## **APPENDIX D**

# **ENVIRONMENT & WILDLIFE MANAGEMENT PLAN**

**November 2015** 

#### 1.0 EXPLORATION INTERNAL ENVIRONMENTAL POLICY

Dunnedin Ventures Inc is committed to the protection of the environment during its exploration activities, through the application of the following principles.

- Deal proactively with environmental issues by identifying potential impacts and implementing preventative actions, measures to mitigate and effective contingency plans.
- Strictly adhere to and comply with all applicable environmental legislation and regulations and the Terms and Conditions of the Licences and Permits.
- Identify and evaluate all environmental aspects and possible impacts of exploration activities, and develop procedures for minimizing, as much as is reasonably achievable, the environmental impacts while carrying out these activities.
- Facilitate clear and effective communication of Dunnedin's environmental requirements to employees and contractors to encourage their participation and compliance.
- Provide effective training, conduct internal assessment/inspections and periodically review procedures during weekly meetings.

#### 2.0 GENERAL

Environmental protection ultimately rests with the company having authorization from the environmental agencies to conduct exploration activities. Environmental awareness and a good knowledge of environmental protection measures help to avoid or reduce adverse exploration impacts. Front line field personnel and contractors must know and follow the applicable work conditions established by the environmental regulatory agencies.

Dunnedin Ventures Inc expects all personnel and contractors operating on its behalf will recognize and respect the rights of other land users.

Dunnedin Ventures through its permits and licences requires:

- That all personnel, contractors, consultants and visitors to the project area respect the land, the waters and the local wildlife.
- The rules, regulations, terms and conditions of the applicable laws, licences and permits are to be strictly adhered to.
- The use of environmentally friendly agents where readily available, and discourages the use of non-environmentally friendly products except where absolutely necessary (ie no efficient alternative exists, safety/health considerations etc.)
- All garbage and litter to be removed from all field sites.
- Practicing preventive maintenance activities will reduce the likelihood of failure resulting in an environmental impact.

#### 2.1 Authorizations

Dunnedin Ventures Inc must apply and comply with the terms of a number of authorizations in order to conduct exploration activities as follows:

- AANDC (Aboriginal Affairs and Northern Development Canada) Land Use Permit (LUP).
   This permit allows Dunnedin to conduct approved activities on those portions of Crown Land that falls within the companies claim boundaries. Dunnedin currently holds a Class A Land Use Permit (N2015C0019) for the purpose of completing prospecting, till and rock sampling. Dunnedin Ventures is submitting a request for an extension and amendment to its permit to include diamond drilling, trenching, ground geophysical surveys, bulk sampling and the establishment of an overland winter trail.
- KIA (Kivalliq Inuit Association) Land Use Licence (LUP). Dunnedin currently holds a
  Class 1 Land Use Licence ((KVL115B02) for the purpose of prospecting and preliminary
  exploration work. The Land Use Licence allows Dunnedin Ventures to conduct approved
  activities on Inuit Owned Lands (IOL), more specifically Surface Land Only Parcel CI-15.
  Dunnedin is submitting to the KIA an application for a Class 3 Land use permit to
  complete diamond drilling, trenching, ground geophysical surveys, bulk sampling and
  the establishment of an overland winter trail.
- NWB (Nunavut Water Board) Water Licence. Dunnedin Ventures is submitting to the NWB an application for a Water Use Licence for the use of water during diamond drilling operations and the subsequent collection of waste water from the drilling operations in an approved drill sump.

Dunnedin Ventures Inc is bound by the terms and conditions set out in the each of the licences and permits while conducting any of its permitted exploration activities. In addition, there are a number of Acts, Regulations, Guidelines and Recommendations the company must also follow which includes (but are not limited to):

- Fisheries Act
- Department of Fisheries and Oceans Operational Statements and Guidelines.
- Nunavut Waters and Nunavut Surface Rights Tribunal Act.
- Territorial Lands Act and Land Use Regulations
- Nunavut Land Claims Agreement
- Environmental Protection Act and Canadian Environmental Protection Act
- Nunavut Wildlife Act and Species at Risk Act
- Guide to Spill Contingency Planning and Reporting.
- Transport Canada-Transportation of Dangerous Goods Act
- Public Health Act
- CCME Canada-wide Standards for Dioxins and Furans.

#### 3.0 WILDLIFE

Approaching and feeding wildlife is strictly prohibited. Dunnedin Ventures Inc understands the impacts to wildlife through human interaction including harassment and disturbance and will insure its contractors and employees follow the terms and conditions as set out by the regulatory authorities. Immediate and appropriate measures will be taken by the company to reprimand any individual(s) involved in any such activities.

**Sightings of wildlife are to be recorded.** This is a condition for conducting exploration activities in the Kivalliq Region of Nunavut. This information is compiled and submitted to all regulatory agencies in the company's annual reports.

**Firearms may be carried for safety reasons,** but only if such firearms are properly registered and stored in accordance with applicable legislation. All firearm discharges must be documented and reported immediately to the Project Manager.

Hunting of wildlife, while conducting business on behalf of Dunnedin Ventures Inc, is strictly prohibited by all Dunnedin employees, contractors and consultants.

Low level aircraft and helicopter flights must make efforts to avoid areas which are crucial nesting and denning habitats. Helicopters will not land in any area where wildlife are present unless under an emergency situation. Should an emergency arise, the event will be documented and reported to the appropriate agency.

**Nuisance wildlife is to be reported immediately.** Proper food storage, the handling of food waste and removal from the field will mitigate wildlife encounters.

The Kahuna Diamond project is within range of the Qamanirjuaq Caribou Herd and special considerations are required so as to avoid disturbance of migrating and calving herds. Dunnedin Ventures will cease activities when caribou are present and will not resume activities until the caribou have safely moved out of the area. This includes the driving of snowmobiles and ATV's, drilling, mapping, prospecting, blasting and overflights by aircraft at any altitude of less than 300 meters above ground level. No drilling will be conducted within 5km of a designated caribou crossing.

All human-bear interactions are to be reported immediately to the project manager, who will then contact the KIA, The government of Nunavut-Department of Environment, Environment Canada, HTO's and the Government of Nunavut Wildlife Biologist. A copy of the Bear Safety material will be available on site and at the offices of Dunnedin Ventures Inc

No eggs or nests are to be disturbed by any activities. If an employee or contractor comes across any active nests, they are to cease all activities immediately to ensure that the nest is not disturbed. Coordinates are to be recorded on the wildlife sighting sheets. Work will not resume until the nest is no longer occupied. Moving or disturbing the nest of a migratory bird is in contravention of the Migratory Birds Convention Act.

**Den sites will be avoided.** All denning sites are to be avoided. If a den site is located, its UTM coordinates are to be recorded so that the den site can be avoided. The coordinates are forwarded to the appropriate regulatory authorities. Any exploration activities will cease immediately

The following buffers are provided (by the Government of the Northwest Territories) for active dens between the den and all exploration activities between May 1 and July 15.

Wolves 800m buffer
Grizzly Bear 300m buffer
Wolverine 2km buffer
Fox 150m buffer

Species at Risk. Environment Canada and COSEWIC has indicated that there may be Species at Risk within the Kahuna Diamond project. A list of the species at risk in Nunavut can be found in Schedule 1 of SARA (Species at Risk Act). The SARA registry can be found at <a href="https://www.sararegistry.gc.ca">www.sararegistry.gc.ca</a>. Schedules of SARA are amended on a regular basis so it is important to periodically check the registry for updates. If any of the listed species are sighted on the Kahuna Diamond project, the information will be recorded.

### The predicted impacts to wildlife due to the presence of the Kahuna Diamond project include:

- Attracting wildlife,
- Habitat disturbance
- Unintentional disturbances

Wildlife can be naturally inquisitive and some species are attracted to areas that are occupied by humans due primarily by scents and smells. Dunnedin will discourage this by minimizing all waste and the proper storage of these attractants until such time they will be removed from the site. At no time will it be permitted by any personnel, contractors or consultants to feed or to use food products to entice wildlife closer to activities. All active work sites will be kept clean of all food waste and will be properly stored in sealed containers.

Habitat disturbance during exploration programs are temporary. Dunnedin will act proactively to complete site reclamation and remediation immediately following the completion of the work ie at drill sites, bulk sample sites etc. Habitat disturbance on the Kahuna Diamond project will result to some extent from diamond drilling and bulk sample activities. The effects of habitat disturbance at drill sites are very temporary and in most cases it would be unlikely that an individual would be able to locate the previous season's drill collar or sump.

Despite best efforts and practices, unintentional disturbances can occour. As an example, every effort will be made to to avoid nest and den sites. However, should a field crew happen upon nests or dens, the coordinates will be recorded and the crew will immediately vacate the area. These areas will be avoided until they are no longer being inhabited. These encounters will be immediately reported to the Government of Nunavut and the Kivalliq Inuit Association. All unintentional disturbances, no matter what the nature, will be reported immediately and will be documented in the annual report.

**Monitoring** is an important component to the exploration program. Exploration is dynamic and continually changing. Every field season is unique, exploration activities are conducted in different areas from year to year. All drill sites and field crews will have wildlife sighting sheets used to document the species sighted, date, time of sighting, GPS location, number of species and activities. These locations will be provided each year as part of the Work Plan that is submitted annually by January 31.

#### **4.0 AQUATIC LIFE**

Work in and around water bodies must be done in such a manner as to not disturb any aquatic habitat or life.

Fishing while conducting business on behalf of Dunnedin Ventures Inc is strictly forbidden.

The drill foreman is responsible for ensuring safe working conditions at the drill site which includes measuring ice thickness before moving heavy equipment across the ice or drilling from the ice surface.

Waterlines must be properly placed and screened in accordance with the "Freshwater Intake End-of-Pipe Screen Guideline" (DFO).

No waste is to enter any body of water.

All sumps, fuel caches and camps must be located at least 31 meters from the high water mark of any body of water unless otherwise approved by the appropriate regulatory authority.

## 5.0 Archaeology

No work will occur in any area where a known archeological site has been located. If any employee or consultant finds an archeological site, work must cease immediately, the GPS coordinates are recorded and the finding is reported immediately to the Project Manager who in turn will report its location to the Government of Nunavut, Aboriginal Affairs and Northern Development Canada and the Kivalliq Inuit Association. Handling of any archeological artifact is strictly prohibited.

#### **6.0 Internal Inspections**

Internal inspections are to be completed by the project manager or it's designate on a monthly basis. In addition to this, daily inspections of the individual work, storage and staging areas allows for a timely response to potential impacts affecting the surrounding environment. All employees and contractors are responsible for maintaining a clean and safe workplace.

Some points to consider from a Land Use Inspector or a community visitors point of view:

When flying to the work site.

- ➤ Is there any garbage lying around?
- ➤ Has any garbage flown away and can be seen lying on the Tundra?
- Are items stored in a neat and tidy manner?

## Drips and Leaks

- > While walking around the work sites, keep aware of potential sites for leaks or drips.
- In areas of potential leaks, place a drip pan or a collection device underneath the area.
- In areas where potential leaks and drips may occur, keep absorbent pads easily accessible.
- Report all leaks and drips to the Project Manager.

## Fuel Storage areas

- Make sure that the fuel drums are stored according to code and best practices.
- > Keep the fuel storage site tidy and neat.
- ➤ Visually inspect the fuel storage area on a regular basis to ensure there are no leaking or damaged drums and that all barrels are stored in the 3:00 and 9:00 o'clock position.