



**ENVIRONMENT AND WILDLIFE  
PROCEDURES PLAN**

**CHURCHILL DIAMOND PROJECT  
APRIL 2008**

## **SHEAR MINERALS LTD.**

### **EXPLORATION INTERNAL ENVIRONMENTAL POLICY**

Shear Minerals Ltd. is committed to the protection of the environment during its exploration activities, through the application of the following principles:

- Evaluate all environmental aspects of exploration activities, identify the significant ones and document procedures for minimizing as much as reasonably achievable the environmental impacts while carrying out these activities;
- Comply with all applicable environmental legislation and regulations and the Terms and Conditions of the licences and permits;
- Communication of Shear's environmental requirements to employees and contractors to encourage their participation and compliance;
- Provide appropriate training, conduct internal assessment/inspections and the periodic review of procedures during weekly meetings;
- Deal pro-actively with environmental issues by identifying potential impacts and implementing preventive actions, measures to mitigate and effective contingency plans; and
- Consistently consider the interests of the Stakeholders in exploration activities.

## GENERAL

Environmental awareness and a good knowledge of environmental protection measures help to avoid or reduce adverse exploration impacts. Ultimate responsibility for environmental protection rests with the company having authorization (i.e. permit, licence, letter, etc.) from the environmental regulatory agencies to conduct exploration activities (this includes all field personnel and contractors). Accordingly, field personnel and contractors must know and follow the applicable work conditions established by the environmental regulatory agencies. All contractors will be required to adhere to the standards that Shear Minerals Ltd. has developed for its field operations.

Shear expects that all personnel and contractors operating on its behalf will recognize and respect the rights of other land users. This may require that other land users, if identified by regulatory agencies, will be duly consulted prior to the start of work. For example, Shear Minerals has committed to the people of Rankin and Chesterfield Inlet and to the KIA that they will be notified prior to any low-level flights for the purpose of airborne geophysics. The information to be passed on included: location of flights, dates when flights will occur, and how long the airborne geophysical surveys will last. The Project Manager is to relay this information to the Environment and Permitting Manager who will contact the communities and the KIA.

Shear requires:

- The use of environmentally friendly (i.e. non-toxic and / or biodegradable) agents where readily available, and discourages the use of non-environmentally friendly products except when absolutely necessary (i.e. no efficient alternative exists, safety / health considerations, etc.);
- All garbage and litter to be removed from all field sites. If litter is seen lying around it is everyone's responsibility to make sure that it is cleaned up. A rule of "If you see it, pick it up" will ensure a tidy and safe workplace;
- The rules, regulations, Terms and Conditions of the applicable laws, licences, permits, etc. are strictly followed;
- Preventive maintenance activities will reduce the likelihood of failure resulting in an environmental impact.

## AUTHORIZATIONS

Shear Minerals has received a number of authorizations in order to conduct the exploration activities for the Churchill Diamond Project. These authorizations include:

- INAC (Indian and Northern Affairs Canada) – Land Use Permit (LUP). This allows us to conduct approved activities on the Crown portions of land that comprise the Churchill Diamond Project. As of March 1, 2007, approved activities include; prospecting, mapping, geophysics (ground and airborne), till sampling, fuel caches, trenching and drilling. All aspects of these activities are covered under our LUP.
- KIA (Kivalliq Inuit Association) – Land Use Permit (LUP). This allows us to conduct approved activities on the Inuit Owned Land (IOL). As of March 1, 2007, approved activities include; prospecting, mapping, geophysics (ground and airborne), till sampling, fuel caches, trenching, drilling and the Sedna Camp. All aspects of these activities are covered under our LUP.
- KIA – Right of Way (ROW). This allows Shear Minerals to transport overland (under snow conditions) equipment and supplies along an approved route over IOL to the Sedna Camp.
- NWB (Nunavut Water Board) – Water Licence. This allows Shear Minerals to use water for drilling and domestic purposes and deposit waste. The waste includes drill sumps, greywater sumps, combustible and non-combustible wastes, etc.

The Terms and Conditions of each of these licences/permits are the rules that Shear Minerals must abide by when conducting all activities. In addition to these there are a number of Acts, Regulations, Guidelines and Recommendations that we must also follow. These include (but are not limited to):

- *Fisheries Act*
- Department of Fisheries and Oceans Operational Statements and Guidelines
- Caribou Protection Plan/Caribou Protection Measures
- Keewatin Land Use Plan
- *Nunavut Waters and Nunavut Surface Rights Tribunal Act*
- *Territorial Lands Act*
- Territorial Land Use Regulations
- *Nunavut Land Claims Agreement*
- *Environmental Protection Act*
- *Canadian Environmental Protection Act*
- *Species At Risk Act*
- Guide to Spill Contingency Planning and Reporting
- *Public Health Act*

## WILDLIFE

**Approaching and feeding wildlife is prohibited.** Shear Minerals Ltd. has made commitments to communities and regulatory agencies that wildlife will not be harassed or disturbed. Not only are these commitments made by Shear Minerals but they are also part of the Terms and Conditions provided by regulatory authorities in our LUPs and Water Licence.

**Sightings of wildlife are to be recorded on the wildlife sheets provided.** This is a requirement for our conducting exploration in the Kivalliq Region. This information is reported by Shear Minerals to all regulatory agencies in monthly and annual reports. Wildlife sighting sheets will be posted at the drill sight, camp kitchen and in the camp office.

**Harassment of all wildlife is strictly forbidden by all individuals conducting business on behalf of Shear Minerals.** Appropriate measures will be taken to penalize any individual(s) who have been involved in such activities.

**Firearms may be carried for safety reasons,** but only if such firearms are properly registered (to be verified by the Contract Administrator) and stored in accordance with applicable legislation. Carrying a firearm must first be acknowledged by the Project Manager and Camp Manager. All such firearm discharges must be reported to the Project Manager and the Camp Manager.

**Hunting of wildlife, while conducting business on behalf of Shear Minerals, is strictly forbidden by ALL Shear employees.** The communities of Chesterfield Inlet and Rankin Inlet requested that this be a policy as part of their review of our applications. The regulatory agencies have made this a Term and Condition as part of our LUPs. There are NO exceptions to this rule.

**Low-level aircraft and helicopter flights must make efforts to avoid areas which are crucial nesting and denning habitats.** Prior to conducting any low-level airborne geophysical surveys the Environment Manager must be contacted. Shear Minerals is required to provide the following information to the communities and the KIA prior to any low-level airborne geophysical surveys: dates of surveys, location of surveys and how long the surveys will take to complete. A pre-screening survey of the area must be conducted to ensure that there is no wildlife present in the area.

Shear Minerals will provide the Chesterfield and Rankin HTO's and the KIA with photos and description of the helicopter being used on the Churchill Diamond Project. Shear Minerals has also committed to assist the community of Chesterfield Inlet in determining the operators of any low flying helicopters in the area that are in danger of harassing wildlife.

**Nuisance wildlife is to be reported immediately.** Proper food storage and handling of cooking wastes will prevent problems with attracting wildlife.

**Special caribou protection measures are required** for areas of Nunavut so as to avoid disturbance of migrating and calving herds. These are found in the DIAND Caribou Protection Measures.

**All human-bear interactions are to be reported immediately** to the Environment 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

**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. These coordinates are to be reported to the Environment Manager who will contact Environment Canada.

Environment Canada has indicated that there may be Species at Risk within the Churchill Diamond Project. These species include: the short-eared owl, the peregrine falcon, grizzly bear and the wolverine. If any of these species are sighted the information will be recorded using the wildlife sighting sheets and will be reported.



Short-eared owl



Peregrine Falcon



Peregrine Falcon silhouette

## AQUATIC LIFE

Working in and around water bodies must be done in such a way that prevents disturbance to aquatic life and habitat.

**Fishing while conducting business on behalf of Shear Minerals is strictly forbidden.** The communities of Chesterfield and Ranking Inlet have requested that this be a policy as part of their review of our applications. Shear Minerals has made a commitment to the people of Chesterfield and Rankin that there will be no fishing policy at the Churchill Diamond Project, There are no exceptions to this rule.

**The drill contractor is responsible for proper testing of ice-thickness prior to moving heavy equipment across water bodies and prior to drilling on ice.** Until testing is done so, any activities on the ice will be inactive.

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

**No wastes are to enter any water bodies.** This includes any discharge from the Josephine Lake Camp.

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

Shear Minerals provides environmentally friendly laundry detergent, shampoo, conditioner, shower gel and soap for all employees and contractors. They are to be used while staying at the Josephine Lake camp.

## ARCHAEOLOGY

**No work is to occur in any areas of known archaeological sites.** If any employee or contractor finds an archaeological site, they are to cease activity in the area and record the GPS coordinates and report the finding immediately to the Camp Manager and Project Manager. The Camp Manager will notify the Environment Manager who will contact the Government of Nunavut, DIAND and the KIA.

**Handling of any archaeological finds is prohibited.**



Tent Rings are the most commonly recognized archaeological site. Along eskers it is common to find stones that have been shaped to form tools and weapons.



## INTERNAL INSPECTIONS

Internal inspections are to be conducted by the Environment Manager on a monthly basis. In addition to the monthly internal inspections, daily inspections are to be conducted around the main fuel cache at camp by the Camp Manager. This is a requirement as outlined in our LUPs. The Camp Manager will look for drips, spills, leaks and damaged drums.

**The Camp Manager is not the only person responsible for maintaining a clean and safe workplace.** All employees and contractors should do their part to keep the camp tidy and to prevent garbage and other waste from littering the tundra.

Some points to consider when going about your daily business are:

- When flying in to the camp, look at it from an Inspector's point of view or a community visitor's point of view.
  - Does the camp look tidy overall?
  - Is there any garbage lying around?
  - Has any garbage blown away and can it be seen on the tundra?
  - Are items stored in a neat and tidy fashion?
- Drips and leaks
  - While going about your daily tasks, think about whether or not a drip or a leak is a potential
  - In areas where you identify a potential, place a drip pan or some sort of collection device underneath the area. You can hold a pan in place with a rock.
  - In areas where drips and leaks are a potential, keep spare absorbent pads in a pail with a lid so that they are easily accessible
  - Report all potential leaks and drips to the Camp Manager.
- To do list
  - It will not always be safe or timely to clean up areas, for example items that are on thinning ice. Having a "To Do List" somewhere visible in the office will show any potential visitors that you are aware of the issue and that you will address it when it is safe or timely to do so.
- Fuel storage areas
  - Make sure that fuel drums are stored according to code and best practices

- Keep propane tanks pointing away from the camp
  - Keep the fuel storage area tidy and neat
  - Visually inspect the fuel storage area at camp every day to be sure that there are no leaks or damaged drums and that all barrels are stored in the 3:00 and 9:00 position.
- Burn areas
  - Do not let garbage pile up
  - Food waste should be incinerated frequently
  - Ensure that only burnable waste is burned in camp. Metal, batteries and all other non-burnable waste will be flown out of camp.
- Make sure that the storage areas, generator shack and all other areas are neat and tidy. Be sure that chemicals are stored on shelves or at least on a wooden floor. Do a visual inspection whenever you are in these areas.

Any concerns, issues or potential problems should be reported to the Camp Manager and Project Manager immediately.