

Elaine Briere - MVLWB

From: Angela Plautz - MVLWB [aplautz@mvlwb.com]
Sent: Thursday, July 22, 2010 8:32 AM
To: permits@mvlwb.com
Subject: FW: Wildlife Management plan
Attachments: final-LUP-wildlife management plan.pdf

Importance: High

Please file under MV09L8-08.

-----Original Message-----

From: Linh Nguyen [mailto:Linh.Nguyen@inac-ainc.gc.ca]
Sent: Wednesday, July 21, 2010 3:38 PM
To: Jane Amphlett; Melanie Burgess; Michael Martin; aplautz@mvlwb.com
Subject: Wildlife Management plan

Hi Angela,

Please find attached the Tundra Mine Wildlife Management Plan as per section 36 of the Land Use Permit MV2009X0019.

Linh Nguyen
Project Officer
Contaminants and Remediation Directorate

Indian & Northern Affairs Canada
5103 48th Street, Waldron Building
Yellowknife, NT
P: (867) 669-2831
C: (867) 446-5544
F: (867) 669-2721



3rd Floor, Waldron Building
5103-48th St
Yellowknife, NT
X1A 1N5

July 21, 2010

Angela Plautz
Regulatory Officer
Mackenzie Valley Land and Water Board
P. O. Box 2130
YELLOWKNIFE, NT, X1A 2P6

Sent By Email

RE: MV2009X0019 – Tundra Mine Wildlife Management Plan

As per conditions 36 of the Land Use Permit - MV2009X0019, INAC-CARD would like to provide this wildlife Management Plan.

If you have any questions or require additional information please do not hesitate to call me.

Regards,

Linh Nguyen
Project Officer
Indian and Northern Affairs Canada
Contaminants and Remediation Directorate
Ph: 867-669-2831
Fax: 867-669-2721

CC: Jane Amphlett INAC-CARD
Melanie Burgess INAC-CARD
Michael Martin INAC-South Mackenzie District



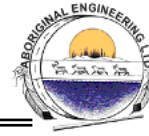
Indian and Northern
Affairs Canada

Affaires indiennes
et du Nord Canada

Wildlife Management Plan for the Tundra Mine

**Prepared By
Aboriginal Engineering Limited**

Wednesday July 21 2010



11.0 Wildlife Contingency Plan - SWP

11.1 Potential Encounters

The following animals, if encountered at Tundra Mine, could present a risk to the safety of employees and visitors:

- Black Bear;
- Grizzly Bear;
- Wolverine;
- Moose;
- Caribou; and
- Wolf

Of the above listed animals the bears present the greatest risk to human health as they are the most likely to be encountered in this area. As such, the plan will focus on bear encounters. However, the basic principles of the plan can be applied to other dangerous animals such as a wolverine, if encountered.

11.2 Roles and Responsibilities

The following outlines the roles and responsibilities of employees with respect to the Wildlife Contingency.

Table 16 Roles and Responsibilities With Respect to Wildlife Contingency

POSITION	RESPONSIBILITY
Project Manager	Preparing Wildlife Contingency Plan and ensuring the necessary resources are available to efficiently implement the plan.
	Ensuring that the necessary training resources are available and that a training program based on the Wildlife Contingency Plan is developed.
Site Superintendent	Implementing the Wildlife Contingency Plan at site when required (i.e., Primary Designate)
	Ensuring that fire arms and ammunition are stored as per regulations.
	Issuing fire arms and ammunition.
	Ensuring that the response team is properly trained and certified as per the Plan.
	Documenting training.
Bear Monitor	Reporting bear encounters as per the Wildlife Response Plan.
	Responding to wildlife encounters and patrolling camp and work areas on a regular basis to ensure safety of crew
Health and Safety Officer	Issuing bear deterrents.
	Providing training to employees prior to Work as per the Wildlife Response Plan.
Employee	Immediately reporting wildlife encounters as per regulations to the Designate
	Responding to wildlife encounters as per the Wildlife Response Plan
TLICHO Field Engineer	Monitoring Wildlife Response Plan actions from camp to ensure safety of response team



11.3 Training

All persons entering the site are to undergo wildlife safety training. The Health and Safety Officer is responsible to provide such training to employees prior to any Work or site visits. The training is to include the information contained herein and the viewing of the video “*Working in Bear Country for Industrial Managers, Supervisors and Workers*”. The trainees are to complete a test following the training and are to sign off that the training has been issued, using the following form.

Table 17 Bear Safety Training Checklist

DATE	SUBJECTS COVERED	EMPLOYEES IN ATTENDANCE	INTSTRUCTOR(S)	EMPLOYEE SIGNATURE	HEALTH AND SAFETY OFFICER SIGNATURE

11.4 Acts, Regulation and Guidelines

The following Wildlife Contingency Plan has been developed in accordance with:

- DIAND EH&S SOP – 017 (A) & (B);
- the Northwest Territories Hunting Regulations; and
- the Firearms acts and its applicable regulations.

In addition the following publications were referenced:

- Safety in Black and Grizzly Bear Country, RWED²; and
- Canadian Firearms Safety Course Student Handbook, Aiming for Safety, Department of Justice Canada³.

11.5 Firearm Protocol

11.5.1 Firearms and Ammunition

GENERAL

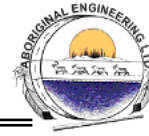
AMMUNITION

All ammunition must be of .23 or larger calibre. The empty cartridges are not to be less than 44mm in length. Ammunition of the following type is NOT to be used:

- rim fire;
- non-expanding bullets;

² Sections of the Safety in Black and Grizzly Bear Country have been reproduced herein for the purpose of employee education.

³ Sections of the Canadian Firearms Safety Course Student Handbook, Aiming for Safety, have been reproduced herein for the purpose of employee education.



- steel-jacketed;
- tracer or
- prohibited ammunition, such as
 - any cartridge that can be fired from a commonly available semi-automatic handgun or revolver and has projectile specifically designed to penetrate body armour;
 - any projectile that can ignite on impact, is made to be used in or with a cartridge, and is not more than 15mm in diameter;
 - any cartridge that can be fired from a shotgun and contains projectiles, know as flechettes, or any similar projectiles.

Only center-fire ammunition is permitted. All ammunition is properly fit the firearm that is being used.

FIREARMS

Non-restricted firearms are to be used at the Tundra Mine, including:

- rifles; and
- shotguns.

Only under exceptional circumstances is a handgun that is not a prohibited firearm to be used. The use of such a firearm will require a restricted firearm license and pre-approval by the Crown.

Firearms are only to be used by the following persons:

- Wildlife Monitor;
- Site Superintendent.

No prohibited devices are to be used with firearms, including but not limited to,

- any part of a weapon or accessory of a weapon that is prescribed by regulation to be a prohibited device;
- a handgun barrel that is equal to or less than 105 mm in length;
- a device designed to muffle or stop the sound of a firearm (silencer);
- a cartridge magazine prescribed by regulation to be a prohibited device; and
- replica firearms.

Unauthorized use of a firearms and failure to abide by the above listed points are very serious offenses and will result in immediate removal from site and potential charges under various legislation.

Firearms are not to be loaded when not in use.

STORAGE

Ammunition must not be stored along with any flammable goods. The ammunition is to be stored along with the firearm in the Site Superintendents room. The firearm and ammunition are



to be locked in the closet at all times when not in use. No trigger lock is required as the firearms and ammunition are strictly for use in controlling animal predators in a remote wilderness area. Firearms are to be Proven Safe and stored unloaded.

11.5.2 License Requirements

All persons who carry a firearm must have a valid Federal Possession and Acquisitions License. The license must be available for issuance to an inspector upon request. Copies of the license are to be stored in personnel files. Wildlife response team members shall be experienced in using firearms at remote Northern locations and will have a hunting background. In addition, all firearm(s) are to be licensed.

11.5.3 Issuing Firearms

Only the Site Superintendent can issue firearms. A logbook will be maintained and stored with the firearms that tracks:

- the date that the fire arm was issued;
- the type of firearm that was issued;
- the number of ammunition issued;
- the type of ammunition issued;
- the person issuing the firearm;
- the person receiving the firearm; and
- the reason for issuing the firearm.

The above information is to be entered into the following form. The form is to be reproduced within a log book.

Table 18 Tracking Firearm Issuance

DATE	FIREARM TYPE	# OF AMMUNITION	TYPE OF AMMUNITION	ISSUER	RECEIVER NAME AND SIGNATURE	REASON FOR ISSUANCE OF FIREARM
				NAME AND SIGNATURE		

However, in the event of an emergency, the logbook can be filled out following the issuance of the firearm. Notwithstanding, the logbook must be filled out prior to issuing the firearm for any other reason than an emergency situation. An emergency situation is defined as any time a bear or other dangerous animal has been spotted within five km of the camp or is threatening the health and safety of an employee.



11.5.4 Tracking Ammunition

If a firearm is discharged, the number of rounds and the reason for discharging are to be recorded. Such information is to be recorded by the Site Superintendent in the following form. The form is to be reproduced within a logbook.

Table 19 Tracking Firearm Use

PERSON WHO DISCHARGE AMMUNITION	NO. OF ROUNDS FIRED	TYPE OF AMMUNITION FIRED	REASON FOR DISCHARGE	SS SIGNATURE

11.6 Basic Safety Principles

11.6.1 Basic ACTS of Safety for Firearms

The four basic Acts of firearm safety are as follows

1. **A**ssume every firearm is loaded.
 - a. Regard any firearm as a potential danger;
2. **C**ontrol the muzzle direction at all times.
 - a. Identify the safest available muzzle direction;
 - b. Keep the firearm pointed in the safest available direction at all times;
 - c. The muzzle of a firearm **MUST NOT** be pointed towards yourself or any other person at any time. Pointing firearms at persons is a federal offense and will be treated as a serious incident.
3. **T**rigger finger must be kept off the trigger and out of the trigger guard.
 - a. Resist the temptation to put your finger on the trigger or inside the trigger guard when you pick up a firearm;
 - b. Accidental discharge is far more likely to occur if your finger is on the trigger or inside the trigger guard;
4. **S**ee that the firearm is unloaded when not required to be loaded for Wildlife Response – **PROVE** it safe
 - a. Do not initially handle the firearm unless you can PROVE it safe;
 - b. Check to see that both chamber and magazine are empty. Do this any time you initially handle a firearm



- c. Pass or accept only open and unloaded firearms. This is an **IMPORTANT HABIT** to develop.

11.6.2 PROVE it Safe

Proving a firearm safe requires the following step to be completed in the listed order:

1. **P**oint the firearm in the safest available direction (Not at yourself or any other person);
2. **R**emove all cartridges;
3. **O**bserve the chamber;
4. **V**erify the feeding path; and
5. **E**xamine the Bore.

The firearm is now unloaded and safe until it leaves the direct control of the person who unloaded and completed PROVE it safe procedures on the firearm.

11.7 Social Responsibilities of a Firearm User

The following is a summary of the social responsibilities of a firearm user:

- Store all firearms and ammunition properly;
- Explain firearms safety to all persons who are within the general area of the firearms storage;
- Remove firearms from situation of potential violence;
- Act sensibly and carefully while around firearms;
- Never consume drugs or alcoholic beverages when around firearms;
- Always get permission when shooting on someone else's property;
- Maintain your firearm in good working condition;
- Have your eyesight checked regularly;
- Avoid firing near any buildings or roads, unless an emergency situations requires otherwise;
- Know and respect firearms regulations and local by-laws; and
- Wear safety equipment.

11.8 Preventing and Responding to Bear Encounters

11.8.1 Distinguishing Between Grizzly and Black Bears

Grizzlies and black bears are generally dormant during the winter months. They usually enter dens in October or November, and emerge in April or May. However, a bear may leave its den early during warm winters or if it is disturbed. Up to four (but usually two) squirrel-size cubs are born in the den in midwinter.

Black bears are sometimes confused with grizzly bears because the two species may appear similar in size, and both vary in color from black to brown, cinnamon or blond. The two species can be distinguished by several physical features.

GRIZZLY BEARS

Grizzlies have a stout, chunky build, a prominent shoulder hump, a massive head with an upturned muzzle or "dishface," and long claws (about 6- 8 cm). Adult male grizzlies can weigh more than 300 kg. Females are smaller than males.

BLACK BEARS

Black bears have a smaller, less robust build, flat or straight shoulders, a straight muzzle, and short, curved claws. Adult males average 100-150 kg, but can weigh more than 275 kg. Females are smaller than males.

The following figure presents the visual features that can be used to distinguish a black bear from that of a grizzly bear.

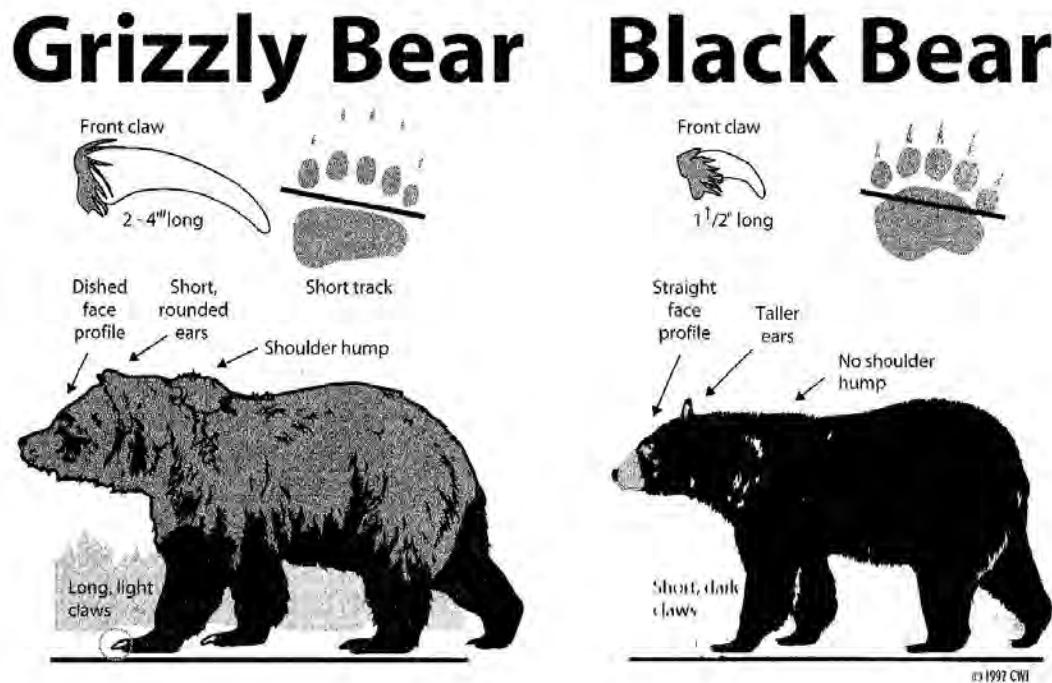
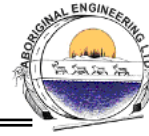


Figure 16 Distinguishing Features of Grizzly and Black Bears

EATING HABITS

Grizzly bears and black bears are both omnivorous. That is, they eat whatever is available. They rely mainly on vegetation, such as roots, grass and berries, but also eat fish, remains of dead animals, insects, small mammals such as ground squirrels, and garbage. Grizzlies also prey on moose, muskox and caribou. Grizzly bears have been known to prey on black bears. Both animals are extremely dangerous when near a food source as they will aggressively defend such resources.



BEHAVIOR

A bear's reaction to you will be influenced by many factors and is therefore never entirely predictable. Given the opportunity, bears usually avoid people. Some bears are more dangerous or aggressive than others. Old or wounded bears may be in pain or starving. They may aggressively seek food from people if they are unable to obtain enough on their own. Any bear that has become accustomed to people and shows no fear of them is dangerous.

Every bear defends a critical space. The size of the space varies with each bear and each situation: it may be a few hundred metres. Intrusion into this space is considered a threat and may provoke an attack. All female bears aggressively defend their cubs. If a female with cubs is surprised at close range, or separated from her cubs she is likely to charge. A sudden charge is the mother's natural defence against danger to her young. A female black bear may act less aggressively if her cubs can escape up a tree and she can defend them by standing at its base.

However, she is still dangerous and may become suddenly aggressive if provoked. Bears also aggressively defend their food, and are often reluctant to leave it until it is all eaten. In some cases, a bear that is threatened may engage in displays intended to scare away an opponent. These may include huffing, panting, hissing or growling; looking directly at you, sometimes with lowered head or ears laid back; slapping on both feet on the ground; jaw popping; or charging to within several metres, then stopping suddenly or veering to the side. Threat displays may be followed by an attack, but may also end with the bear walking or running away.

A bear standing on its hind legs is probably trying to pick up your scent and figure out what you are. It may sniff the air or swing its head from side to side. Bears do not charge standing on their hind legs.

Most grizzlies avoid contact with humans if possible. However, there is good reason for their reputation for ferocity. If cornered, threatened, or surprised, the grizzly can be very aggressive, and will usually stand its ground or charge.

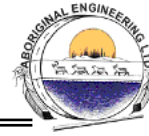
Black bears are often less aggressive and flee from danger. However, because they are more curious and adaptable than grizzlies, they quickly become accustomed to human activity, and may develop aggressive food seeking habits, which make them dangerous. Therefore, treat all black bears with caution.

In a very few cases, a bear has stalked a person that it apparently considered potential prey. Although such incidents are rare, you should know the difference between the behaviour of a hunting bear, and the behaviour of a threatened bear. A hunting bear does not bother with displays and shows no signs of annoyance or fear. It may approach you directly at a fast walk or run, follow you, or circle carefully making cautious approaches.

11.8.2 Preventing Bear Encounters

CAMP FACILITIES

BEAR FENCE



The camp shall be surrounded by an electrified bear fence that that will be inspected daily by the Bear Monitor to ensure its integrity.

WILDLIFE MONITORS

One wildlife monitor will monitor the area within the site work limits at all times during Work.

Any employee working within or visitor entering the area outside of the limits are to be accompanied by a personal bear monitor. At a minimum two bear monitors are to be on site. One bear monitor will be patrolling the Work area and another back-up will be available for outside the Work area when required. The alternate is to perform labour or other duties when not required.

DAILY AREA CHECKS FOR WILDLIFE OR SIGNS OF WILDLIFE

The primary wildlife monitor is to perform a check on the general area prior to and following Work. The morning check is to be performed prior to breakfast. The evening check is to be conducted after dinner. The checks will be conducted using an available truck and are to follow a prescribed route. The exact route is to be selected following mobilization to the site. The bear monitor is to be accompanied by another employee during the check and is to keep in radio contact with the Site Superintendent. A firearm is to be taken during such checks. The results of the previous night and morning patrols are to be discussed in the daily morning toolbox meetings. However, any wildlife sighting and/or signs of wildlife are to be immediately reported to the Site Superintendent who is to take appropriate actions as per the Wildlife Contingency Plan

FOOD

- Do not feed any wildlife;
- All food must be consumed in the dining room. No food is to be consumed outdoors;

GARBAGE

- Food wrappers and juice containers must be deposited in the dining-room garbage containers;
- Garbage from dining-room garbage containers must be stored inside a building in a securely closed container until ready for incineration;
- All food waste and garbage is to be incinerated on a daily basis by the camp manager or other authorized employee using the on-site garbage incinerator. All persons incinerating garbage are to be trained in proper use of the incinerator to ensure safe work and complete combustion of garbage. Incomplete combustion can leave behind organic matter that will remain a wildlife attractant.

BUILDINGS

- Check the area immediately outside doors before exiting buildings;



- Check the interior of all rooms of abandoned building prior to entrance for signs of bear or other large animal activity. This includes initial entrance into the building and also when moving from one room to another within a building. If signs of bear activity are present leave immediately by the same path that was used to enter. Under no circumstances is a room to be entered if bear signs are present or even suspected to be present as interiors of buildings are confined spaces within which animals will react aggressively;
- Watch for signs of digging under skirting of buildings;
- Watch for bear tracks;
- Keep all doors closed, unless moving personnel or equipment into or out of buildings.
- Ensure that all access doors to areas under buildings are closed and secured, unless work is actually being performed.

DEAD WILDLIFE

- **DO NOT APPROACH** any dead wildlife. Bears will aggressively defend food resources. Such encounters are often resulted in either a person or bear casualty;
- Report any dead wildlife found immediately to the Site Superintendent.
- Report any sightings of ravens or sea gulls diving and circling an area.

FUEL HANDLING AND STORAGE

- Fuel and synthetic materials can act as strong bear attractants;
- Store fuel only in designated container and areas;
- Fill equipment prior to leaving Work area to avoid the necessity of carrying additional fuel supplies;
- Avoid spills and clean up spill of fuel immediately;
- Only store materials impacted by hydrocarbons as per the Spill Contingency Plan;
- Do not use vehicles or equipment that are leaking fuel or other hydrocarbons.

11.8.3 Responding to a Bear

IN THE VICINITY

- Take note of the location of the sighting;
- If safe to do so, take note of what direction the bear is heading;
- Record a brief description of the bear;
- If you have a radio, contact the Site Superintendent and report the presence of the bear. The Site Superintendent will immediately report the sighting to the Health and Safety Officer and Wildlife Monitor;



- If you do not have a radio, report the bear sighting to the Site Superintendent verbally as soon as possible. The reporting takes precedent over work;
- Monitor the movement of the bear, if it is within sight of camp and it is safe to do so (i.e., It is several hundred meters away and there is a vehicle or a secure building nearby).

IN THE CAMP

- Take note of the location of the bear.
- Take note of the direction of travel and what it is doing.
- Contact the Site Superintendent and report the presence of the bear. The Site Superintendent will immediately report the sighting to the Health and Safety Officer and the Wildlife Monitor;
- Sound the bear alarm – a central air horn will be located at the camp. One long blast means that a bear or other dangerous animal is in the camp and that all persons must seek nearby shelter;
- Immediately after hearing the alarm, contact the Site Supervisor with your location and if you are in immediate danger and require assistance. The Site Supervisor will advise on the last known location of the bear;
- The Site Superintendent is to ensure, as soon as possible after the bear sighting, that all persons are accounted for and their locations and current status are known;
- Monitor the movement of the bear, if safe to do so, until bear response personnel arrive;
- Stay indoors or in your vehicle. **DO NOT APPROACH** the bear under any circumstances;
- Keep all doors closed and close all windows;
- Obey all instruction issued by the Site Superintendent.

BEAR TEAM RESPONSE PROCEDURES

WILDLIFE RESPONSE TEAM

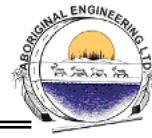
The Wildlife Response Team (WRT) shall consist of the following people:

- the Site Health and Safety Officer;
- the Site Superintendent;
- the Wildlife Monitor; and
- a Camp Monitor (maintain communication at camp).

BEAR RESPONSE EQUIPMENT

Bear response equipment shall consist of:

Firearms



- 1 x 12 gauge pump action defender shotgun;
- 12 gauge, 3 in. Magnum slugs;
- 12 gauge Cracker Shells;
- 12 gauge Rubber Bullets;
- 30-06 5 shot bolt action rifle or equivalent; and
- 220 grain ammunition.

The following figures display the fire arms that will be present on-site for bear response.



Figure 17 Defender Shot Gun



Figure 18 30-06 5 Shot Bolt Action Rifle

Bear Deterrents

- starter Pistol
- .22 cal blanks for pistol
- screamer and banger tubes for starter pistol.
- knife; and
- bear spray.

Response Vehicles

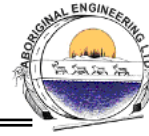
- diesel crew cab trucks for response in areas where roads exist;
- quad or side by side for response on rugged terrain.

Communications

- hand held radio;
- satellite radio cw/ impact and water resistant case and emergency numbers; and
- emergency flare.

RESPONDING TO A BEAR

A. Bear sighted in general vicinity



- General vicinity means not within the Work area, but within 5 km of the Work area;
- When a bear is reported in the general vicinity, the wildlife response team will collect the bear response equipment and proceed to the last known location of the bear. There must be at least two people responding to bear sightings. The shotgun magazine shall be fully loaded with slugs when responding to a bear. 12 gauge deterrents are to be hand loaded, one at a time. The defender shot gun can accommodate 3 slugs. The 45-70 level action rifle can accommodate 4 shells.

Bear between 2 km and 5 km away from camp

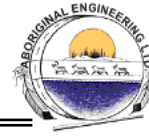
- If the bear is not headed towards the camp, the team will only observe its behaviour and direction of travel until they are confident that it is not heading towards the camp;
- If the bear is headed towards the camp, the team will fire cracker shell and/or screamer rounds in an effort to drive it further away from camp; and
- Upon returning to the camp the team leader shall report the incident to the Site Superintendent who will in turn report to Raymond Bourget at the Department of Resources, Wildlife and Economic Development. Telephone #: 920-3049. Or to his alternate: Albert Bourque, at 873-7184.

Bear between camp and 2 km away from camp

- The team will fire deterrent rounds and aggressively drive the bear away from the camp;
- Upon returning to the camp the team leader shall report the incident to the Site Superintendent who will in turn report to Raymond Bourget at the Department of Resources, Wildlife and Economic Development. Telephone #: 920-3049. Or to his alternate: Albert Bourque, at 873-7184.

B. Bear in camp

- An attempt to move the bear out of the camp shall only be made if it is safe to do so and no personnel are in immediate danger;
- If personnel are in immediate danger, or if it is not possible to remove the bear without endangering someone, the bear is to be shot;
- Wildlife response team shall ensure that everyone has been notified and accounted for the location of all personnel. An update list of employees will be kept by the health and safety officer;
- Ensure that the bear has a clear avenue of escape;
- Ensure that there are no people in the direction that the bear is likely to take in leaving the camp.
- Ensure that there is not more than one bear;



- If it is safe to do so, use rubber bullets, screamers and/or cracker shells to drive the bear out of camp;
- Follow the bear and continue to use deterrents until you are confident that it is leaving the area;
- If you lose sight of the bear, STOP and return to camp; and
- Upon returning to the camp the team leader shall report the incident to: Raymond Bourget at the Department of Resources, Wildlife and Economic Development. Telephone #: 920-3049. Or to his alternate: Albert Bourque, at 873-7184.

C. Destroying a Problem Bear

- A problem bear is a bear that either is directly threatening health and safety or has returned to camp more than once;
- If the bear is standing sideways, it shall be destroyed by shooting at the large shoulder bones, into the chest area;
- When facing head on, a bear shall be destroyed by shooting into the chest area;
- A minimum of two shoots shall be fired into the vital areas;
- The bear is not to be approached until it is certain that it is dead;
- The shotgun is to be reloaded, cocked and ready to fire before approaching the dead bear;
- Before shooting, consider what is beyond the bear, as the slug may pass through the bear;
- Upon killing a bear, the hide shall be removed, with the claws and the head attached. The hide shall be placed into a freezer. The body shall be disposed of as per directions issued by a Renewable Resource Officer;
- The incident must be reported immediately to the Wildlife emergency line at (867) 873-7181;
- All reasonable efforts must be made to ensure the hide and other valuable parts do not spoil and that these are turned over to a Renewable Resource Officer.

D. Close Encounter with Bear by Employees Other Than Wildlife Response Team

There is always the possibility that you may surprise a bear at close range, or

The bear is unaware of you and feeding

- If you can do so undetected, leave the area. Quietly go back the way you came. Move only when the bear's head is down. Stop when it lifts its head to look around. Stay downwind. When you are a safe distance away, wait until the bear leaves or make a wide detour around it; and
- If you cannot leave undetected, let the bear sense you by smell first. Quietly move upwind. If possible, keep the bear in sight. The bear may leave when it smells a person nearby.



The bear is unaware of you, but approaching

- Give the bear the right-of-way.
- Try to get out of the way without being noticed. If that is not possible, announce your presence. Bears should be able to determine that you are a human by the time they are 100-150 m away; and
- Give the bear a chance to leave

The bear is aware of you, but distant:

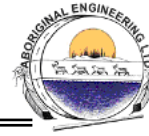
- Stay calm;
- Continue walking slowly, but head away from the bear;
- Do not run unless you are sure you can reach safety;
- If the bear follows, leave behind a cap, scarf, etc. to distract it and allow it to identify you as a person from your scent;
- If you are dealing with a grizzly bear, climb a tree if a large one is available. Remember, however, that black bears can climb trees easily, and grizzlies may climb if the spacing of limbs permits; and
- If there is a bird colony nearby, or something else that could be a distraction to the bear, you could head in that direction.

The bear is aware of you and close

- In close confrontations, the bear is likely to feel threatened. Its natural tendency is to reduce or remove the threat. Help it by acting as non-threatening as possible, particularly if it is an adult bear or a female with young. Do not make sudden movements. Monitor the bear's movements but avoid direct eye contact. If the bear is young and possibly curious, you may have to be more aggressive to drive it away. To help you act appropriately, assess the situation and try to determine why the bear is acting the way it is;
- Help the bear identify you as a person. It may leave. Stay upwind if possible. Talk in low tones and slowly wave your arms;
- Give the bear the opportunity to leave. Make sure it has an open escape route;
- Back away slowly and/or climb a tree if appropriate; and
- Try to deter the bear if you are in a safe position.

The bear is close to you and threatening

- Try to scare the bear off with an appropriate deterrent if you are equipped to do so;
- If you have no deterrent, or if the attempt is unsuccessful, act as non-threatening as possible;
- Talk in a calm, but authoritative voice;



- Do not make fast or sudden movements that might startle or provoke the bear;
- Do not imitate a bear's aggressive sounds, signals, or postures; and
- Feed a slug or cartridge into the chamber of your gun, keeping an eye on the bear. Back off slowly and steadily and drop a hat or scarf or other article to distract the bear. Do not drop your backpack as it can help protect the spine in the event the bear charges. Drop food only as a last resort (this provides a bad example for this bear's next encounter with a person).

The bear is very close (less than 50 m in open areas, closer in forests) and approaching

- If the bear does not respond to a deterrent, stand your ground;
- If you are unarmed, do not play dead unless the bear charges;
- Standing will enable you to dodge an attack, to distract the bear by dropping something or by flashing clothing; you will also be able to monitor the bear's actions; and
- If you are armed and the bear continues to approach and act aggressively, be prepared to shoot.

The bear charges

- A bear charges at high speed, on all four legs, often crouched low to the ground. It does not charge on its hind legs;
- Many charges made by grizzlies and black bears are bluffs. These bears often stop or veer to the side at the last moment. However, it may be difficult to know if a charge is a bluff until the bear is very close;
- If you are faced with a charging bear (or a bear at close distance that is hunting you as potential prey), you have two options: shoot to kill if you have a gun, or play dead (see below) if you are unarmed.
- If the bear definitely knows what you are and it is not deterred, you are likely considered prey, (its next meal). Aggressively fighting and trying to hurt it as badly as possible is your best option.

11.9 Minimizing the Impact on Wildlife

Wildlife may be impacted by the loss or modification of habitat and disturbance from vehicles and equipment during sensitive life-cycle periods (e.g., breeding and rearing). The following guidelines are intended to minimize impacts on wildlife from project activities:

- Drivers will maintain a safe and appropriate speed on the roads especially the winter road, and drivers will not chase animals down roads. Instead, drivers will stop and turn off their headlights to allow stressed animals to disperse;
- Recreational or sustenance hunting, firearm use, and/or fishing are not permitted on any site;



- Dogs are not permitted on any site unless prior authorization is obtained from the INAC Project Manager;
- When encountering wildlife, remember they have the right of way;
- Never feed wildlife. Feeding wildlife may cause them to stay at the site and become used to human contact. The consequences of feeding may result in serious harm to humans, and/or the animal being relocated or destroyed; Feeding animals will result in removal from site and termination of employment;
- If encountering wildlife on the road, stop the vehicle and allow wildlife to pass. Be sure to:
 - Remain in the vehicle;
 - Avoid using the horn;
 - Avoid provoking the animals; and
 - Wait for the animal(s) to pass before continuing.