceedings and a list of attendees. Forward a copy of the completed minutes to the BCOC, post them, and provide a copy to NG Contract Manager.

6.4. Inspections and Audits

6.4.1. The BCOC must develop a plan to conduct weekly safety inspections of the Base Camp and document these inspections.

6.4.2. All inspections should be reviewed at the weekly BCWHSC meetings.

6.4.3. Inspections must include a corrective action plan if deficiencies are noted.

6.4.4. Inspections should include:

6.4.4.1. Buildings and structures.

6.4.4.2. All fire safety systems.
6.4.4.3. Means of transportation (vehicles, boats, all-terrain vehicles, etc.)
6.4.4.4. Base Camp grounds, landing sites and docking facilities.
6.4.4.5. Equipment, tools and machinery.
6.4.4.6. Employee work methods and practices.

6.4.5. Equipment pre-use inspections should be completed for all equipment prior to use based on the manufacturers specifications and documented.

6.4.6. NG will complete audits of the BCOC safety management system during Base Camp operations.

6.5. Hazardous Occurrence Reporting and Investigating

6.5.1. The BCOC must have a documented system for hazardous occurrence reporting and investigating.

6.5.2. The system must ensure that if an employee becomes aware of a hazardous occurrence arising during or in connection with the employees work that has caused or is likely to cause injury of themselves or of someone else at the workplace, they must immediately report the hazardous occurrence to their supervisor.

6.5.3. The Base Camp supervisor upon becoming aware of a hazardous occurrence shall document and investigate the Hazardous Occurrence Incident and ensure actions have been taken to prevent recurrence.

6.5.4. The Base Camp supervisor must notify the BCWHSC of all serious hazardous occurrences and of the name of the person appointed to investigate it.

6.5.5. The Base Camp supervisor must take the necessary measures to prevent a recurrence of the hazardous occurrence.

6.5.6. The BCOC must report to NG Contract Manager all hazardous occurrences.

6.6. Base Camp Safety Orientations

6.6.1. The BCOC must provide a pre-program safety orientation for all employees prior to travelling to Base Camp.

6.6.2. Employees must sign off that they have attended and understood the safety orientation.

6.6.3. These records must be maintained by the BCOC.

6.6.4. The orientation must be supported by ongoing safety meetings at regularly scheduled intervals.

6.6.5. Any new employee, contractor, tenant, visitor, or other individual visiting Base Camp during the project must receive the same safety orientation as received by employees at the start of the season. The individual should be taken through the orientation by an experienced person on site.

6.6.6. The orientation shall provide details of the hazards and the rules and must be completed before visitors are allowed to move freely around the site.

6.7. Hazard Control and Personal Protective Equipment

6.7.1. The BCOC must develop and implement a program regarding the use of PPE.

6.7.2. The BCOC will make PPE available and take all reasonable steps to make sure employees use appropriate PPE for the jobs they perform.

6.7.3. The BCOC must provide adequate training in the correct use and maintenance of PPE and document the training in accordance with their safety management system and jurisdictional requirements.

6.7.4. Then BCOC supervisors will complete risk assessments to determine the required PPE for Base Camp and excursions.

6.7.5. The BCOC supervisor will provide a list of required PPE for various tasks and provide written instructions for future reference regarding the correct methods to use PPE.

6.7.6. The BCOC supervisor will ensure training in the proper use, fit and care of the PPE is completed for all employees. Training should include demonstrating the correct way to wear and adjust PPE, especially for items such as earplugs and respirators, as their incorrect use greatly diminishes the protection they provide.

6.7.7. The BCOC supervisor will periodically assess the condition of required PPE to be sure it is still doing its job.

6.7.8. All employees will use all mandatory PPE and follow BCOC's SWPs and training regarding PPE and protective clothing.

6.7.9. All employees must be trained in how to wear and adjust PPE so it functions correctly.

6.7.10. Employees must maintain and care for PPE and replace it when it is worn or damaged.

6.7.11. Employees must be trained to know the limitations of the PPE you use.

7. Contractor Base Camp Operations

7.1. General

7.1.1. It is important to recognize situations where the risks and hazards at Base Camp are higher than normal, which is typical at remote sites when first aid and medical treatment may be unavailable for hours or even days.

7.1.2. The BCOC's safety management system, policies and procedures, safety meetings, and risk assessments should include measures to diminish the occurrence and severity of accidents.

7.1.3. Policies and procedures must include requirements for weekly Workplace Health and Safety Committee meetings, daily employee safety meetings and risk assessments for specific tasks.

7.1.4. Risk assessments can help identify risks and hazards so they can be mitigated, which should result in lower accident rates. Trained BCOC personnel, competent contractors, and specialists (sometimes) who are familiar with Base Camp and the specific tasks required for operations should conduct risk assessments.

7.1.5. Safety orientation sessions at the start of the season or for new employees, contractors and visitors must be completed and documented.

7.1.6. Certifications such as first aid, Workplace Hazardous Materials Information System (WHMIS), and Possession and Acquisition License (PAL) must be obtained for employees who will be responsible for these tasks.

7.1.7. Awareness of terrain and other site-specific risks and hazards at Base Camp and during excursions must be documented and plans must be developed to address these specific risks and hazards.

7.1.8. Relevant regulations and job skills, including required personal protective equipment (PPE) must be reviewed with all attendees of Base Camp.

7.1.9. The BCOC must maintain a log book at Base Camp indicating who is always onsite. all visitors and contractors must sign in prior to entering Base Camp and sign out when leaving Base Camp. The sign in and sign out should include date and time and contact information.

7.1.10. All visitors must have a safety orientation that addresses the site-specific risks and hazards at Base Camp and during excursions.

7.1.11. Students and other young workers must receive sufficient training and supervision, as they are statistically more likely to have accidents than more experienced workers.

7.1.12. Risk assessments of the Base Camp site and excursions must be completed so that the BCOC can prioritize which hazards are most important to address and provide relevant training. Performing risk assessments should be an ongoing process throughout the time Base Camp is being operated. Weekly BCWHSC meetings provide an opportunity to identify new risks and hazards and educate employees, contractors, tenants and visitors about how to mitigate them.

7.1.13. The BCOC must develop an emergency response plan (ERP) for Base Camp and all excursions.

7.1.14. All employees must be trained in the ERP and all emergency procedures. Employees assigned emergency duties should be competent.

7.1.15. Fire drills, evacuation drills, bear sighting drills etc., must be held and documented with all Base Camp attendees.

7.2. Kitchen Safety, Food Handling and Food Storage

7.2.1. Hygienic food preparation and handling procedures and safe food storage are critical to maintaining employee and visitor health.

7.2.2. Preventing food-borne illnesses starts with selecting competent food handlers. The BCOC must ensure that at least one employee who has successfully completed a food safety course and whose training is current is always present in the kitchen.

7.2.3. The BCOC shall ensure that an employee who handles or comes in contact with food or with a utensil used in a kitchen shall be clean, wear clean outer garments and wears headgear that confines the hair.

7.2.4. Food should be restricted to the kitchen and dining areas; no food should be permitted in sleeping or work areas to control vermin (or bears).

7.2.5. Handwashing facilities must be available for employees and visitors so that they can wash before meals. Dirty work clothes and boots should not be permitted in the kitchen and eating areas.

7.2.6. Employees who work in kitchens shall be free from an infectious agent of a disease or skin condition that may be spread through the medium of food.
7.2.7. Employees shall not use tobacco products or consume cannabis while engaged in handling or contacting food or a food utensil.
7.2.8. Employees shall wash their hands before commencing or resuming work and after each use of sanitary facilities.
7.2.9. Employees and visitors must not feed wildlife. Feeding wildlife encourages animals to become human habituated and food conditioned. Some carry life-threatening diseases such as rabies and plague.
7.2.10. Equipment that is used in food premises shall be kept in good repair; of a form and material that can be readily cleaned and sanitized; and maintained in a clean and sanitary condition.
7.2.11. Equipment and facilities suitable for the cleaning and sanitizing of utensils shall be available and used for no other purpose.
7.2.12. Employees must have up-to-date immunizations. Prior to employment, employees should undergo medical screening for communicable diseases (e.g., TB and hepatitis), and in some locations they should be tested for typhoid, cholera, and/or worms (ova and parasites).
7.2.13. All employees must use proper handwashing techniques with soap and water. Insist that staff practice meticulous personal hygiene before and during food preparation, after touching surfaces that are not sanitized (including face, nose, hair etc.), after handling garbage and after using the toilet. If necessary, train food handlers in required handwashing procedures.
7.2.14. Consider placing hand sanitizer dispensers at key locations.

7.3. Kitchen Operations Safety

7.3.1. ALWAYS keep an appropriate-sized fire extinguisher(s) in the kitchen mounted in an easily accessible place near an exit.
7.3.2. The BCOC must ensure all kitchen staff have been briefed on how and when to use the Class K fire suppression system located in the kitchen at Base Camp.
7.3.3. If a fire starts on the stove – turn off the heat and cover the pan. Use salt or baking soda on the flames, not water, as it will cause grease to flare and splatter and spread the fire. Use a B or BC type fire extinguisher if one is required.
7.3.4. If clothing catches fire, drop to the ground and roll. STOP – DROP – and ROLL.
7.3.5. Always use dry kitchen towels, hot pads or oven mitts when handling hot utensils and pots and pans. Damp items will produce a steam burn on the hands or arms.
7.3.6. Do not move pots that contain hot oil. Let them cool in place before moving them.
7.3.7. Work cautiously with steaming pots. Lift the lid carefully away from your face. Pour hot liquids carefully.
7.3.8. Keep knives sharp and use the correct knife for the job.
7.3.9. Cut away from yourself and cut food on a cutting board – not in your hand.
7.3.10. Store kitchen knives safely – never store them loose in a drawer where grabbing one may result in a severe cut. Do not leave sharp knives in the sink or put them in a dishwasher.

7.3.11. Read the manufacturer's operator manual and be familiar with the safe operating procedures for all kitchen appliances.
7.3.12. Outlets with GFCIs (Ground Fault Circuit Interrupter) are recommended. Do not overload outlets; use power bars.
7.3.13. Only use electrical cords that are in good condition and that are as short as possible for the job. Have frayed electrical cords repaired or replaced; only certified electricians should make repairs.
7.3.14. Never unplug electrical cords with wet hands. Always unplug an appliance before cleaning it or clearing a blockage.

7.4. Sanitizing Kitchen

7.4.1. Make a dilute bleach solution by putting about 15 ml (1 Tablespoon) of 5% bleach in 4 liters (1 gallon) of water. This produces a bleach solution that works well for sanitizing surfaces and eating utensils. Use this solution in a spray bottle on surfaces after they are washed with hot soapy water. If a washing cloth is kept in the solution for cleaning tables, change the solution at least once a day (more frequently for large facilities). Make a fresh solution often.
7.4.2. Food preparation areas must be kept meticulously clean. It is essential to wash all food preparation surfaces with hot soapy water before food preparation begins and again before a different food is prepared on the surface to prevent cross-contamination. Rinse with a sanitizing solution.
7.4.3. Use cleaning products appropriate for the equipment used (i.e., stove, refrigerator). Post appropriate SDSs nearby.
7.4.4. Wash hands before and after handling any raw meats or foods that might carry bacteria on the surface such as melons or dirt-laden vegetables.
7.4.5. Clean plates, utensils, and cooking containers after each meal. It is best to use three sinks: one each for washing, rinsing, and sanitizing. The water temperature for hand washing dishes should be at least 43°C (110°F) and items should be allowed to air dry. The water temperature should be at least 60°C (140°F) in dishwashers.
7.4.6. Wipe down the eating surfaces with sanitizing solution after each meal.
7.4.7. Wash cloth towels and dishcloths daily in a washing machine (hot cycle).
7.4.8. Sponges should not be used for cleaning in the kitchen area as they retain bacteria.
7.4.9. Clean floors and food storage areas daily.
7.4.10. Wear rubber kitchen gloves when washing dishes to protect your hands from hot water and excessive exposure to soap and water. If disposable kitchen food preparation gloves are worn, the wearer must change them as often as he or she would normally wash their hands whenever there is a chance of cross-contamination and when the hands have touched something unsanitary.

7.5. Food Preparation Safety

7.5.1. Use potable (drinking) water only to wash salad greens, fruits, vegetables, and any food that will be consumed raw. It is advisable to wash pre-washed produce. Wash

skins of melons before slicing and fruits that will be peeled by knife or by hand to prevent bacteria being carried onto the fruit.

7.5.2. If possible, use a designated cutting board for meat, poultry and seafood, and a separate board for vegetables and fruits. This way, raw fruits and vegetables will not be accidentally contaminated by raw meats etc. Wash cutting boards with hot soapy water and sanitizing solution after use.

7.5.3. Keep raw meat, poultry and seafood separate from all other foods. Store them on the bottom shelf of a refrigerator. Then, leaking packages will not drip onto other foods.

7.5.4. Wash food in a bowl, not in a water-filled sink. After washing meat, chicken, or fish, always wash the sink as well as the container, as splashed water may contain contaminating bacteria.

7.5.5. When cooking meats, poultry, or seafood on a grill, place the cooked food in a clean container. Discard marinades after raw items are removed.

7.5.6. It is essential to keep prepared food at a safe temperature to prevent the growth of bacteria. This requires that cold foods be kept cold (less than 4°C or 40°F) and hot foods be kept hot (warmer than 60°C or 140°F). Bacteria grow rapidly in the temperature range between 4° to 60°C (40° to 140°F). Food should be heated rapidly and cooled rapidly through this temperature range.

7.5.7. Food that requires refrigeration should be discarded if it sits for two hours or more between the temperature range of 4° to 60°C (40° to 140°F).

7.5.8. A large pot of hot food takes a long time to cool through the critical temperature range. To chill cooked food quickly, place it in a shallow pan to expose a large surface area to cooler temperatures and/or place it into several smaller containers.

7.5.9. Store all leftover food in sealed, metal, or plastic containers and refrigerate as necessary. Label and date the containers.

7.5.10. Defrost all foods in the refrigerator. Always defrost meat in a refrigerator – not out in the open on a work surface or outside on the barbecue.

7.5.11. Food handlers should unpack and inspect all food shipments for quality immediately after it arrives. Inspect for quality, freshness, and potential contamination including by vermin. After inspection, store it promptly for maximum safety. Proper storage includes both preservation of food quality by refrigeration and prevention of invasion by nuisance animals and insects. Never store food in sleeping tents.

7.5.12. Store perishable goods in appropriate places – cupboards, refrigerators, or freezers. Store heavy and bulky items on lower shelves but not necessarily the lowest shelf. Store foods in containers that are insect proof, rodent proof, and bear proof, as required. Label the contents.

7.5.13. Once frozen goods have thawed, they must not be refrozen. Cook thawed food as soon as possible or discard any food that has been thawed for too long.

7.5.14. Rotate stored food so that food is used up in the order received. Pay attention to expiry dates and required storage instructions such as “refrigerate after opening”.

7.5.15. Store food in covered containers or plastic bags in refrigerators to prevent juices from other items dripping onto them. Seal raw meat, poultry and fish and place them on the lowest shelf of a refrigerator so they cannot drip onto other foods.

7.5.16. Discard food when packaging seals are broken, any tins are rusted, “bloated” or “popped”, it has passed the expiry date and improperly stored food (e.g., without required refrigeration).
7.5.17. Always keep grease stored in an airtight container; use as soon as possible.
7.5.18. If Base Camp is left unattended during the day, it is very important to prevent bears and other animals from accessing food. Place all food in metal storage drums whenever possible. In addition, strong smelling foods should be carefully sealed in layers of resealable plastic bags. Consider using an item such as a “Critter Gitter”, which is an infrared motion detection device that emits a very loud noise and flashing lights to scare off animals that enter the designated detection area.
7.5.19. Control the smells of food, garbage, and waste products to minimize attracting bears.
7.5.20. Prepare only enough food that can be consumed in one meal. Store food in bear proof containers.
7.5.21. Use non-greasy foods whenever possible. Use or incinerate all leftover grease as soon as possible.
7.5.22. Remove leftover lunch food from daypacks and dispose of it properly each day.

7.6. Housekeeping

7.6.1. The BCOC must address housekeeping requirements and expectations at safety orientation meetings at the start of the season.
7.6.2. Housekeeping requirements should be reviewed regularly at safety meetings.
7.6.3. Comply with requirements for storage and handling systems for hazardous material, fuels, compressed gas cylinders, explosives, and firearms etc.
7.6.4. Carry out inspections weekly to make sure the site is orderly and document these inspections.
7.6.5. Dispose of rubbish and other waste daily according to the waste management plan.
7.6.6. Keep storage areas free of debris, vegetation, and rubbish to prevent fires and tripping hazards.
7.6.7. Keep walkways and paths well lit, especially at night, and apply sand or other material to create non-slip surfaces when mud, snow or ice are hazards.
7.6.8. Keep flammable materials – including wet clothing – away from heat sources such as heating stoves, radiators and heating ducts, lights and electrical wiring.
7.6.9. Keep the area around electrical panel and junction boxes clear.
7.6.10. Place “No Smoking” and relevant hazard signs where flammable materials are stored.
7.6.11. Use tarpaulins to protect materials that may be damaged by weather or sunlight.
7.6.12. Keep gear organized and in appropriate storage areas.

7.7. Drinking Water Safety

7.7.1. Drinking water systems must be maintained by a certified water treatment technician.
7.7.2. The BCOC must obtain all required permits for operations of water treatment systems.

7.7.3. All new and re-introduced potable water lines must be cleaned, disinfected, flushed, and must pass testing for chlorine concentration and coliform absence before being put into use.
7.7.4. The BCOC must take weekly water samples for analysis to confirm that water meets drinking water standards.
7.7.5. The BCOC must operate and maintain the water treatment system according to the manufacturer's instructions.
7.7.6. Filters and UV lights must be checked and changed, as appropriate, to make sure they are functioning and that the light is not blocked by stains or dirt etc. Replace the UV bulbs if the light is blocked.

7.8. **Waste Management Plan**

7.8.1. Proper waste management is fundamental to Base Camp safety.
7.8.2. The BCOC should determine how waste products are ultimately handled – whether they are recycled or subject to various treatment and disposal options.
7.8.3. The BCOC shall develop and document a Waste Management Plan for the Base Camp.
7.8.4. It is essential to eliminate potential camp sewage discharge or spills that may contaminate surface and ground water, eliminate potential disease-causing organisms and smells from accumulations of waste deposits that attract wildlife, including vermin.
7.8.5. A waste management plan should include elimination or reduction of the amount of material or waste used or generated.
7.8.6. Elimination or reduction of the risk to human health or the environment presented by a material or waste must be considered.
7.8.7. The plan should identify methods for burning paper products and other clean combustibles in designated areas with proper supervision, extinguishing control, and only under appropriate weather conditions.
7.8.8. The storage of solid waste, particularly cafeteria and/or kitchen waste, must be in covered animal-proof receptacles.
7.8.9. The collection of solid waste must be incinerated in approved incinerators or packed out.
7.8.10. The waste management plan must include an annual cleanup of Base Camp at the end of the season.

7.9. **Laboratory Safety**

7.9.1. The BCOC must ensure that risk assessments are completed for laboratory work being completed at Base Camp.
7.9.2. The BCOC must ensure that only authorized trained employees, contractors or tenants are permitted to work in the Base Camp laboratory.
7.9.3. Lab safety procedures must be developed, documented, and followed for all tests being conducted in the Base Camp laboratory.

7.9.4. The BCOC must prepare and maintain a chemical inventory and SDS binder for the laboratory.
7.9.5. All employees, contractors or tenants who conduct work in the laboratory must wear the appropriate PPE.
7.9.6. When performing procedures that involve the liberation of volatile, flammable, strong smelling, or toxic materials they must be performed in a fume hood.
7.9.7. Laboratory access must be restricted to authorized persons only.
7.9.8. Smoking, eating, drinking, storing food, beverages or tobacco; applying cosmetics or lip balm and handling contact lenses are not permitted in laboratories.
7.9.9. Keep the laboratory clean and free of unwanted chemicals, biological specimens, radioactive materials, and idle equipment.
7.9.10. Consult safety data sheets (SDS) before working with hazardous chemicals or infectious material. Ensure you have access to the SDSs for the products you handle.
7.9.11. Ensure that access to emergency equipment (eyewash stations, emergency showers and fire extinguishers) is not blocked.
7.9.12. Label, package and dispose of all waste material properly.
7.9.13. Report accidents and dangerous incidents promptly to the BCOC.

7.10. **Docking Facility Installation**

7.10.1. Personal flotation devices will be worn by all BCOC employees when completing the installation of the docking system.
7.10.2. The BCOC must safely secure ramps or gangways when loading and offloading.
7.10.3. The BCOC must ensure that fenders are in place on the docking side and they must check the condition of the fenders regularly.
7.10.4. The BCOC must check for items such as loose boards or nails that stick out on docks and repair as necessary.
7.10.5. Spill response equipment must be readily available at the docking facility in case of any fuel spills.
7.10.6. All dock chains and hardware must be checked daily.
7.10.7. Once the installation of the dock has been completed a final inspection will be completed and documented.
7.10.8. When boats arrive, the dock will be inspected before people and equipment are off loaded.

8. Fire Safety

8.1.1. Based on a risk assessment, the BCOC will determine the needs for mitigation and fire prevention methods**.**
8.1.2. The BCOC must ensure appropriate and properly functioning fire extinguishers and smoke detectors are present in all structures and tents.
8.1.3. Place firefighting equipment including fire extinguishers and a fire horn in one or more muster stations in a central location(s).

8.1.4. Keep a water hose and pump in place at a water source to fight fires (lakeshore, river bank).
8.1.5. Locate extinguishers in the office and kitchen tents, sleeping tents, the incineration site, generator enclosures, fueling locations and fuel storage areas, helicopter landing pad and/or air strip, and in vehicles.
8.1.6. Develop an emergency evacuation plan and develop alternate plans if the location requires them.
8.1.7. Post the plans and make sure each person, including visitors, are familiar with the plans. Periodically hold practice fire drills.
8.1.8. Reduce clutter. Do not stack core boxes or other combustible materials against accommodation structures. They provide fuel for potential fires and may block exits and emergency equipment.
8.1.9. Keep oily rags in a sealable metal container. Keep it closed to exclude oxygen.
8.1.10. Keep grass and flammable vegetation cleared away from propane tanks or fuel storage areas.
8.1.11. Establish a smoking policy so that smoking is permitted only in areas declared safe for smoking.
8.1.12. Do not permit smoking in or nearby:
    8.1.12.1. Storage areas for fuels, chemicals, flammable materials such as solvents, paints, lubricants.
    8.1.12.2. Aircraft and helicopter landing areas.
    8.1.12.3. Fueling areas or fueling procedures for machinery, vehicles, extra fuel containers.
    8.1.12.4. Maintenance areas when servicing: batteries, engines or motors, hydraulic systems etc.
    8.1.12.5. Any designated “No Smoking” area.

8.2. Fire Prevention Practices for Employees

8.2.1. When open fires are permitted, keep them small and locate them in a safe place. Never leave them unattended. Extinguish all open fires thoroughly with water when they are no longer required.
8.2.2. Turn off cook stoves when not in use. Make sure the oil stove heaters are turned down or off whenever you leave camp. Perform regular maintenance on stoves, stovepipes, and draft regulators, which will reduce the potential risk of carbon monoxide poisoning.
8.2.3. Turn off all non-essential propane tanks when not in use.
8.2.4. Use caution when burning mosquito coils. Place them in a metal container when lit and be sure to extinguish them when not in use.
8.2.5. Clear brush and grass from around portable generators, water pumps, compressors or any small motors.
8.2.6. Use caution and correct procedures when fueling camp equipment and vehicles.
8.2.7. When parking a vehicle, make certain the exhaust system does not come in contact with dry flammable materials such as grass.

8.3. Fire Extinguishers

8.3.1. Everyone is required to know the location of all firefighting equipment and be trained to use it.

8.3.2. All fires require three elements: (1) fuel, which can be solid, liquid or gas, (2) oxygen and (3) heat sufficient to raise the fuel above the temperature of ignition. To extinguish a fire, it is necessary to remove one of the three elements.

8.3.3. Fires are classified according to the material involved in the fire.

8.3.4. Class A: Ordinary combustible material e.g., wood, cloth, paper, rubber and many plastics. Ordinary combustibles leave ash when burned.

8.3.5. All Class A fires must be extinguished by cooling the material below the temperature of ignition. The burning material must be soaked with an extinguishing substance to prevent re-ignition.

8.3.6. Class B: Flammable liquids (e.g., gasoline, grease, oil, diesel, kerosene, tar).

8.3.7. Class B fires must be extinguished by removing oxygen (smothered) so the vapors cannot reach the source of ignition. Never use water; it causes the fire to spread.

8.3.8. Class C: Electrical equipment (e.g., wiring, fuse boxes, appliances, circuit breakers, machinery, battery powered equipment).

8.3.9. Class K: Cooking oils such as vegetable fats or animal fats – a classification used only in kitchens.

8.3.10. Fire extinguisher maintenance should include weekly inspections, recharging as soon as an extinguisher is used, annual servicing to replace damaged parts, and keeping records of inspections and the repairs.

8.3.11. Report the use of a fire extinguisher to a supervisor immediately so it can be recharged and made serviceable again.

8.3.12. Use the correct fire extinguisher for a fire; otherwise, you may be injured or cause the fire to spread.

8.4. Firefighting Basics

8.4.1. The BCOC must ensure that all employees are trained to operate each fire type of extinguisher and all other firefighting equipment in Base Camp and on excursions.

8.4.2. All employees, tenants and visitors must be aware and adhere to the following:

- 8.4.2.1. If you encounter a fire, sound the alarm for a fire immediately. Shout loudly.
- 8.4.2.2. Use the correct fire extinguisher. Fight a fire only if it is a small fire and you believe you can put it out quickly.
- 8.4.2.3. Never fight a fire that is burning between you and the exit. First get out and then fight the fire with your back to the exit.
- 8.4.2.4. Never turn your back on a fire as it may flare up or change suddenly.
- 8.4.2.5. In very cold temperatures a water-based extinguisher is not effective, as the water base may freeze. A water-based extinguisher used on an electrical fire may cause electrocution or shock; if used on a class B fire of flammable liquids, it may cause the fire to spread.

8.4.2.6. Treat a fire as an electrical fire if there is any suspicion that it may be an electrical fire. Do not use a water extinguisher. Disconnect the power source(s) if it is safe to do so.
8.4.2.7. Stand upwind from a fire to fight it. Do not stand downwind as the smoke and flames are dangerous if they contain hazardous chemicals. Also, the smoke and air may become superheated.
8.4.2.8. Do not fight fires that involve explosives or chemicals. Evacuate the area if there is any chance of chemicals or explosives associated with a fire.
8.4.2.9. Machinery fires burn with great intensity. The air downwind may become superheated and damage lung tissue.
8.4.2.10. After extinguishing a fire, watch the area carefully to be sure it does not re-ignite.

8.5. Fire Risk Assessment

8.5.1. The BCOC must complete fire risk assessments to identify hazards (e.g. faulty plug sockets, damaged kitchen appliances, ventilation. Heat sources), sources of kindling (e.g. furniture, laundry, paper, chemicals) and carry out a check on the outside environment (e.g. bush around lodge, trees, garden etc.)
8.5.2. The BCOC must identify who is at risk (e.g. employees, customers) and determine the safety measures that will be required.
8.5.3. This assessment must be recorded and reviewed weekly during Base Camp operation.

8.6. Campfire Safety

8.6.1. Before you leave on the tour, check possible outdoor burning restrictions, especially during dry season. Additionally, check the weather forecast (e.g. rain, debris burning due to wind)
8.6.2. When scouting out your fire pit, look up and around to make sure the pit is not under any low-hanging branches or near any brush or bushes. Items like these can easily go up in flames if the fire gets bigger than anticipated. Also keep a radius of around 15 feet/5 meter around the fire pit clear of tents, chairs, food and any other debris or obstructions.
8.6.3. Clear all debris from around the fire pit, including garbage and grass. There should be a five-foot perimeter of soil around the campfire space.
8.6.4. Circle the pit with rocks. If your fire grows, this will help keep it within the borders of the fire pit.
8.6.5. Keep any flammable items far from the fire. This includes your campfire wood, aerosol cans, pressurized containers.
8.6.6. Set up a safety zone around the campfire where all can sit and relax around the fire.
8.6.7. Set boundaries; only those designated should light the campfire, add wood, or put out the fire.
8.6.8. Burn only natural vegetation such as wood. Do not use flammable liquids. Do not burn trash.

8.6.9. Ensure the close supervision of children whenever a campfire or hot coals are burning.
8.6.10. Designate a play area to keep toys or other children's items out of the safety zone.
8.6.11. Be sure all matches and lighters are out of reach and sight of children. Matches and lighters should be stored in a secured location to prohibit access by children.
8.6.12. Always keep water, sand, dirt or a shovel nearby. This is necessary for an immediate response in case flames are out of control and need to be reduced and helpful to put the fire out at any time.
8.6.13. Always maintain an eye on the fire. Never leave the fire unattended at any time.
8.6.14. Extinguish the fire and ensure that the coal is wet and cold.

9. FUEL SAFETY

9.1.1. Environmental damage caused by fuel or oil spills is one of the greatest risks at Base Camp.
9.1.2. The BCOC must develop a Fuel Safety Plan that addresses the handling, storage and use of all fuels.
9.1.3. The following are some of the fuel hazards that the Fuel Safety Plan must address:
9.1.3.1. Fire and/or explosion can be caused by misting fuel encountering an open flame or a static discharge.
9.1.3.2. Burns or chemical burn injuries can be caused by fires, explosions or skin contact with fuels.
9.1.3.3. Inhalation injuries caused by the toxic, corrosive, or asphyxiant properties of some compressed gases can occur when handling fuels.
9.1.3.4. Impact injuries can be caused by mechanical failure of compressed gas cylinders. If cylinders are knocked over and the regulator is sheared off the contents may diffuse and/or the cylinder may become a missile and cause great damage.
9.1.3.5. Carbon monoxide poisoning can be caused by incomplete combustion of fuels in heating stoves, generators, saws or appliances where there is insufficient ventilation.

9.2. Fuel Storage

9.2.1. The BCOC must ensure that all flammable and combustible liquids are stored safely in accurately labelled containers that conform to WHMIS regulations (e.g., fuels and propane).
9.2.2. The BCOC must ensure to store each type of fuel in a separate cache; it is important not to mix different types of fuels, especially aviation fuels.
9.2.3. Store full factory sealed fuel drums by lying on the side with both bungs horizontal in the 9 o'clock and 3 o'clock position, which prevents air and moisture from entering. This is mandatory for aviation fuel drums and recommended for diesel.

9.2.4. Fuel drums should be stored in a secondary containment system, which should be rated for diesel and aviation fuels, as required. Check the specification sheet for the rating information.
9.2.5. Ensure signs are posted that clearly prohibit smoking and open flames in fuel storage and handling areas.
9.2.6. Most fuel drums are clearly marked but occasionally markings are erased. If in doubt about the identity of a fuel – DO NOT USE IT. Report it to a BCOC supervisor.
9.2.7. Make sure empty and half full fuel drums cannot be blown over by aircraft prop wash or the rotor wash from helicopters.
9.2.8. Mark fuel drums with company ownership as required.
9.2.9. Compressed gas storage areas should be a minimum of 30 meters from any occupied building or tent. Separate the storage areas in compliance with WHMIS and MSDS specifications.
9.2.10. Flammable gases must be stored separate from oxidizers (e.g. hydrogen peroxide, nitric acid, sulphuric acid)
9.2.11. Corrosive substances must be stored separately from flammables.
9.2.12. Full cylinders must be stored separate from empty cylinders.
9.2.13. All cylinders must be stored separately from corrosive vapors.
9.2.14. Situate fuel storage areas away from the camp; ideally, locate the cache a minimum of 100 m (300 ft) from structures.
9.2.15. Do not locate fuel drums too near the helipad in the event of a helicopter accident.
9.2.16. Store fuel in a clear, bermed area surrounded by a firebreak.
9.2.17. Keep an accurate inventory and document all fuel caches.
9.2.18. Include date the cache was set up, number of drums and the type of fuel, and dates of additions and deletions to the cache.
9.2.19. Maintain a running total of full and empty drums at the cache.

9.3. **Fuel Handling**

9.3.1. Handle fuel carefully to prevent accidents including fires, spills and fuel contamination**.**
9.3.2. Employees who handle fuel should receive appropriate training in WHMIS and transportation of dangerous goods (TDG).
9.3.3. Keep appropriate spill kits at fueling sites or stations and take precautions to prevent injury and environmental damage.
9.3.4. Wear PPE: Wear safety glasses or goggles and gloves.
9.3.5. When drums are under pressure from sun exposure, the bungs may come off unexpectedly and the contents may splash out.
9.3.6. Aviation fuel drums must be stored horizontally but may be placed upright when they may be used.
9.3.7. Once a drum is opened and partially used, it is very important to replace and securely tighten the bungs to avoid contamination.
9.3.8. Do not expect pilots to use fuel more than two years old or if the bung seals are damaged.
9.3.9. Pilots may refuse to use fuel that is stored upright for more than one day.

9.3.10. Transferring fuel by hand from drums to smaller containers:
- 9.3.10.1. For fire safety, use only CSA-approved fuel containers and restrict the size to no larger than 20 L.
- 9.3.10.2. For diesel fuel, use yellow CSA-approved containers.
- 9.3.10.3. Use hand or power pumps with a flash or spark arrester to prevent a static spark when transferring fuel into jerry cans.
- 9.3.10.4. When transferring fuel to smaller containers, label each container clearly according to WHMIS requirements.
- 9.3.10.5. If it is necessary to use the same pump for various fuels, be sure to flush the pump out first and empty the waste into a container – never onto the ground.
- 9.3.10.6. Label the waste fuel container.
- 9.3.10.7. Never use your mouth to siphon fuel.

9.3.11. Follow the correct fueling procedures and use the correct fuel for equipment, vehicles, ATVs, and boats.

9.3.12. Check the operator's manual or ask someone who knows how to do the job correctly.

9.3.13. Manage waste petroleum products and isolate waste products in sealed appropriate containers until they can be properly disposed of off the site.

9.3.14. It is advisable not to refill fuel drums. If refilling a drum with gasoline, diesel or stove oil is unavoidable, follow these guidelines:
- 9.3.14.1. Use the same type of drum and ground the drum before filling. If you are not sure what type of fuel was previously in the drum – do not use the drum.
- 9.3.14.2. Closely inspect the drum for cleanliness inside and out and check for damage. Do not use damaged drums.
- 9.3.14.3. Label the contents on the outside of the drum with indelible markings.
- 9.3.14.4. Make sure both bungs are tightly secured before transporting the refilled drum.
- 9.3.14.5. Do not refill drums with aviation fuel without the written permission of the charter aircraft company.
- 9.3.14.6. It is difficult to prevent spills so keep a spill kit close by during filling procedures.

9.4. Transporting Fuel Drums and Compressed Gas Cylinders

9.4.1. Follow all TDG regulations for transportation.

9.4.2. Transport fuel drums upright in the back of pickup trucks – never in the cab. Carefully secure all drums so they cannot shift while underway.

9.4.3. Transport and maneuver individual cylinders with the aid of a hand truck. Never roll them on their side over the ground or floor to move them.

9.4.4. Follow safe slinging procedures when transporting fuel.

9.5. Propane Gas Handling

9.5.1. Handle propane storage tanks and cylinders carefully. Use, transport, and store propane cylinders in an upright position. Make sure the safety cap covering the valve is in place on propane cylinders during transportation.

9.5.2. Secure propane cylinders upright against the outside wall of the building, tent or other accommodations when in use. They should be placed on a solid base or non-combustible rack and secured so they cannot tip over. Do not place them directly on wet soil as this may cause corrosion. Shield propane tanks from radiant or other direct heat sources and shield hoses from excessive heat and foot traffic. If a cylinder freezes to a surface, use warm water below 52°C (125°F) for thawing.

9.5.3. Use only the correct installation methods, the correct tools and the proper fittings (regulators, hoses) when connecting propane cylinders to fuel lines.

9.5.4. Store full and empty gas cylinders separately outdoors according to WHMIS regulations. Never store propane tanks inside living, working quarters, in basements or with oxidizers; oxidizers react with propane and contribute to fire and explosion.

9.5.5. As propane gas is heavier than air, escaping gas will accumulate in low areas. Proper ventilation around all propane burning equipment is essential to prevent explosions.

9.5.6. Propane pressure varies with the temperature of the liquid propane, not with the amount of propane in the cylinder. Never heat up a propane tank by using a torch etc., to try to increase the flow of gas from the cylinder.

9.5.7. Always use soapy water to check for leaks at the joints and fittings. Never use a flame to check for leaks.

9.5.8. Make sure the safety shut-off valve works properly.

9.5.9. Propane tanks have a limited life span. Do not use corroded or rusty tanks or those that have past the expiry date.

9.6. Heating Stoves and Appliances

9.6.1. Place oil and wood stove on a suitably sized sheet of metal. Place stoves at least 1 meter from any flammable material such as tent walls, and beds. Place a heat resistant barrier on the walls nearest the stove. Aluminum foil may be used, which will also reflect heat around the tent.

9.6.2. Place insulation between the chimney and the support pole whenever an outside chimney needs a support pole. Brace and wire all pipes until they are solid enough to withstand a windstorm. Make sure the chimney does not touch the tent and the chimney vent that passes through the tent is made of adequate insulating material. Always use a heat-resistant spark arrester on oil and wood stoves at the chimney top.

9.6.3. For all heaters/stoves, always check that the tent is well-ventilated but not drafty. Carbon monoxide and toxic fumes are significant hazards.

9.6.4. Remember to turn stoves down or off when the tent or camp is not occupied.

9.6.5. Install heating fuel on a proper stand outside the structure. Use absorbent mats to soak up any minor leaks from fittings of oil drums used for heating.

9.6.6. Do not move kerosene heaters when lit.

9.6.7. Do not put wet clothing, gear or packs within 1 meter of a heating stove or hang them from electrical cords or ropes above a stove. If clothing falls onto the stove, it will catch fire.

9.7. Propane Heaters and Appliances

9.7.1. Propane fuel may produce deadly carbon monoxide through incomplete combustion. No propane heaters or appliances should be used in tents or any sleeping quarters without excellent ventilation. Whenever possible, place propane appliances such as refrigerators outside a building. Place a carbon monoxide detector in any area where propane appliances are used.

9.7.2. Make sure all fittings on the supply line are secure.

9.7.3. Make sure there is adequate ventilation.

9.7.4. If you smell propane (rotten eggs or cooking cabbage smell), do not try to light the heater or appliance. Check all connections using soap and water – never check with a match or flame.

9.7.5. Read the instructions for operating and lighting propane heaters, stoves, refrigerators, or other appliances.

9.7.6. Most propane stoves and appliances have a pilot light that must be lit first.

9.7.7. Keep combustibles away from any propane stove or appliance.

9.7.8. If gas runs out turn off all control valves at the stove or appliance. Turn off the shutoff valve on the gas cylinder. Change the gas cylinder. Open the valve on the new gas cylinder and check for leaks. Open the valve at heater and light the pilot light.

9.7.9. Always transport propane refrigerators in the upright position. Install refrigerators in an area with sufficient ventilation. Keep them level and prevent them from rocking.

9.7.10. Never operate propane without a proper regulator at the outlet of a propane cylinder.

9.8. Carbon Monoxide Poisoning

9.8.1. Carbon monoxide is the leading cause of death by poisoning in North America. Carbon monoxide is a colorless, tasteless odorless and non-irritating gas so you are unaware of it when you breathe it. Carbon monoxide combines readily with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. Carbon monoxide can build up rapidly and poisoning can occur in a very short time – even within minutes.

9.8.2. Risks are caused by confined spaces or semi-confined spaces where toxic CO levels can build up very quickly, sometimes in a few minutes and exceed the safe limits, lack of awareness of the risks and situations where CO poisoning can occur, and indoor use of propane or gasoline fueled equipment.

9.8.3. Sources of CO include incomplete combustion from improperly adjusted oil or gas burners in space heaters, heating stoves, cooking stoves, and all fires.

9.8.4. Gasoline powered tools such as chainsaws, chop saws, pressure washers, portable generators can create CO conditions.

9.8.5. Vehicles exhaust can create CO conditions.

9.8.6. During normal combustion very little CO is produced. However, incomplete combustion of any fuel greatly increases the production of CO.

9.8.7. The symptoms depend on the concentration, the degree of physical exertion, and length of exposure. Low concentration produces a slight headache, shortness of breath, nausea and dizziness. Higher concentrations produce a severe headache, mental confusion, dizziness, impaired vision and/or hearing, and collapse or fainting with physical exertion. Extreme concentrations produce unconsciousness, coma and death.

9.9. **Prevention**

9.9.1. All employees, contractors and visitors must be made aware of the risks, warning signs and required first aid treatment for CO poisoning.

9.9.2. The BCOC must complete an assessment of all items that have the potential of generating carbon monoxide poisoning.

9.9.3. Install ventilation that is appropriate for the work space.

9.9.4. Maintain fuel powered equipment in good condition and inspect it regularly.

9.9.5. For heating and cooking stoves, make sure the flame of liquefied petroleum gas burns with a clear, blue flame. A flickering or yellow flame indicates that the air intake is restricted and needs adjustment, as more CO is produced when combustion is incomplete as indicated by a yellow flame.

9.9.6. NEVER use a heat source inside a tent without excellent cross ventilation. Open vents at the top are not sufficient. Small heat sources in small tents or cabins is a deadly combination.

9.9.7. Start vehicles and heavy equipment outdoors or in well-ventilated areas, especially in cold temperatures as engines produce more CO when it is cold.

9.9.8. Do not barbecue with charcoal in any enclosed space. Coals emit carbon monoxide even when they are not glowing.

9.9.9. Ensure CO detectors are installed and maintained in all buildings and accommodations at Base Camp and where CO may be produced.

10. POWER GENERATION SAFETY

10.1. **Generators**

10.1.1. The BCOC must comply with the relevant building, fire and electrical codes regarding the use of generators and electrical distribution systems.

10.1.2. Only trained personnel should operate and maintain generators. However, keep the operating instructions for each generator available in case a problem develops and the person who normally runs the generator is not present.

10.1.3. Exhaust emissions contain poisonous carbon monoxide (CO). Never run a generator in a building, tent or in an enclosed area unless the exhaust pipe discharges outside the area so fumes cannot re-enter the enclosure.

10.1.4. Operate the generator on a level surface. Otherwise, fuel and oil spillage may result. Use drip trays, absorbent pads and have a spill kit available.

10.1.5. Know how to stop the generator quickly. Label the emergency shut-off; understand the operation of all the controls.
10.1.6. A generator is a potential source of electrical shock. Do not allow the generator to get wet. Cover it to protect it from rain or snow. Do not use a generator if your hands are wet.
10.1.7. Larger generators and electrical distribution systems should be installed, maintained and/or inspected by a qualified electrician.

10.2. **Installation and Maintenance of Generators**

10.2.1. To prevent damage to the generator, make certain it is grounded. Connect a length of heavy wire from the ground terminal to a ground spike. Grounding protects the generator from damage due to lightning. Be aware, however, that grounding the generator may increase the danger of shock to a person standing near it if the soil or flooring beneath the generator is wet.
10.2.2. Install a ground fault circuit interrupter (GFCI) at the generator and plug all cords into it.
10.2.3. Carry out regular maintenance and repairs. This includes regular oil changes and coolant level checks. Shut off the engine before carrying out maintenance. Keep a written log of maintenance and servicing.
10.2.4. Place and operate small generators in a metal or plastic pan or drip tray to catch spills that frequently occur during fueling.

10.3. **Fueling Generators**

10.3.1. Fuel generators during daylight hours. Never allow a generator to run dry of fuel (unless you intend to do so). Each evening there should be enough fuel in the tank to last until morning.
10.3.2. If fueling must be done in darkness, make sure there is adequate lighting to do the job safely.
10.3.3. Gasoline is commonly used in small generators, and it is extremely flammable and explosive. Fuel only in a well-ventilated area with the generator engine stopped and cooled.
10.3.4. Do not smoke or allow flames or sparks in the area where the generator is being fueled.
10.3.5. Take care not to overfill the fuel tank and cause spillage. Replace the filler cap tightly after fueling. Clean up any spillage.
10.3.6. If diesel generators are fed directly from 205 L (45-gallon) drums or a larger tank, place the drum or tank in a spill containment structure and keep an appropriate spill kit on hand.

10.4. **Electrical Safety**

10.4.1. Only qualified electricians should design and install electrical systems and wiring and carry out all repairs to electrical equipment**.**

10.4.2. Employees who use electrical tools and equipment should be trained and should refer to the manufacturer's operator manual for safe operating procedures, especially the first time an item is used or if they have not used the equipment recently.
10.4.3. Avoid electrical hazards by following safe work practices (SWP). An electric shock can be fatal when current passes through the body. Electrical burns can be extremely serious and may even require amputation of digits or limbs.
10.4.4. Any moisture may provide a path for electricity and result in shock. Keep all appliances, power tools, plugs and cords away from water and damp surfaces.
10.4.5. Make sure all electrical equipment is properly grounded.
10.4.6. In the event of an electrical fire, always use a C-rated fire extinguisher – never use water, which will increase the risk of electrocution.
10.4.7. Use extreme caution when handling aluminum ladders or other conductive materials and prevent them from touching exposed overhead electrical wires, light bulbs or other conductors.
10.4.8. Do not work alone with or near high voltage electricity. Use the "buddy system" so emergency measures can be initiated if one person is injured.
10.4.9. Treat every wire as if it were energized or "live" until you confirm that it is not.
10.4.10. Clearly label the circuit breaker(s) and the main power emergency switch. Everyone should know the location and how to operate them to cut off power.

10.5. **Electrical Equipment**

10.5.1. The BCOC must ensure that employees use the correct power tool or appliance for the job. Securely store all equipment in its designated storage place when not in use. Keep items in good repair and free of dirt and grease; never use defective or worn tools or appliances.
10.5.2. Grip the plug and not the cord when unplugging a tool or appliance. Always handle plugs with dry hands.
10.5.3. Unplug tools, appliances and machinery before inspecting, cleaning, clearing a stoppage, or carrying out maintenance.
10.5.4. Make sure all electrical systems are correctly grounded. All circuits should be equipped with ground fault circuit interrupters (GFCIs) also known as earth leakage safety switches or residual current devices. GFCIs protect people from electrical shock, as they will interrupt the circuit before a fuse in a circuit breaker panel is triggered.
10.5.5. Keep the access clear around circuit panels and junction boxes. All employees should know the location of circuit breakers and fuses, especially for their immediate work area.
10.5.6. Minimize hazards caused by electrical cabling by burying, elevating or barricading exposed cables. Mark the location of any buried cables. Protect cords and cables from damage when they cross roads or passage ways. Secure or suspend electrical cords with non-conducting materials. Make sure that cables do not get wet.
10.5.7. Use only approved armored (teck) cable for burial.

10.6. **Electrical Cables, Power, and Extension Cords**

10.6.1. Make sure power cords use the appropriate voltage for the electrical grid system. Use cords with ratings appropriate for the job.

10.6.2. It is preferable to use only circuits with GFCIs. However, if there is no GFCI, use electrical cords that contain inline GFCIs. To use electrical cords that lack GFCIs may require a documented inspection program; therefore, it is usually cheaper and safer to purchase and use cords with inline GFCIs.

10.6.3. Visually inspect power cords before use. Make sure they are free of breaks in the insulation and have no taped splices. Inspect them for fraying and damage before each use. If damaged, cords should be repaired by an electrician or discarded.

10.6.4. Use the correct type and length of cord for the job. A power cord should be as short as possible for the job. A cord should never be near your feet where it may become a tripping hazard, or draped over a workspace or cooking surface where it may get caught.

10.6.5. Do not allow vehicles etc., to drive over power cords. Place the cord between planks for protection.

10.6.6. All electrical and repair work should only be carried out by qualified electricians.

10.6.7. Tag out defective tools and bring them to the attention of the supervisor for repair.

10.6.8. BCOC employees who conduct maintenance should be trained in and follow lockout procedures, as required.

10.6.9. Wear proper PPE when carrying out maintenance work (e.g., safety glasses and electrical rated footwear).

10.7. **Lockout and Tag Out**

10.7.1. The BCOC must develop a lockout and tag out program to be implemented during installation, maintenance and repairs of machinery and equipment.

10.7.2. Employees who work with machinery or carry out maintenance on electrical circuits should receive formal training to learn lockout and tag out procedures.

10.7.3. Issue each worker who maintains or services equipment that requires locking out a personal lock with only one key, which is kept by that person. Only that person may place the lock on a switch, valve, or circuit panel to lock out energy and only that person may remove the lock when work is completed. Each person who works on a machine or circuit places his or her personal lock on the switch and removes it. This prevents someone from inadvertently restoring the energy source.

10.7.4. Identify the machinery, equipment, or power system. Notify other affected employees that the lockout system will be implemented. Make sure no other employee will be harmed by shutting off the equipment or machinery.

10.7.5. Shut off the equipment or machine and make sure that all moving parts are completely stopped.

10.7.6. Identify and turn off (de-activate) all energy sources. Turn off the switches or valves or other energy isolation devices so the equipment is completely isolated from all energy sources. Dissipate stored energy through bleeding, blocking, or grounding etc.

10.7.7. Apply a personal lock to the switch or control of each energy-isolating device (energy source). Each person who will work on the equipment must apply their personal lock.
10.7.8. TEST the lockout to make sure it is effective and make sure each and every source of energy has been locked out. Before testing, it is essential to make sure all employees are clear, and no hazards will be created if the lockout fails.

10.8. **Batteries**

10.8.1. Cheap batteries are a false economy in the field.
10.8.2. The BCOC must ensure that employees follow the manufacturers' instructions when installing or recharging batteries.
10.8.3. Do not mix batteries. Use the same brand and chemical type. All batteries should be the same age – replace all of them at the same time.
10.8.4. Do not leave equipment switched on when the batteries are depleted. Remove depleted or damaged batteries. Do not leave them in equipment as they may corrode or leak and cause damage.
10.8.5. Pay attention to the expiry date on batteries in Personal Locator Beacons (PLB) and Emergency Locator Transmitters (ELT). Batteries should be replaced before the expiry date. Good batteries in ELTs should provide continuous transmission for 48 hours.
10.8.6. If you carry battery powered equipment in very cold weather, keep the items close to your body inside several layers of clothing to preserve the charge. Take them out to use briefly and replace them in your clothing as soon as possible.
10.8.7. Follow the recommendations in the manufacturers' operator manuals for communications and navigational equipment regarding rechargeable batteries and rechargers. Match the charger with the battery. Some batteries should be almost, but not totally depleted before recharging.
10.8.8. Store batteries in cool, dry, well-ventilated areas. Keep them away from any heat source, including direct sunlight.
10.8.9. Never store batteries with flammable or explosive materials or with food. Store batteries of like chemistry together – not mixed with other types of batteries.

11. FIRST AID

11.1. **First Aid Plan**

11.1.1. The BCOC will develop and document a First Aid Plan for the operational period at Base Camp.
11.1.2. The First Aid Plan will also include all excursions organized by the BCOC.
11.1.3. The First Aid Plan will identify the qualified person or people dedicated to the plan.
11.1.4. A qualified person must be either a Physician Assistant or a Nurse Practitioner.
11.1.5. The plan must identify the location of the first aid station at Base Camp and the required equipment to maintain adequate first aid for the Base Camp operational period.

11.1.6. The qualified person must always be available at Base Camp during the operational period.

11.2. **Responsibilities of the Qualified Person**

11.2.1. Participate in employee training to deliver information on medical services.
11.2.2. Conduct basic health screenings of all Base Camp employees, contractors, tenants and visitors.
11.2.3. Review, process and keep files of employee health records and related paperwork.
11.2.4. Organize, manage, and stock the Base Camp first aid station and all first aid kits for excursions.
11.2.5. Administer daily medications and keep daily logs for all treatments and medications.
11.2.6. Provide injury management and acute care for all employees, contractors, tenants, and visitors.

11.3. **First aid preparations for Base Camp for potential Incidents**

11.3.1. Common illnesses and disorders should be addressed as appropriate with isolation, disinfecting the area, and monitoring the health of the patient.
11.3.2. Initial treatment for life-threatening illnesses as appropriate.
11.3.3. Treatment for burns, scalds and sunburn.
11.3.4. Abrasion, sprains and broken bones caused by slips, trips and falls or transportation accidents.
11.3.5. Serious cuts and lacerations from chainsaws, axes or other cutting tools.
11.3.6. Specific injuries or illnesses due terrain or climate, such as hyperthermia or heat exhaustion, heat stroke, dehydration, animal attack and accidental exposure to bear spray.

11.4. **First Aid Communication**

11.4.1. The BCOC will post first aid contact information at central locations and at each communication station.
11.4.2. It will include the name(s) of the qualified person at Base Camp.
11.4.3. The telephone number, radio frequency or satellite phone number to reach the qualified person from any location at any time.
11.4.4. Operating instructions for both radio and satellite phone will be included.
11.4.5. Contact number(s) for the nearest medical treatment center and transportation providers (helicopter, fixed wing etc).
11.4.6. The times required to reach the medical center by every available means of transportation.

11.5. **First Aid Kits and Supplies**

11.5.1. First aid supplies and medications should reflect the anticipated injuries or illnesses, including those due to environmental conditions and diseases common in the area as determined from risk assessments.

11.5.2. First aid kits should contain sufficient supplies for the size and location of Base Camp. Include blankets, spine board, a basket stretcher(s) that fits in a truck or helicopter, as well as the appropriate quantity of oxygen, which is dependent on the time required to reach a medical treatment center.
11.5.3. Maintain kits so they are well stocked, clean and sterile and the contents are not expired.
11.5.4. During excursions, it may be necessary to stock medications that can be administered by people with advanced first aid training under the specific direction of the qualified person by radio or satellite telephone.
11.5.5. A suitable first aid kit should be present in every truck, ATV, snowmobile, boat, as well as in heavy equipment.
11.5.6. Employees involved in excursions should always carry an adequate first aid kit.

11.6. **First Aid Training**

11.6.1. The BCOC must ensure that all employees are certified in standard first aid and cardio pulmonary resuscitation (CPR).
11.6.2. Only the 16-hour first aid training that includes the transportation endorsement is acceptable by all jurisdictional Workers' Compensation Boards across Canada.
11.6.3. In addition to standard first aid, wilderness first aid training is required for all employees who participate in excursions.
11.6.4. CPR refresher training should be taken annually. Standard first aid requires recertification every three years. Advanced first aid training requires recertification every two years.

12. COMMUNICATIONS PLAN

12.1.1. Good communication promotes safe work, builds morale, and encourages the efficient use of time, equipment and personnel**.**
12.1.2. Because no single communications system or check-in schedule will suffice, it is the responsibility of the BCOC to develop and maintain safe work practices (SWPs) for routine and emergency communications.
12.1.3. The BCOC must assess the requirements of their work site(s) and take into account such factors as isolation, terrain, time of year, weather, means of transportation and other pertinent risks.
12.1.4. Lack of preparation and knowledge regarding communication equipment and procedures can have serious consequences.

12.2. **Responsibilities of the BCOC Regarding Communications**

12.2.1. Comply with occupational health and safety (OHS) regulations regarding required communications for employees working in isolated locations, working alone etc.
12.2.2. Comply with government requirements by obtaining all necessary and appropriate licenses to operate communication equipment.

12.2.3. Carry out a risk assessment to determine the most appropriate types of communication equipment for Base Camp.
12.2.4. Supply employees with sufficient, appropriate, and functioning communication equipment.
12.2.5. Make sure there is a fully functioning communications backup system for base camp and each excursion.

12.3. **Responsibilities of the BCOC Supervisor Regarding Communications**

12.3.1. Develop communications safe work practices (SWPs) for the project and communications procedures for site specific emergency response plans (ERPs).
12.3.2. Provide adequate training for employees regarding the communication SWPs and communication procedures in the ERPs. Make sure all employees are trained to use each type of communication equipment they may have to use.
12.3.3. Post operating instructions for all communication equipment in central and visible places and/or at each communication station. Operating instructions should accompany complicated portable equipment and communication equipment in vehicles, boats and aircraft etc.
12.3.4. Post ERP communication procedures in central and visible places and at each communication station. Emergency communication information should accompany all portable communication equipment and all vehicles, boats, aircraft etc.
12.3.5. Create and implement employee check-in schedules and a tracking system that complies with OHS regulations for various work situations and conditions at the project (e.g., working alone, excursion). The system should include a communications log.
12.3.6. Ensure the communication system is monitored 24/7.
12.3.7. Understand the idiosyncrasies of the service plan for the satellite telephone system so that an individual using a handheld phone is not suddenly left without service.

12.4. **Responsibilities of the BCOC Employees Regarding Communications**

12.4.1. Be trained to use all communication equipment at Base Camp. This is essential during an emergency when anyone may be required to use the equipment due to unusual or crisis circumstances.
12.4.2. When working on or off site, take all the communication equipment, contact numbers and frequencies that may be required. Verify that equipment is working and fully charged before departure and after being dropped off.
12.4.3. Adhere to check-in schedules, especially if you are working alone or change plans. Failing to check in may result in a needless search if you do not make contact at the scheduled time.

12.5. **Satellite Telephones**

12.5.1. Everyone needs training if satellite phones are used.

12.5.2. User instructions should be posted at the central location with a stationary satellite phone and always accompany every portable satellite phone.
12.5.3. Emergency situations are not the time to learn to use a satellite phone. Every person who may possibly be in the position to use a satellite phone in an emergency should be trained to use them.
12.5.4. Keep satellite phones in a waterproof and shockproof case.
12.5.5. Charge satellite phones each night or at the manufacturer's specified interval while in regular use and test them routinely when they are not in use.
12.5.6. For best transmission, set up the portable equipment in a location with wide access to the sky, as you will not know the precise location of the satellite that picks up and transmits a call.
12.5.7. When using a satellite communications system, locate the satellite dish so people do not come within 3.5 meters during transmission. The presence of a person or object in front of a dish may block the transmission.
12.5.8. While a properly installed satellite dish is grounded, everyone should stay away from the dish during a thunderstorm. The base is metal and may attract lightning, depending on the location. No one should stand in front of the antenna; satellite dishes emit radio waves.

12.6. **Two-Way Radios**

12.6.1. Make certain there are enough two-way radios (including batteries and rechargers) and other portable equipment for all operations. Allow for loss and breakage. In very remote areas, be sure to take enough equipment to include supplies for emergency caches.
12.6.2. Some two-way radios include a GPS unit. It is strongly recommended that any person working alone be equipped with a combination GPS/radio unit. A person can be located immediately when they engage the radio "send" button.
12.6.3. Verify that you have the proper radio setup to communicate with aircraft, if applicable.
12.6.4. Repeater stations can be installed to increase the range.
12.6.5. In some locations two-way radios (walkie-talkies) that can accommodate several types of antennas are more versatile.
12.6.6. Check that the project uses radios with the same frequencies as the contractor's radios. Program the frequencies into each radio – base station and handhelds.
12.6.7. Predetermine which frequency to use for ground personnel to communicate with an aircraft pilot (e.g., traverse support). This may vary with individual aircraft.
12.6.8. Radio frequencies used should allow communications with outside camps and other contacts. In some areas there may be a common frequency used by industry over which help can be readily obtained.

12.7. **Emergency Locator Devices Personal Locator Beacon**

12.7.1. A Personal Locator Beacon, a device containing a small radio frequency transmitter and a GPS unit, is designed to be carried by an individual in remote areas away from normal emergency response services.

12.7.2. In very remote areas it may be advisable to equip employees with PLBs that tie in with the Cospas-Sarsat system. When a project uses them, a protocol system must be set up to avoid launching a full-scale search when a charter aircraft can reach the person in distress. Make sure employees know how to cancel a false alarm or the company may be required to pay a large false alarm charge.

12.7.3. A PLB must only be activated in a distress emergency where there is serious danger to human life and only in areas where cell phone coverage or other communications methods such as two-way radios or satellite phones are not available.

12.7.4. Anyone using a PLB should be familiar with the operator's manual. Use the correct batteries and make sure they are fully charged before departing on a long trip. Replace batteries according to the manufacturer's directions.

12.8. **Emergency Position Indicating Radio Beacon (EPIRBs)**

12.8.1. Each EPIRB has an identification number kept on file by the National Search and Rescue Secretariat (NSS) in Canada. The registration should be kept up to date.

12.8.2. Employees using boats should carry a regular 406 EPIRB unit that floats and will activate at a specified depth when it contacts water.

12.9. **Emergency Locator Transmitters (ELT)**

12.9.1. Pilots of charter aircraft should indicate the location of the ELT in the aircraft to passengers and describe how to remove and manually activate the unit in the event of emergency.

12.10. **Communication Equipment Training**

12.10.1. The BCOC is responsible for ensuring that employees are trained to use communication equipment correctly.

12.10.2. Train employees to correctly set up and operate the communication equipment they will use when working both on and off the site.

12.10.3. When a project or camp uses a satellite communications system, make sure there is a backup system. Make sure people are trained to operate both systems. Post concise operating instructions for both systems at the stations (including the muster station, which should have backup communication equipment).

12.10.4. For emergency purposes the pilot should train all employees who use air support regarding the location, removal, and positioning of the ELT so it transmits the maximum signal.

12.10.5. Employees who do intermittent field work should update their training so they are knowledgeable about current communication equipment. Employees visiting a

project could hinder safety during an emergency if they cannot use the equipment properly.

13. Traversing Safety

13.1.1. Traversing is inherently risky, and the risks are greater when individuals are not sufficiently aware of local hazards.

13.1.2. Lack of training in safe methods of traversing (including training by experts), lack of helicopter support, traversing alone or with too small a crew can contribute to an increased risk of injury or death.

13.2. **Risks and Hazards of Traversing**

13.2.1. The following are common hazards associated with traversing:

13.2.1.1. Slips, trips and falls caused by working on steep, rough or slippery ground, wearing inadequate footwear, and balance difficulties when carrying heavy packs.

13.2.1.2. Impact injuries caused by flying rock chips or rock breaking away when overhead.

13.2.1.3. Risk of wildlife attacks: bears.

13.2.1.4. Health risks caused by temperature extremes, high altitude, unsafe drinking water, local diseases, inadequate first aid support.

13.2.1.5. Hypothermia and hyperthermia are caused by wearing inadequate clothing when working in temperature extremes, getting cold and wet, dehydration, working alone and not recognizing the symptoms.

13.2.1.6. Getting lost caused by inadequate training to use navigational equipment, loss of battery power for equipment, working with insufficient map coverage for the area, panic.

13.2.1.7. Stranding caused by transportation breakdown, communication breakdown, injuries, rising water levels due to weather, flash floods, getting lost.

13.2.1.8. Potential survival situation caused by injuries, transportation breakdown, falling into water, breaking through ice, animal attack, getting lost, not following the emergency response plan (ERP)

13.2.1.9. Risk of being shot by hunters when traversing during hunting season.

13.3. **BCOC Responsibilities for Safe Traversing**

13.3.1. Make sure the health and safety of each employee is protected at every work location including field crews on traverse.

13.3.2. Comply with occupational health and safety (OHS) legislation and regulations; this is particularly relevant regarding employees who traverse alone.

13.3.3. Develop safe work practices (SWPs) and emergency response plans (ERPs) that address the risks and hazards related to traversing. Should an accident occur, the BCOC cannot demonstrate defense of due diligence when it lacks SWPs and ERPs.

13.3.4. Make sure employees are trained by qualified personnel (trainers) to use their equipment and they know how to mitigate risks and hazards to traverse safely.

13.3.5. Make sure supervisors are competent and trained and provide appropriate supervision of their employees.
13.3.6. Consider hiring specialists when working in hazardous terrain. Consider hiring knowledgeable, experienced local people who know the land when it is appropriate. They may help plan, train workers or participate in traverses.
13.3.7. Provide sufficient and appropriate equipment to enable employees to traverse safely.
13.3.8. Provide employees with current information regarding local health risks (e.g., hepatitis, malaria, Chagas disease). Inoculations should be up-to-date, especially for tetanus and hose required for overseas work.
13.3.9. Make sure employees are in good health and are physically capable of traversing safely.

13.4. **BCOC Supervisors Responsibilities for Safe Traversing**

13.4.1. Perform risk assessments of the project area and include analyzing traverse areas.
13.4.2. Develop written site specific SWPs and ERPs that address the risks and hazards identified in the risk assessments.
13.4.3. Provide training to make sure employees are competent in the use of their compass, GPS (global positioning system) unit, maps, communication equipment and are familiar with the SWPs and ERPs.
13.4.4. Training should be a part of, but not be limited to, site orientation, meetings and daily routine planning sessions. Training should include other means that make sure traversing employees are aware of the risks and hazards they face.
13.4.5. Provide appropriate supervision for employees on traverse. Provide a tracking system fo traversing employees and make sure they record details of their planned traversing routes and check in when they change plans. Make sure employees follow the SWPs.
13.4.6. Understand the duties of and work with employees hired for special work (e.g., trained bear guards, mountaineering or avalanche specialists).

13.5. **BCOC Employees Responsibilities for Safe Traversing**

13.5.1. Be aware of the risks and hazards associated with the project site and traverse areas.
13.5.2. Follow SWPs regarding traverse safety. Follow check-in schedules, keep track of your location and use personal protection equipment (PPE) while traversing.
13.5.3. Be prepared. Know the weather forecast and always carry appropriate clothing and gear, including portable communication and survival equipment.
13.5.4. Work within your physical limitations and do not take chances.
13.5.5. Follow training provided by the BCOC and instructions provided by the BCOC supervisor.
13.5.6. Build up physical stamina and endurance before starting field work to prevent injuries due to exhaustion and physical overexertion.

13.6. **Field Trips and Group Traversing**

13.6.1. When traversing from boats, make sure everyone in the party knows the planned route, the destination, and the distance. Decide whether to hide the keys on or near the boat or have someone carry a second set.

13.6.2. Everyone should know what equipment is required for the traverse. As a minimum, always take first aid and survival kits and water, as required.

13.6.3. The party should proceed at a pace so that no single person or small group lags behind or forges ahead. This is especially important when traversing in remote areas where some participants are not familiar with the area, customs or language.

13.6.4. Obtain permits or permission from the authorities having jurisdiction (AHJs) to enter or cross on the land, as required.

13.6.5. Check for sacred sites and try to plan traverses that avoid crossing such sites.

13.7. **Development of Safe Work Practices**

13.7.1. Comply with the applicable jurisdictional regulations regarding working alone, wildlife, firearms, relevant transportation regulations, as well as federal, provincial, territorial and municipal regulations. Obtain all required permissions and permits.

13.7.2. Develop SWPs that address site specific risks and hazards. These may include dangerous terrain such as cliffs, canyons, specific unstable ground, crossing water bodies, the use of vehicles or aircraft, firearms and dangerous wildlife, potential security risks, and the use of audio entertainment equipment.

13.7.3. Develop site specific ERPs. Develop procedures that address potential injuries, wildlife encounters, survival issues and rescues, including evacuation from the most remote and difficult terrain in the traverse areas.

13.7.4. Traverse in pairs using the “buddy system”. Traversing alone is not recommended. Follow all applicable regulations when traversing alone is permitted.

13.7.5. Plan traversing routes carefully using the best possible maps, air photos and local knowledge. Plan routes that are safe – no route or sample is worth an accident. Consider worker fitness, required emergency caches, and potential support from helicopters, boats or ATVs to gain safe access to remote places.

13.7.6. Carry sufficient equipment, gear, and emergency supplies appropriate for the terrain, climate, and degree of risk. This includes good footwear, clothing, appropriate communication equipment, compass and maps, GPS unit, Personal Locator Beacon(PLB) as required, extra batteries, a personal survival kit, first aid kit, and enough food and water to cope with an emergency overnight stranding or injury.

13.7.7. Develop a system to keep track of all employees including field crews on traverse. Record the following in a central location: all traverse routes, drop off and pick up points and their alternatives, estimated times of arrival and return, potential pickup locations for emergencies and other pertinent information.

13.7.8. Maintain a whiteboard or maps at Base Camp with the tracking system from check ins throughout the day as they are called in.

13.7.9. Set up and adhere to a communication schedule between Base Camp and employees on traverse. Employees should notify Base Camp when they change plans, encounter problems such as a bear, or are delayed.

13.8. **Emergency Response Plans-Traversing**

13.8.1. Develop ERPs that will best use local resources, contractors and government resources to provide medical care, evacuation and location of missing or overdue persons.

13.8.2. Incorporate traversing ERPs into Base Camp ERPs.

13.8.3. Employees and personnel designated to assist during an emergency should be fully informed of the plans, receive relevant training, and demonstrate knowledge of how to implement them.

13.8.4. Test the plan to make sure all the contact numbers work.

13.8.5. Each excursion party should have a written plan that includes what to do if crew members become separated, are injured or involved in an accident, face a survival situation, are late reporting in or are missing. While traversing, employees should note potential hazards and discuss any potentially dangerous developments while on route.

13.8.6. In very remote areas consider equipping employees with Personal Locator Beacons (PLBs) that tie in with government search and rescue operations. If they are carried, a protocol system must be set up with the government to avoid launching a full-scale search when a charter aircraft can reach the person in distress.

13.8.7. Inform your supervisor and co-workers about all allergies, medication requirements or adverse reactions you might experience and teach co-workers to recognize symptoms of any impending attack. Co-workers need to know how to administer medication (e.g., insulin, epinephrine).

13.9. **Training for Safe Traversing**

13.9.1. Employees should receive the following training before traversing:

13.9.1.1. Training to recognize, avoid and address local risks and hazards in the field area, as required**.**

13.9.1.2. Training in BCOC’s site specific SWPs regarding traversing.

13.9.1.3. Be proficient in the use of all navigational, communication, emergency equipment and aids.

13.9.1.4. Trained in the risks and hazards of the area, which may include hazardous terrain, hypothermia, hyperthermia, high altitude, dangerous wildlife, and weather-related hazards.

13.9.1.5. Be aware of all site transportation risks and hazards (aircraft, vehicles, ATVs, boats, as appropriate).

13.9.1.6. ERP procedures.

13.9.1.7. Appropriate survival strategies.

13.9.1.8. Special equipment required for field work (e.g., chainsaw, ice axe, crampons, ropes).

13.9.1.9. Advanced first aid, as required.

13.10. Equipment for Traversing

13.10.1. Satellite phone, two-way radio or mobile/cell phone, as appropriate.
13.10.2. Maps and air photos.
13.10.3. Compass – Attach it to yourself so it won't get lost; verify the magnetic declination.
13.10.4. GPS unit.
13.10.5. Extra batteries for GPS and communication equipment.
13.10.6. Knife or —Leatherman‖ type multi-tool – keep the knife blade very sharp.
13.10.7. Matches in waterproof container – in several places including in a pocket.
13.10.8. Lighter, additional fire making equipment.
13.10.9. 10-15 m paracord or light strong rope.
13.10.10. Emergency space blanket or light mountaineering tarp.
13.10.11. Small first aid kit – plus a 3-day supply of personal medications including epinephrine, as required.
13.10.12. Helicopter signal cloth – fluorescent orange.
13.10.13. Signal mirror.
13.10.14. Rain gear.
13.10.15. Extra warm clothing in waterproof bag.
13.10.16. Water (2 litres minimum).
13.10.17. Sunscreen.
13.10.18. Hat(s) – for sun, cold.
13.10.19. Flares and flare guns – good ones.
13.10.20. Whistle
13.10.21. Bug spray
13.10.22. Mosquito head net and/or jacket (depending on region).
13.10.23. Bear bangers and pepper spray, as appropriate
13.10.24. Altimeter (for mountainous areas)
13.10.25. Sunglasses
13.10.26. Spare glasses – if you need them to read your map.
13.10.27. Water purification tablets and/or iodine (follow instructions carefully).
13.10.28. High energy food packets (e.g., chocolate bars, dried fruit, nuts).
13.10.29. Extra pair of socks
13.10.30. Sample bags and sampling tools.
13.10.31. Axe or folding saw – mandatory if cutting helicopter pads or there is potential for
13.10.32. remaining out overnight in wooded regions.
13.10.33. Toilet paper
13.10.34. Small roll duct tape
13.10.35. Wrist watch
13.10.36. Personal Locator Beacon (PLB), as required.

13.11. Clothing for Traversing

13.11.1. Avoid clothes that constrict freedom of movement. Loose clothing is cooler than tight clothing in hot temperatures. Wear layers that are loose enough to allow air to be entrapped for greater insulation from cold temperatures. Remove layers as necessary to control sweating.

13.11.2. Clothing should provide protection from various environmental hazards (e.g., heat, cold, rain, snow, wind, UV radiation, insects).

13.11.3. Dress appropriately (in layers) to protect yourself from exposure to weather conditions.

13.11.4. Minimize water accumulation in clothing from sweat, rain or snow. Innermost layers should wick moisture away from the skin surface.

13.11.5. Rain gear should be suitable for the temperature and humidity.

13.11.6. Boots should suit the climate, the terrain and the required work. Boots should provide good ankle and foot support for working in rough terrain.

13.12. Traverse Planning Tips

13.12.1. Be aware of specific hazards that will vary each day when planning the route, the drop off and pick up points and alternates. Avoid impassable terrain and potentially very hazardous areas.

13.12.2. Develop a check-out routine to use before field parties leave camp. Verify that each crew member has recorded the planned traverse route, the drop off and pick up points, the estimated time of return, and has put all their essential gear and supplies in their day pack.

13.12.3. Be prepared for changing conditions that may impact your progress on traverse, such as lightning storms, inversion or ice fog layers in mountains, descending cloud cover, strong winds and heavy or torrential rains, snow squalls, whiteouts, rapid temperature changes. These may limit visibility and affect your ability to establish your location and/or the time and place of a scheduled pick up.

13.12.4. Plan easier traverses early in the season. Plan difficult traverses for a time when people are in the best physical condition and the weather conditions are most suitable. Try to schedule difficult traverses for times when extra crew, a helicopter, or other support will be available.

13.12.5. Plan to complete traverses in daylight and allow plenty of time to return to camp before dark. Be careful late in the day when you are tired and feeling less agile. Many slips, trips and falls occur at this time.

13.12.6. When planning a long traverse, have a backup plan in case it cannot be completed.

13.12.7. Consider altering the normal daily routine to take best advantage of the most comfortable working conditions.

13.12.8. Allow extra time for traverses in bad weather or through rough areas. Haste often results in injury.

13.12.9. Plan for places where emergency caches can be placed and where emergency response pickups and drop offs can be made.

13.13. Working Alone

13.13.1. If the BCOC decides that working alone is necessary, they should identify all risks and hazards to the employee and take measures to eliminate or mitigate the hazards to the lowest practical level.

13.13.2. The BCOC must provide appropriate training to address any additional and increased risks and hazards that result from working alone.

13.13.3. The BCOC must develop written safe work practices (SWPs) and set up and implement a tracking and check-in procedure.

13.13.4. The emergency response plan (ERP) should include required actions to address a missed check-in and appropriate emergency rescue procedures.

13.13.5. Excellent communication equipment in good working order and with adequate local coverage must be provided to the employee.

13.13.6. Top quality and appropriate safety equipment, such as bear deterrents, emergency shelter, survival caches etc. must be provided to the employee.

13.13.7. Employees should realize that if they are asked to work alone, it is imperative that they evaluate their level of experience and capabilities before deciding and must carefully evaluate all the risks and hazards.

13.13.8. They must confirm that all equipment is in good working order and verify that communication equipment functions by initiating communication at the onset of the job as soon as they are dropped off or reach the work location.

13.13.9. They must strictly adhere to tracking and check-in procedures and immediately notify the contact person whenever there is a change of plans.

14. Boats and Inflatables

14.1. General

14.1.1. When boats are used for excursions, it is important to select the appropriate boat and motor for the type of waters where they will be used; use the largest, safest boat available for the job.

14.1.2. Operators should be thoroughly familiar with the characteristics and limitations of their boat and motor; they should know their personal boating capabilities and not exceed them.

14.1.3. When working on boats in unfamiliar or hazardous waters or where navigation is difficult, the BCOC should consider hiring certified pilots or experienced locals who are familiar with the risks and hazards of the project area.

14.1.4. Due to the possibility of capsizing and falling overboard, everyone who uses boats should know how to swim.

14.1.5. Training in boat recovery and rescue skills, cardiopulmonary resuscitation (CPR) and other resuscitation skills is essential.

14.1.6. If you work in cold water areas, be prepared to deal with cold water immersion hypothermia at all times and wear a personal flotation device (PFD) with appropriate thermal insulating properties.

14.2. **Risks and Hazards of Boating**

14.2.1. Death due to drowning may be caused by not wearing a PFD (after capsizing, falling overboard) or trying to swim to shore without wearing a PFD after capsizing, swamping or falling overboard.

14.2.2. Capsizing may be caused by using the wrong boat for the body of water, lack of training, lack of piloting skills, rogue waves and/or swamping or sudden storms or winds.

14.2.3. Injuries may be caused by exposure to bad weather or sun caused by inadequate clothing (e.g., hypothermia, sunburn), slips and falls on deck or while boarding the boat or fire and/or explosion due to improper fueling procedures.

14.2.4. Stranding may be caused by engine breakdown, lack of spare parts, lack of training to read charts, lack of navigation skills, lack of navigation and/or communication equipment, lack of required safety equipment, adverse weather or changing tides.

14.3. **BCOC Responsibilities Regarding Boats and Inflatables**

14.3.1. The BCOC must develop written safe work practices (SWPs) for the use of boats, motors and for employees who work near water.

14.3.2. The BCOC must have written emergency response plans (ERPs) that address potential emergencies related to the use of boats, motors and for employees who work on or near water.

14.3.3. Make sure supervisors are trained so they are competent; provide training and education for employees regarding SWPs, ERPs and hazards related to working on water and with boats.

14.3.4. Carry out inspections and maintenance of boats and motors, docks etc.

14.3.5. Monitor the use of boats and implement consequences when SWPs etc., are not followed.

14.3.6. Keep records of all training, accidents, incidents and corrective actions, mitigation of hazards, inspections, maintenance, infractions etc., that apply to boats and their use.

14.3.7. Provide required personal protective equipment (PPE).

14.3.8. Carry adequate insurance.

14.4. **BCOC Supervisors Responsibilities Regarding Boats and Inflatables**

14.4.1. Implement company SWPs and those in the manufacturers' operator manuals for boats and motors.

14.4.2. Develop site specific SWPs that address hazards associated with boats and working on water, as required.

14.4.3. Advise, instruct, and monitor employees and contractors regarding company SWPs health and safety regulations etc., and potential hazards of using boats and motors.

14.5. **BCOC Operators Responsibilities Regarding Boats and Inflatables**

14.5.1. Follow SWPs and training regarding boats provided by the BCOC.

14.5.2. Be familiar with any warning decals on boats and associated equipment.
14.5.3. Use PPE and safety equipment as directed.
14.5.4. Report hazards, dangers and defective boats and equipment to a supervisor.

14.6. **Safe Operating Guidelines for Boats and Inflatables**

14.6.1. Comply with the manufacturer's operator manual regarding safe operating procedures for the boat and/or motor**.**
14.6.2. Be familiar with the Small Commercial Vessel Safety Guide if the boat is of this class, or equivalent.
14.6.3. Comply with the Canada Shipping Act, 2001 regarding registration and/or licence requirements for company owned boats.
14.6.4. All operators of pleasure craft are required to possess a Pleasure Craft Operator Card (PCOC).
14.6.5. Wear an approved personal flotation device (PFD) or life jacket suitable to your body size.
14.6.6. Know and adhere to recommended ratings for load, number of occupants and horsepower on the boat. Make sure the safety compliance notice, the capacity label and/or license number is displayed, as required.
14.6.7. Use boats and motors that are fully equipped, safe and appropriate for the bodies of water where you work. Do not use defective equipment.
14.6.8. Employees who use boats should be adequately trained and should be checked out by trained personnel before proceeding with work. More than one person on board should be able to operate the boat and motor in case of emergency.
14.6.9. Inspect the boat and motor before heading out. Make sure all the required equipment, emergency supplies and adequate fuel for the journey are on board. Plan for 1/3 fuel outbound, 1/3 fuel inbound, and 1/3 fuel in reserve.
14.6.10. Have an emergency response plan (ERP) in place. Develop procedures for dealing with emergencies, including breakdowns, capsizing, a missing or overdue boat, and cold-water immersion.
14.6.11. Establish a communication schedule with routine check-in times. Employees using boats should adhere to the check-in schedule and inform Base Camp if plans are changed while on route.
14.6.12. File your daily trip plan (boating route) with Base Camp and the person responsible for the tracking system. That person should be familiar with the ERP and know what to do if the boat does not arrive or return as planned, and what to do if you do not check in as scheduled.
14.6.13. Travel at a safe speed appropriate for the water conditions and maintain control of the boat at all times.
14.6.14. Be aware of the existing navigational conditions, taking into account factors such as tides, currents, ice, rapids, and potential obstructions. Have appropriate navigational charts and maps and tide tables.
14.6.15. Do not boat during inclement weather. Head for shore if bad weather threatens. Do not take chances.

14.6.16. Do not operate a boat at night except with appropriate navigation lights and in familiar waters.
14.6.17. Travel as close to shore as safely possible in case problems develop.
14.6.18. Refrain from smoking on any boat powered by an outboard motor.
14.6.19. Do not operate a boat if you have consumed alcohol or if you have taken medication or drugs that might affect your ability to operate the boat.
14.6.20. Contract a competent, experienced, licensed pilot for large boats and wherever there are difficult navigational hazards or other local hazards (weather, tides) beyond the skill level of the employees' using boats.
14.6.21. Prior to beginning a trip, operators should instruct passengers where basic equipment is located – life ring, boat hooks, fire extinguisher, lines, first aid kit etc., in case they are asked to retrieve them in an emergency.
14.6.22. It is best to operate a boat with at least one crew member. It is advisable to carry a satellite phone, which is the most dependable means of communication, especially in a remote area.

14.7. **Safe Loading Guidelines**

14.7.1. Know and do not exceed the maximum load and allowable number of passengers for the class of boat. The permissible gross load capacity includes the weight of the engine, fuel, gear and all passengers. Make an extra trip, if necessary.
14.7.2. Distribute the passengers and load so that the boat is "trim". Keep loads centered and as low as possible.
14.7.3. When travelling with a group of boats, distribute the food, equipment and survival kits as equally as possible between them. This reduces the chance of placing the entire field party at risk with the loss of a single boat.
14.7.4. Secure all large items with strong ropes and cover them with heavy tarpaulins to prevent shifting or loss if the boat capsizes. Passengers must not get trapped with cargo should the boat capsize.
14.7.5. Load inflatable boats so no sharp or pointed objects can pierce or damage the inflatable hull.
14.7.6. Never load or unload a boat unless it is securely moored to a dock or is properly beached.
14.7.7. If loading in calm water, allow enough freeboard for rougher water conditions.
14.7.8. If travelling in rough water, make sure the boat has enough ballast for stability.
14.7.9. Transport important cargo items in waterproof packs or several layers of plastic bags to keep them dry. Tie them to the boat. Keep essentials in your pockets (e.g., waterproof matches, whistle, knife, keys, identification papers and licenses).
14.7.10. Follow Transport Canada regulations for the transportation of dangerous goods.

14.8. **Recommended Equipment**

14.8.1. The following equipment should be available on boats:
14.8.1.1. First aid kit, size appropriate for size of crew and region.
14.8.1.2. Radio, satellite telephone, as appropriate for region.

14.8.1.3. Location equipment – GPS unit, compass, up-to-date charts.
14.8.1.4. Emergency Position Indicating Radio Beacon (EPIRB), as required.
14.8.1.5. Signal flares, signal mirror.
14.8.1.6. Water.
14.8.1.7. Survival kit, size appropriate for size of crew and region.
14.8.1.8. Axe.
14.8.1.9. Food.
14.8.1.10. Additional clothing.
14.8.1.11. Additional Class BC Fire extinguisher(s) – a 5-BC is very small.

14.9. **Communication Guidelines for Boats and Inflatables**

14.9.1. Always be able to report emergencies to obtain help.
14.9.2. Allow operators to respond to emergencies from other boaters.
14.9.3. Keep in touch with the Base Camp.
14.9.4. Keep informed about weather forecasts and warnings (if available in the area where working). This requires a marine receiver or marine radio.

14.10. **Emergency Communications**

14.10.1. A marine VHF-DSC radio connected to a GPS receiver provides reliable emergency communications for coastal Canada. Use channel 16 for emergency calling purposes. Use channel 70 for emergency DSC (digital) communications.
14.10.2. Satellite telephones provide good communication but do not alert other vessels that you are in distress or provide a signal for search and rescue to follow in the event of an emergency. Be trained to use a sat phone correctly as they require special procedures. Post instructions onboard and keep them with the sat phone.
14.10.3. Emergency Position Indicating Radio Beacon (EPIRB): These are buoyant radio distress beacons that can be manually activated, or they can float free from a sinking or overturned vessel. They transmit for hours. EPIRBs must be registered with the Canadian Beacon Registry at 1-877-406-7671.
14.10.4. VHF radio channel 16 is used for emergency and calling purposes only. Once you call another boat on channel 16, take your conversation to a working frequency to continue.
14.10.5. Keep the radio tuned to channel 16 so you are aware of emergency calls.
14.10.6. VHF channel 70 should be used only for DSC (digital) communication and not for voice communications.
14.10.7. Urgent messages: When a situation requires immediate urgent action (e.g., a mechanical breakdown), but is not a life-threatening distress situation, you may interrupt another transmission as soon as possible by announcing PAN-PAN, PAN-PAN, PAN-PAN. Proceed with your message when communication traffic clears. An urgent message has priority over all other messages except distress calls. Examples of urgent situations are loss of power or loss of steering, and you need a tow.

14.10.8. Distress messages: Use channel 16. When you are threatened by grave and life-threatening danger requiring immediate assistance, announce MAYDAY, MAYDAY, MAYDAY. Never use MAYDAY unless the emergency is imminently life threatening.

14.10.9. Give this information when you send an urgent or distress message: give the name of your vessel; repeat it three times; give the call sign; state the position of the vessel; describe the nature of the emergency; state type of assistance require and state how many people are on board.

14.11. Guidelines for Motors

14.11.1. Read the manufacturer's operator manual carefully and follow the safe operating procedures.

14.11.2. Use a motor appropriate for the job required of the boat. For example, an inflatable that must handle heavy surf requires a long shaft motor, but a short shaft motor would be preferable on navigable rivers. Do not use a motor that is too powerful for the size of the boat. Do not twin motors on a boat unless the motors and boat are designed for this purpose.

14.11.3. Secure the motor and tie it to the boat; the motor mounting clamps may loosen due to vibration.

14.11.4. Sit or squat while starting an outboard motor. Do not stand.

14.11.5. Know the fuel consumption of the boat and motor combination. Check the fuel level before departure and check frequently during the trip. Use a dipstick; don't depend on a gauge. Reserve more than half the fuel for your return trip. A good plan is to count 1/3 fuel for the outbound trip, 1/3rd fuel for the return trip, 1/3rd fuel for emergency consumption.

14.11.6. Carry more fuel than required for the worst conditions or in case of an emergency. For example, boats consume more fuel when the water is rough. If necessary, carry extra fuel and oil, mixed to the correct ratio, in CSA approved containers. Label the contents correctly (e.g., mixed boat gas 50:1).

14.11.7. To avoid damage, do not use the motor in shallow water. When in doubt about the depth of water, reduce your speed and post a lookout at the bow, if possible, to watch for underwater hazards. Lift the motor and paddle the boat. In swampy areas, check that the propeller does not become fouled with vegetation and that there is a proper discharge stream of cooling water. If you need to clean weeds from the propeller, make sure the motor is stopped – not just in neutral.

14.11.8. Unhook the fuel hose and hoist the motor when you beach a boat for more than 15 minutes.

14.11.9. Repair outboard motors on land rather than on water, whenever possible.

14.11.10. Do not wear loose clothing that might get caught in motors. Never operate an outboard with the shroud removed as loose clothing can easily get caught in the flywheel.

14.11.11. Consider travelling with a second boat and/or carry a backup motor that uses the same hose linkage as the main motor. Otherwise, a separate tank of fuel is required for the backup motor.

14.12. Fueling Procedure

14.12.1. Fueling should be carried out on shore. Should a fire or explosion occur, then the crew will be safely on land.

14.12.2. Secure the boat to a dock or on shore.

14.12.3. All passengers are required to be on shore if they are not helping with fueling.

14.12.4. Fuel only when the motor is shut off, fuel in a well-ventilated place.

14.12.5. Remove portable fuel tanks to shore to fill them.

14.12.6. When fueling inboard motorboats with non-removable fuel tanks, it is essential to prevent fumes from entering the boat and accumulating inside the cabin or in the bilges. If fumes are present in such places, a spark may cause an explosion. Complete the following practices before fueling begins:

12.12.6.1. Shut off all electrical switches and all motors on board, including portable radios.

12.12.6.2. Extinguish all open flames including any pilot lights.

12.12.6.3. Close all hatches, doors and windows on boats with cabins.

12.12.7. Do not smoke. Do not allow flames or sparks in a fueling area.

12.12.8. Use the correct fuel and ground the nozzle against the filler pipe. Allow fuel to flow into the fill-pipe only as fast as the pipe can handle. Do not overfill the tank. Close the tank cap securely when fueling is done.

12.12.9. Clean up any fuel spills completely with spill kit materials. Dispose of contaminated materials in appropriately marked containers.

12.12.10. Restart an outboard motor after all spills are completely cleaned up.

14.13. Training for Boats and Inflatables

14.13.1. A minimum level of knowledge for everyone working on boats is the Power Craft Operator Certificate (PCOC).

14.13.2. Anyone working on boats in excess of 6-7 meters should learn navigation and safe boating skills in classes taught by professionals.

14.13.3. Employees should know general boat handling techniques and procedures appropriate for the type of boat and bodies of water where they will operate and know the following:

14.13.3.1. General boating safety awareness.

14.13.3.2. Maintenance of equipment and troubleshooting for mechanical problems.

14.13.3.3. Load management skills.

14.13.3.4. Shore and dock landings and departures under a variety of circumstances.

14.13.3.5. Anchoring and securing methods.

14.13.3.6. Boat-handling techniques for tides and currents, rough weather conditions and ice conditions (as relevant).

14.13.3.7. Rescue practice.

14.13.3.8. Crew responsibilities in the event of an emergency.

14.13.3.9. Learn the capabilities of your boat. These include speed, fuel consumption, handling abilities under various sea conditions. Know the bottom clearance of the boat.

15. WILDLIFE (BEARS)

15.1.1. Bear encounters may be a threat to the safety of employees and visitors and to Base Camp.
15.1.2. All employees working at Base Camp should receive bear safety training.
15.1.3. Employees need to know how to maintain camps to prevent attracting bears, how to avoid bear encounters and understand bear behaviors, details of the bear response plan, and contact information for the local government wildlife agency.
15.1.4. Employees who traverse should learn about preferred bear habitats, bear behaviors, how to minimize contact with them, and how to react during an encounter.
15.1.5. The BCOC must hire trained bear guards who will carry firearms on traverse.

15.2. **BCOC Responsibilities Regarding Bears**

15.2.1. Take all reasonable precautions to protect the health and safety of every employee.
15.2.2. Comply with jurisdictional occupational health and safety (OHS) and wildlife legislation and regulations.
15.2.3. Perform risk assessments to determine the threat from wildlife, including wildlife habitats in traverse areas.
15.2.4. Develop written safe work practices (SWPs), as required, that address bear risks. SWPs should address the observations and conclusions of risk assessments.
15.2.5. Make sure supervisors are trained, competent and provide supervision of employees who work where bear encounters may be a risk.
15.2.6. Provide sufficient and appropriate equipment and support so employees can work and travel safely.
15.2.7. Provide training to make sure employees are knowledgeable about (SWPs) and emergency response plans (ERPs) that address bear risks and hazards, knowledgeable about potential bear threats and how to react to encounters, and competent in the use of their personal protective equipment (PPE) and deterrent equipment.

15.3. **BCOC Supervisors Responsibilities Regarding Bears**

15.3.1. BCOC supervisors should develop written site-specific SWPs, as necessary. Make sure employees comply with the SWPs.
15.3.2. Make sure employees comply with applicable wildlife legislation and are prepared for potential bear related emergencies covered in the site ERPs.
15.3.3. Develop site bear response plans and work with trained bear guards, as required.

15.4. **BCOC Employees Responsibilities Regarding Bears**

15.4.1. Comply with applicable wildlife legislation and follow SWPs regarding bears.
15.4.2. Be familiar with the site ERPs, regarding bear related emergencies, which may be life-threatening.
15.4.3. Take appropriate measures to prevent near attacks.
15.4.4. Prevent animals from becoming human habituated and food conditioned. Never feed wildlife and keep a clean camp so animals are not attracted by odors and garbage.

15.5. **Precautions and Preventions**

15.5.1. Seek local knowledge from wildlife officials, elders and others with expertise regarding bears in the Base Camp area.
15.5.2. Use the observations and conclusions of risk assessments when choosing traverse routes.
15.5.3. Develop site specific bear response plans appropriate for the local species of bears. Plans should address various scenarios including when a bear is sighted on traverse, near Base Camp and if a bear enters Base Camp. Training sessions should include drills both in daylight and at night to address potential bear emergencies.
15.5.4. Adhere to SWPs, especially regarding camp cleanliness, food handling and waste management. Minimize bear attractants.
15.5.5. Hire trained bear guards to protect traversing employees, visitors and Base Camp property. Trained bear guards are usually local people who have completed a training program that covers firearms safety and the use of appropriate deterrents in response to recognized bear behaviors.
15.5.6. Bear safety training is essential for every employee, visitor, tenant and contractor at Base Camp.
15.5.7. Employees should receive a bear safety course from a wildlife official or competent person prior to beginning work. Refresher training is advised for long time employees.
15.5.8. Train employees regarding the appropriate distances to use various bear deterrents.
15.5.9. If firearms are present in camp, it is advisable to hold firearms practice for employees authorized to use them. In Canada, a Possession and Acquisition Licence (PAL) is required to use a firearm.

15.6. **Tips for Camp Locations**

15.6.1. Check with knowledgeable people (e.g., local wildlife officers) to avoid setting up camps where bears are known to cause problems.
15.6.2. Do not locate a camp in preferred seasonal bear habitat and on their travel routes.
15.6.3. Try to choose a site with good visibility to see an approaching bear.
15.6.4. Choose a site where noise (such as a rushing stream) does not block the sounds of your camp to an approaching bear.
15.6.5. Look elsewhere for a camp site if you observe signs of bears.

15.6.6. People at any camp site should never sleep in the open without a tent, and always use a flashlight at night when going to and from latrines or between buildings or tents. Bears often forage at night.
15.6.7. Try to camp inland on a high point of land (always away from the shore) where you can easily observe the surrounding area. On land, the most common place to encounter polar bears is along their travel routes, beaches, peninsulas, near shore islands or valley passes.
15.6.8. Set up tents in a line or a semi-circle, never in a circle, square or other closed configuration. If it becomes necessary to deter or shoot an invading bear, you do not want a tent in the line of fire.
15.6.9. Surround established camps with trip wire fences with motion detectors or electric bear fences in polar bear country and anywhere there is a major risk from bears.
15.6.10. Where bears are a problem, tent frames, steps and other camp structures should have skirting to prevent creating a hiding place for bears. All exits should have adjacent windows so you can check for bears before leaving. In high-risk areas, buildings and tents should have a window on each side and large buildings should have two exits.
15.6.11. Remove vegetation near camp that might hide a bear. Try to eliminate blind corners when arranging tents and buildings.
15.6.12. Keep bear spray and a good flashlight in each tent.

15.7. **Electric Fences for Base Camp**

15.7.1. Construct electric fences so that they are well grounded.
15.7.2. Check the perimeter frequently to maintain the fence.
15.7.3. Post warning signs at critical places to remind employees and visitors of potential electric shock.

15.8. **Bear Response Plans**

15.8.1. Train employees to respond correctly to bear encounters.
15.8.2. Post contact information for the area wildlife officer to request assistance should it become necessary to have a bear removed (one persistently returns or enters camp).
15.8.3. Maintain warning and detection systems and deterrent equipment.
15.8.4. Monitor and report any bear activity near camp.
15.8.5. Compile and report bear problems to wildlife officers.
15.8.6. Deter and, if necessary, destroy a bear while remaining in compliance with wildlife regulations.
15.8.7. Create different alarms for bears and for fire. People must respond differently.
15.8.8. When a bear is seen in the distance from camp use an appropriate deterrent as soon as possible. Adverse conditioning must be done every time a bear is sighted near camp to try to prevent it from becoming human habituated and/or food conditioned. The closer it gets to food the more difficult it will be to deter it. Any bear

that has received a food reward in the past will be hard to deter and any fed bear is dangerous. Plan for the possibility that a bear in the distance may return.

15.8.9. When a bear attempts to enter camp: Everyone must be familiar with the plans, which must cover both day and night situations. All employees should understand what is expected of them under various circumstances.

15.8.10. Decide at what distance from camp attempts will be made to direct or haze (harass) a bear to go away. Consider what tactics to use and in which order.

15.8.11. Know which deterrents to use for each situation when a bear is sighted (distance, or in camp) and which deterrents are appropriate for a specified distance.

15.8.12. Discuss plans of action if a bear enters a Base Camp building or tent, including the kitchen and dining structure.

15.8.13. Decide who will shoot the bear when there is a threat to life.

15.8.14. Discuss what tactics to use if someone is attacked.

15.8.15. Develop plans for bear encounters while traversing.

15.8.16. Know how to react in open areas when a bear is sighted in the distance.

15.8.17. Know how to react to close encounters that may occur in dense brush, forests, berry patches, shorelines etc.

16. EMERGENCY RESPONSE

16.1.1. If a company hotline is not available, the people designated to receive calls and relay information during an emergency should be trained to do this job properly.

16.1.2. Base Camp and excursions must be fully equipped to address all emergencies.

16.1.3. Communication equipment should be appropriate for the location and terrain and have adequate reception in the area. Everyone should be trained to use communication equipment. Post operating instructions by the stationary communication equipment and supply instructions to be carried with portable equipment.

16.1.4. Provide training regarding transportation safety.

16.1.5. In critical situations the first hour during an emergency (the golden hour) is often the most important, and the outcomes for the people involved will be more successful when a company has an ERP prepared in advance and appropriately trained staff and contractors.

16.1.6. Injury or death to employees, site visitors, the public and/or those nearby cab be caused by lack of appropriate emergency response planning and/or training.

16.1.7. Damage or loss of company property, assets, and/or reputation can be caused by the lack of an emergency response plan or emergency procedures, lack of staff training to handle publicity and the press.

16.1.8. Environmental damage can be caused by lack of or inadequate spill kits, lack of emergency response planning and/or training.

16.1.9. Delay in addressing an emergency situation can be caused by lack of emergency response procedures, lack of employee training, inadequate communication system.

16.2. **Emergency Response Plans**

16.2.1. A site-specific emergency response plan (ERP) must be developed by the BCOC with input from employees familiar with the specific site activities and services available in the immediate area, rather than by one person or team at company headquarters.

16.2.2. Select competent team members to develop an ERP.

16.2.3. Team members or designates must perform risk assessments to determine potential risks and hazards and their severity and impact.

16.2.4. From the risk assessments, determine what emergencies the BCOC is capable of handling and where improvements and additional help will be required.

16.2.5. The BCOC must:

16.2.5.1. Develop the overall ERP that addresses each risk and hazard.

16.2.5.2. Establish criteria for triggering the plan and appropriate alarm signals. Each emergency will require defined response procedures and a sequence of implementation.

16.2.5.3. Assign responsibilities and back-up personnel for each activity.

16.2.5.4. Develop contact lists – general and specific contacts appropriate for the emergency.

16.2.5.5. Define and list required emergency supplies, equipment and communication devices.

16.2.5.6. Define clean-up, remediation, and restoration procedures.

16.2.5.7. Train team members and back-ups and conduct practice drills to test the components of the plan, especially the communication equipment, telephone numbers and evacuation transport.

16.2.5.8. Communicate the ERP to all employees and train them to follow the plan as required.

16.2.5.9. Evaluate, test and improve the plan over time.

16.3. **Responsibilities and Communications of the ERP**

16.3.1. Designate someone who has the authority to speak to members of the press during an emergency – at the Base Camp and at headquarters. Have a basic news release prepared.

16.3.2. Determine the types of information that should be disclosed or kept private. This can be addressed by providing training for those who have been identified as having authority to speak to the media and family members.

16.3.3. Determine at what stage the BCOC should contact headquarters for additional help and call in outside emergency aid such as search and rescue, RCMP etc.

16.3.4. Designate who within the organization will interface with employees' family members in the event of a serious injury or fatality.

16.3.5. Determine what Base Camp property requires protection in the event of certain emergencies and who is charged with the responsibility for implementing the protection procedures.

16.3.6. Determine where emergency operations will be managed from.

16.3.7. Establish criteria and guidelines for the emergency operations center.

16.4. **ERP Information Requirements**

16.4.1. Name of the location and the owner with a mailing address and contact information including telephone, fax and email.
16.4.2. Name of the Base Camp Manager (person in charge) as appointed by the BCOC.
16.4.3. Type of operation.
16.4.4. Location: state UTM and/or latitude/longitude.
16.4.5. Number of employees: include management, employees, and contractors.
16.4.6. Identify areas where emergency response teams, personnel or agencies can set up and work, including a room that functions as emergency command headquarters.
16.4.7. Establish criteria to account for all employees and visitors in the event of an emergency.
16.4.8. Access routes: Note all means of access to Base Camp.
16.4.9. List the nearest medical treatment facility.

16.5. **Risk Assessment and Base Camp Operations**

16.5.1. Complete a risk assessment to identify potential emergencies that could occur on the site and assess the possible impacts on the operations and on employees, contractors, tenants, and visitors.
16.5.2. Fire and explosion – types of fires and sources of explosions.
16.5.3. Injury or illness of workers or visitors – on site, off site, multiple, fatality, including means of transportation to a medical facility, if necessary.
16.5.4. Environment – spills of various types, water pollution, soil pollution, disposal of waste material.
16.5.5. Climate and natural hazards – floods, potential storms in the region, whiteouts, extreme temperatures, winds, earthquake, and other natural disasters, as appropriate.
16.5.6. Equipment failure – power failures (long and short term), fuel shortages, transportation failures and accidents including on site and travelling to and from the site (vehicles, ATVs, aircraft, boats)

16.6. **Emergency Equipment**

16.6.1. List the emergency equipment available on site to address the identified potential emergencies and hazards.
16.6.2. Develop checklists to keep inventory and inspection records.
16.6.3. First aid supplies, firefighting supplies, pumps, extinguishers, hoses, rescue equipment (e.g., basket stretcher that fits into a helicopter or vehicle).
16.6.4. Equipment that can be assigned to an emergency task.
16.6.5. Emergency transport vehicle(s)
16.6.6. Outside sources of specific equipment.
16.6.7. Mutual aid agreements.

16.6.8. Alternative drinking water supplies in case usual supplies are contaminated.
16.6.9. Arrange mass evacuation transportation.

16.7. **Trained Personnel**

16.7.1. List the available trained personnel who can deal with the identified potential emergencies and hazards.
16.7.2. Contact information for all personnel on site who can administer first aid, firefighting and/or security duties.
16.7.3. Identify other sources of trained personnel such as back-up teams, Agencies: local fire department, provincial/territorial/state ambulance, RCMP or police, local SAR (search and rescue may require separate groups for land/water)
16.7.4. Charter aircraft companies (for help with evacuations, searches)
16.7.5. Possible help available from nearby sites and whether a written mutual aid agreement is in place.

16.8. **Implementation of Emergency Response Plans**

16.8.1. Clearly define how and when people involved in an emergency are to access and implement the plan.
16.8.2. First steps – who to call, how to call, when to call.
16.8.3. Designate who is responsible for implementing the ERP and who is second in charge.
16.8.4. Designate who oversees conducting the emergency operations (depending on the type of emergency).
16.8.5. Define all communication systems to be used (i.e., two-way radios, cell phones, satellite phones).
16.8.6. Assign tasks by function and how the function will be filled.
16.8.7. Evacuation procedures: List the circumstances for declaration, optional routes, and modes of transportation.

16.9. **Directions to the Site**

16.9.1. Clearly define how the directions to the site will be communicated to those who are called to assist but who may not be familiar with the area.
16.9.2. Provide copies of directions in advance to parties who are expected to provide emergency responses. Indicate who has received them in the plan.
16.9.3. Establish and identify helicopter landing areas.

16.10. **Communications**

16.10.1. Assign and train personnel within the BCOC to communicate with employees, families, communities, and the press regarding various emergencies.
16.10.2. Maintain appropriate fully functioning communication equipment.
16.10.3. Train everyone to use communication equipment.

16.10.4. Post contact lists with the communication equipment and in other appropriate and accessible places. Post the instructions for use at the communication centre.
16.10.5. Post what information to include when relaying emergency information.

16.11. Contact List

16.11.1. Base Camp Operations Manager
16.11.2. Corporate head office – appropriate names and telephone numbers
16.11.3. Company hotline
16.11.4. First aid – full telephone number and/or radio channel
16.11.5. Emergency services personnel (Fire, Police, SAR (for both land and water, as required))
16.11.6. Outside agencies: federal, provincial/territorial/state, local government (all necessary AHJs)
16.11.7. Transportation companies including air service (fixed wing and/or helicopter)
16.11.8. Back-up rescue team
16.11.9. First aid attendant – name and full telephone number and/or radio frequency
16.11.10. Base Camp person in charge – name and full telephone number and/or frequency
16.11.11. Military – full telephone number
16.11.12. Workers' Compensation Board (or equivalent) – full telephone number (day/night)
16.11.13. Forest Fire Report – full telephone number
16.11.14. Environmental Agencies – full telephone numbers for appropriate agencies
16.11.15. Chemtrec or similar HazMat communication centre
16.11.16. Welfare agencies
16.11.17. Civil Defence teams
16.11.18. Red Cross/Red Crescent
16.11.19. Public works and highway departments
16.11.20. Port or Airport authority

16.12. Medical Emergency

16.12.1. Assess the situation. Assure your own personal safety and the safety of others.
16.12.2. Summon help if necessary.
16.12.3. Stop or contain the emergency, if possible, without placing yourself or anyone at further risk.
16.12.4. Administer first aid using the primary survey "ABC". The primary survey checks the airway, breathing, circulation and for bleeding and shock.
16.12.5. If required, immediately contact an ambulance or Medevac aircraft.
16.12.6. If the victim is unconscious, try to list all obvious injuries.
16.12.7. If the victim is conscious, establish the extent of injuries.
16.12.8. Contact the hospital and advise them of the incoming patient(s). Give the following information as a minimum:
16.12.8.1. Name of patient(s)

16.12.8.2. Age and sex
16.12.8.3. Nature of injury
16.12.8.4. State of consciousness
16.12.8.5. Estimated time of arrival
16.12.8.6. Request an ambulance to meet the aircraft/boat/vehicle at the designated location.
16.12.8.7. Have the pilot notify the hospital 10 minutes before landing of the revised time of arrival and again request an ambulance to meet the aircraft or boat at the designated location.

16.12.9. Report the accident to the supervisor as soon as possible.
16.12.10. If the accident is serious, notify the jurisdictional Workers' Compensation Board or authority and the local police etc. within the required time in addition to the company contacts.
16.12.11. Take notes to document the accident. Include: what happened, names of witnesses, sketches, and photos if possible.
16.12.12. Complete and submit an accident report form to the appropriate company personnel.

16.13. Vehicle Accident or Incident

16.13.1. Assess the situation. Assure your personal safety and the safety of others.
16.13.2. Administer first aid, if practical.
16.13.3. Call for an ambulance (or air charter) if necessary.
16.13.4. Place reflective warning triangle signs, flares, or both behind and ahead of the accident scene away from vehicles (beware of fuel spills).
16.13.5. Move the vehicles off the road to the shoulder if there are no injuries and the vehicles can be driven. Turn off the ignition and do not smoke.
16.13.6. If there are injuries or the damage is in a public area and more than $1,000.00 (in Canada), call the police, request a police report and call your company contact.
16.13.7. Know the laws and limits that apply in the country where you work.
16.13.8. Report the accident or incident to the supervisor as soon as possible.
16.13.9. Take notes to document the accident. Include: what happened, names of witnesses, sketches, and photos if possible.
16.13.10. Complete and submit an accident report form to the appropriate company personnel.

16.14. Missing Persons

16.14.1. Confirm that the person has failed to check in at the predetermined time.
16.14.2. Contact the person's supervisor and provide details such as where the person was working, how late they are, if he/she is alone.
16.14.3. Do not endanger yourself during a rescue.
16.14.4. If you plan to start a search, inform a supervisor of your plans before heading out. Always go with a second person or a team if possible.

16.14.5. Every search team must carry a first aid kit, communication equipment and appropriate provisions.
16.14.6. Go to where the person is most likely to be found (i.e., where his/her truck is parked).
16.14.7. If the missing person is not found right away, the appropriate SAR authority and/or local police should be notified within the appropriate length of time as specified in the ERP.
16.14.8. Notify all authorities when the missing person is found so all search and rescue participants are informed and can cease their efforts.

16.15. Survival-Stranded Crew

16.15.1. Assemble the field party at the site where the survival cache is located, which is usually at the end of the traverse (air drop or vehicle).
16.15.2. Contact the Base Camp by radio and inform them of your position and conditions.
16.15.3. Determine whether it is possible to safely return to the project site by foot. This can only be done if:
16.15.3.1. The site is reasonably close – this distance should be determined before the traverse starts.
16.15.3.2. Weather conditions are good.
16.15.3.3. The GPS equipment is functioning and there are spare batteries.
16.15.3.4. Emergency food and shelter are available to carry.
16.15.3.5. Everyone is in good physical shape and capable of completing the trip.
16.15.4. When it is not feasible to return to camp, the survival cache and personal survival kits should provide temporary shelter and supplies.
16.15.5. Remain at the site until transportation arrives.
16.15.6. Maintain communication abilities; do not waste battery power.

16.16. Aircraft Accident- At the site of the accident

16.16.1. Assure your own personal safety and the safety of others.
16.16.2. Administer first aid, as needed.
16.16.3. Remove and set up the ELT if it did not automatically begin operation.
16.16.4. Build a shelter (and fire) near the accident scene and make everyone comfortable. Remain near the scene.
16.16.5. Make signals that are visible from the air to aid in the search (e.g., fires, signal mirror, large symbols).

16.17. Aircraft Accident Case Base Camp Response

16.17.1. Attempt to contact the aircraft by normal means when it is 15 minutes overdue. Use local resources when possible. Use the Base Camp radio, a radio in another aircraft on site, and a cell phone to reach the satellite phone on the aircraft if it is so equipped. If near civilization, phone places along the planned flight route for information.

16.17.2. Relay contact attempts through other aircraft in the area.
16.17.3. After 30 minutes or if an accident is confirmed, contact the nearest aircraft home base and advise them, as appropriate, that the aircraft is overdue or that there has been an accident.
16.17.4. Contact the operations base manager of the aircraft charter company. Report an accident or incident to the supervisor, to the air charter company concerned and to the relevant government authority (Transportation Safety Board of Canada investigation office) as soon as possible.
16.17.5. After 60 minutes overdue: Contact the nearest operations base manager. Brief the manager on the action taken and the following information: Name of the pilot Type of aircraft, registration and colour Number of crew/passengers Planned flight route Departure time, estimated time of arrival Last known position Hours of fuel on board, emergency equipment on board.
16.17.6. Notify appropriate company contacts.
16.17.7. Record all actions taken.
16.17.8. Share information ONLY with the aircraft/helicopter company and the rescue coordination centre. Do not speak to the media.
16.17.9. If necessary, contact an ambulance or Medevac aircraft or equivalent as soon as possible.
16.17.10. Provide first aid, as required, upon arrival at the site.
16.17.11. If the accident is serious, notify the jurisdictional Workers' Compensation Board authority and the local police etc., within the required time in addition to the company contacts.
16.17.12. Complete and submit an accident report form to the appropriate company personnel.

16.18. Boat Accident

16.18.1. Assure your own personal safety and the safety of others.
16.18.2. Stay with the boat.
16.18.3. Once on shore, administer first aid, as required.
16.18.4. Build a fire and shelter in a visible location near shore and make everyone comfortable. Remain near the accident scene or shoreline.
16.18.5. Make signals that are visible from the air to aid in the search (e.g., fires, signal mirror, large symbols).
16.18.6. Attempt to reach the boat by normal means when it is one hour overdue. Use local resources when possible. Use the Base Camp radio, (2) a cell phone to reach the satellite phone on the boat if equipped, and a radio in an aircraft if available.
16.18.7. In addition, after 60 minutes is overdue, report the overdue boat to the Base Camp supervisor. Brief the supervisor on the action taken and the following information: Captain's name Type of boat, registration, size and colour Number of crew/passengers Planned route Departure time, estimated time of arrival Last known position Hours of fuel on board Emergency equipment on board.
16.18.8. Notify appropriate company contacts.
16.18.9. Record all actions taken.

16.18.10. If the accident is serious, notify the jurisdictional Workers' Compensation Board authority and the local police etc., within the required time in addition to the company contacts.

16.18.11. Complete and submit an accident investigation form to the appropriate company personnel.

16.19. Fires

16.19.1. Try to put out the fire only if it is safe to do so.

16.19.2. Sound the fire alarm.

16.19.3. Assure your own personal safety and the safety of others.

16.19.4. Evacuate all persons to the muster point and hold a roll call.

16.19.5. Locate any missing or injured persons and organize a rescue, as required.

16.19.6. Arrange for camp evacuation, if necessary.

16.19.7. If required, contact an ambulance or Medevac aircraft immediately.

16.19.8. Provide first aid, as required.

16.19.9. Report the fire to a supervisor as soon as possible.

16.19.10. Arrange for temporary shelter once all the people are accounted for, as required.

16.19.11. An emergency shelter should be separate from the rest of the camp and be equipped with emergency food, blankets, means of heating the shelter, sufficient seating for everyone and emergency communication equipment.

16.19.12. If injuries resulting from the fire are serious, notify the relevant authorities within the specified time (i.e., jurisdictional Workers' Compensation Board authority in Canada, or equivalent).

16.19.13. Complete and submit an accident/incident investigation forms to the appropriate company personnel.

16.20. Whiteouts and Extreme Cold

16.20.1. Everyone should remain within the camp accommodations until the emergency has passed. Cease travel and work that could result in injury.

16.20.2. Cease work with equipment or cutting tools, as an injured employee may not be able to reach a first aid station and evacuation may not be possible until conditions improve. Regularly check emergency stores to be sure they are complete and food items are replaced when they reach their expiry date. Depending on location, 3 days of supplies should be made available.

16.20.3. All employees and individuals working away from Base Camp should be supplied with and carry fully functioning communication equipment and have access to survival equipment and/or caches. This includes anyone travelling by any type of vehicle or aircraft.

16.21. Bears

16.21.1. Employees should be trained to recognize bear behaviour and correctly respond to bear encounters.

16.21.2. An ERP should include plans for a designated person to shoot the bear if the situation demands this action.
16.21.3. Attempt to scare a bear away by making noise and using appropriate deterrents.
16.21.4. Inform the appropriate wildlife officials if a bear persistently returns and arrange for them to remove it.
16.21.5. Verify that a threatening animal (e.g., bear) is sighted approaching or within the camp boundaries.
16.21.6. Sound the alarm. The alarm for an animal in camp must sound very distinct and different from the fire alarm so people react appropriately. (People assemble in one place in response to a fire, whereas they stay inside or go to the nearest shelter in response to an animal in camp.)
16.21.7. The animal alarm might be three short blasts of a siren.
16.21.8. People in shelters should shout or use radios to confirm their location. Do not go to a muster point. Maintain a low position. Locate a canister of pepper spray in the shelter.
16.21.9. Designated people should attempt to isolate the animal from the areas where people are sheltering and drive it away using appropriate deterrents. If present in camp, trained bear guards should respond to face the bear.
16.21.10. Notify appropriate wildlife officials to capture and relocate the animal, if required.
16.21.11. Develop plans and tactics that address an animal entering a tent, the kitchen or dining structure, if someone is attacked, handling the invasion during the day and during the night, and if it is necessary to kill the animal.

16.22. Spills

16.22.1. Assure your own personal safety and the safety of others.
16.22.2. Assess the situation without risking employee safety. Determine the substance of the spill, if possible.
16.22.3. Safely stop the spill/leak, if possible.
16.22.4. Take immediate action to minimize the effects of the spill (containment) if it is safe to do so.
16.22.5. Report the spill to a supervisor as soon as possible. If the supervisor is unavailable, work through the phone list; if nobody is available, call the appropriate government environmental authority.
16.22.6. Record detailed notes: Time of occurrence Who was contacted and when Actions taken to contain spill.
16.22.7. What to report: When and where the spill occurred When the spill was discovered and by whom What was spilled, how much was spilled, and where could it go Whether the spill has been stopped and contained What, if any, remediation measures have been started Your name and telephone number.
16.22.8. Complete and submit an environmental spill report or appropriate investigation form to the BCOC and NG Contract Manager within the specified time.
16.22.9. Spot inspections should be conducted to check on follow-up corrective actions when a hazard or incident has been detected, and when changes in safe work procedures have been implemented.

17. Related Documents

17.1. NG-OHS-FOR-023 - Contractor Pre-Qualification Form
17.2. NG-OHS-FOR-022 - Contractor Safety Orientations

18. References

18.1. Canada Labour Code Part II Occupational Health and Safety
18.2. Canada Occupational Health and Safety Regulations
18.3. Workplace Harassment and Violence Prevention Regulations
18.4. Competency of Operators of Pleasure Craft Regulations
18.5. Life Saving Equipment Regulations
18.6. Transportation of Dangerous Goods Regulations
18.7. Firearms Licences Regulations
18.8. Other Acts and Regulations that apply to NG's activities.

19. Record of Revisions

Summary of Revisions	Authorized By	Date of Authorization
D1 - Initial implementation		