

# ENVIRONMENTAL CODE OF PRACTICE COGEMA Resources Inc. - EXPLORATION DEPARTMENT

#### 1. **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 authorisation (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 COGEMA Resources Inc. has developed for its field operations.

CRI Exploration expects that all personnel and contractors operating on its behalf will recognize and respect the rights of other land users, including, but not limited to, trappers, tourists, hunters and outfitters. This may require that other land users, if identified by regulatory agencies, will be duly consulted prior to the start of work. As well, any such human traffic encounters, during the course of field activities, should be reported to the regulatory agencies. Contractors can report such encounters to CRI personnel.

#### CRI Exploration strongly encourages:

- reducing waste (i.e. using rechargeable batteries)
- reusing materials
- recycling (i.e. batteries, printer cartridges, beverage containers)
- fuel conservation (restricting vehicle idle time and the number of trips to the absolute minimum required)

#### CRI Exploration 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.
- preventive maintenance activities to reduce the likelihood of failure resulting in an environmental impact. Examples include tightening of bolts, changing worn hydraulic hoses, performing regular oil changes and scheduled servicing of fire extinguishers.

#### **Authorisations Required**

Any exploration activity requiring authorisation by environmental regulatory agencies (federal, provincial or otherwise) will only proceed when written copies of such authorisation are in the possession of the key field personnel (foreman of contractor crew, senior CRI Exploration field person, etc.). Any such exploration activity will only be conducted in full compliance with all conditions attached to such authorisation. In the event of changes to programs underway, exploration activity may proceed following verbal authorisation from the environmental regulatory agencies on the condition that such verbal authorisation is later documented in writing. Authorisations must be posted in field camps.

Storage of equipment and fuel from one season to another requires authorisation by environmental regulatory agencies.

CRI Exploration will obtain any required authorisation from environmental regulatory agencies. The District Geologist / Senior Geologist / Project Geologist / Chief Geophysicist / Project Geophysicist is responsible to ensure that:

- all field exploration activity is discussed with the relevant environmental regulatory agencies to obtain the necessary authorisations
- all exploration activity is conducted in accordance with conditions of authorisations and with CRI Exploration's ENVIRONMENTAL CODE OF PRACTICE

The Contract Administrator (i.e. the CRI Exploration employee responsible for the contractor) is responsible to ensure that:

- all exploration activity by non-CRI Exploration personnel is conducted with a signed contract which will identify the requirement to adhere to authorisations from environmental regulatory agencies and to CRI Exploration's Environmental Management Program
- contractors have received copies of all authorisations, CRI EXPLORATION DEPARTMENT ENVIRONMENTAL POLICY and ENVIRONMENTAL CODE OF PRACTICE
- all exploration activity by non-CRI Exploration personnel is conducted in accordance with conditions of authorisations and with CRI Exploration's ENVIRONMENTAL CODE OF PRACTICE

#### **Training, Awareness & Competence**

All CRI Exploration personnel, contractors and long-term visitors will have the necessary training, competence and awareness to perform their duties in an environmentally responsible manner and to fully comply with environmental authorisations.

At a minimum, the following training is required:

## • EMS General Awareness

**Who**? All CRI Exploration employees, contractors and long-term visitors.

This training may take the form of a PowerPoint presentation, a general information pamphlet, or any other form deemed appropriate

## • Transportation of Dangerous Goods

**Who?** All CRI Exploration employees transporting radioactive materials.

**Who?** All CRI Exploration contractors transporting fuel in 45 gallon drums or large tanks (must submit evidence of compliance or exemption)

## • Fire Prevention / Response

**Who?** All CRI Exploration field personnel

**Who?** Senior site personnel of CRI Exploration contractors establishing temporary work camps in excess of one night during the fire season (must submit evidence of compliance); specifically, <u>drill foreman, driller / runner, party / crew chief (ground geophysics & linecutting).</u>

#### Spill Response

Who? All CRI Exploration field personnel handling fuels and lubricants

Who? Senior site personnel of CRI Exploration contractors handling fuels and lubricants (must submit evidence of compliance); specifically, <u>drill</u> <u>foreman, driller / runner, party / crew chief (ground geophysics & linecutting)</u>.

## • WHMIS

Who? All CRI Exploration field personnel handling fuels and lubricants

**Who?** Senior site personnel of CRI Exploration contractors handling fuels and lubricants (must submit evidence of compliance); specifically, <u>drill foreman, driller / runner, party / crew chief (ground geophysics & linecutting)</u>.

<u>CRI strongly encourages all contractors to obtain Fire Response, Spill Response and WHMIS</u> for their junior employees.

#### 2. WILDLIFE

Approaching and feeding wildlife is discouraged.

Sightings of rare wildlife, if recognized, should be reported to regulatory agencies. Contractors can report such sightings to CRI personnel.

Nuisance wildlife kills must be reported to regulatory agencies. Contractors can report such kills to CRI personnel.

Harassment of wildlife is strictly forbidden by all individuals conducting business on behalf of CRI Exploration. 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. All such firearm discharges must be reported to CRI Exploration personnel.

Hunting of wildlife while conducting business on behalf of CRI Exploration is only permitted by persons who are registered or entitled to be registered as "Indians" pursuant to the Federal Indian Act. Such hunting is only permitted if conducted in strict accordance with all applicable legislation.

#### **Aquatic Life**

Working in and around waterbodies must be done in such a way that disturbance to aquatic life and its habitat is minimised.

The drill contractor is responsible for proper testing of ice-thickness prior to moving heavy equipment across waterbodies and prior to drilling on ice.

CRI Exploration field workers must test for ice-thickness (using an ice auger) prior to crossing waterbodies via snowmobile or trucks, using the following table as a guide:

Permissible Load	Effective Ice Thickness	
	Lake	River
Snowmobile	10 cm (4")	15 cm (6")
Light Truck (2,400 kgs / 5,200lbs)	21 cm (8")	23 cm (9")
Medium Truck (4,000 kgs / 8,800lbs)	26 cm (10")	30 cm (12")

When travelling via truck on ice, maintain a steady pace and reduce speed near the shoreline to prevent ice from cracking underneath the vehicle.

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

No drill wastes are to enter waterbodies.

Only clean ice and snow (i.e. free of debris) may be used in constructing ice bridges.

No trees or soil must enter waterbodies during ice crossings.

Drill pads and new camps must not be located within 100 metres of a waterbody, unless approved by environmental regulatory agencies.

Exploration activities in the vicinity of fish-bearing waterbodies during spawning seasons will likely be subject to special conditions from environmental regulatory agencies (i.e. avoid shallower portions of lakes, river mouths, gravel bars and bays).

Removing vegetation in the vicinity of waterbodies requires that special attention be paid to soil erosion issues. Extra precautions may include hand-cutting trees within 100 metres of a waterbody if the ground is not sufficiently frozen to prevent mechanised equipment, such as a skidder, from exposing tree roots.

#### **Birds & Mammals**

Low-level aircraft and helicopter flights must make efforts to avoid areas which are crucial nesting habitat for eagle and osprey (such as near rapids or rapidly flowing water).

Proper food storage and handling of cooking wastes will prevent problems with nuisance bears and wolves. Trapping of animals for removal from a site requires authorisation by environmental regulatory agencies.

Special caribou protection measures are required for areas of Nunavut so as to avoid disturbance of migrating and calving herds. See "Reference Materials" below.

Brush from clearing operations must not be piled as to prevent passage of wildlife. Establishing breaks along windrows may be required. Respreading slash upon completion of drilling and camp usage is required.

#### 3. <u>VEGETATION</u>

## Minimising Removal / Damage

Careful planning of access routes, drill pads and temporary work camps will minimise vegetation damage.

Avoid standing merchantable timber whenever possible by taking the path of least resistance.

All clearing requirements are to be kept to the absolute minimum needed to complete the task. This includes using existing trails and cleared camps whenever possible, and using sufficiently frozen lakes, bogs and muskegs for access routes.

All activities are to occur on dry or frozen ground. During wet conditions exploration activity must stop for all activities that could potentially cause rutting of the ground surface. Rutting can also be avoided by using soft turns.

#### **Avoiding Contamination**

See also section below on "Fuels and Lubricants – Transporting and Handling".

Drill muds and flocculents must be environmentally safe (i.e. non-toxic and / or biodegradable).

#### **Preventing Fire Hazards**

Approved chemical fire extinguishers must be located in each tent, building, at all sites of heavy equipment (generator shack, drill rig, skidder, track dozer) and at all areas containing combustible materials (fuel caches, tool cribs). It is also recommended that heavy equipment such as a skidder and track dozer have a fire suppression system.

Heavy equipment (large generators, drill rigs, skidders, track dozers) must be equipped with vertical exhaust stacks free of leaks.

Heavy equipment (large generators, drill rigs, skidders, track dozers), vehicles (trucks, snowmobiles, ATV's) and other small equipment (generators, chain saws, ice augers) must be maintained in good working order (i.e. regular maintenance), and free of accumulated grease and oil.

Track dozers must be equipped with spark arresters.

Diesel stoves, large propane stoves and water heaters must be maintained in good working order and inspected weekly .

Adequate fire fighting equipment (water pumps, shovels, buckets, etc.) must be available in camp during the fire season.

Burn barrels must have grated tops, must be located in a clearing away from tents and vegetation, and must be attended until the fire is completely out.

Open fires during the fire season are only permitted for heating and cooking purposes, and only if there is no fire ban in place.

No smoking is permitted in the vicinity of combustible fuels and materials.

Tents and buildings must be located some distance apart to reduce the spread of a fire.

Brush piles from cleared temporary work camps, drill pads and access trails must be respread over the cleared areas. Leaning trees must be removed from standing timber.

#### 4. FUELS AND LUBRICANTS – TRANSPORTING AND HANDLING

Material Safety Data Sheets (for controlled substances) must be readily available in the work camp and posted at all drill rigs

No fuel storage or lay-down areas are permitted on ice or within 100 metres of waterbodies.

All individual fuel drums, fuel storage tanks, drill rig fuel tanks and pump shack fuel tanks must have secondary containment (i.e. rubberised berm or other suitable construction to contain 110% capacity of the fuel). In the case of fuel caches (i.e. multiple drums stored in one location), secondary containment must be sufficient to handle 10% of the total fuel volume PLUS the size of the largest container. For example, a single site containing five 45-gallon drums and two 50-gallon drums, must have containment as follows:

- 5 drums x 45 gallons = 225 gallons
- 2 drums x 50 gallons = 100 gallons

**Total Fuel Volume** = 325 gallons

- 10% of Total Fuel Volume = 32.5 gallons
- Size of Largest Container = 50 gallons

## **Secondary Containment Requirement = 82.5 gallons**

Absorbent matting and / or drip pans must be placed under all areas where fuel leaks are likely to occur (i.e. fuel line hose connections, fuelling stations, generators, water pump, parked heavy equipment), and these areas must be inspected on a daily basis.

Lubricant storage areas must have secondary containment to handle leaks and spills.

Appropriate size spill kits must be located at the drill rig, at the water pump and in work camps.

Waste oil, waste filters, and cleaned-up spill materials must be contained for removal from the site, and disposed of in accordance with applicable regulations. Please note that most jurisdictions require that waste oil, waste filters and empty containers be recycled.

Degreasing agents used for maintenance of equipment parts must be environmentally friendly and grease must be contained for removal from the site.

## 5. REFERENCE MATERIALS (available in Q:\Exploration\IQMS\Permits and in hard-copy format on the Exploration Department's ISO 14001 bulletin board)

"Caribou Protection Measures: Qamanirjuaq and Beverly Herd." (Nunavut: Kivalliq Inuit Association, and Federal Department of Fisheries and Oceans)

"Freshwater Intake End-of-Pipe Screen Guideline" (Department of Fisheries and Oceans)

"Interim Guidelines for the Disposal of Drill Hole Waste Generated During Exploration for Metallic Minerals [Gold, Diamond, Etc.], Oil Sands and Uranium in the Green Area." (Alberta Department of Sustainable Resource Development)

"Mineral Exploration Guidelines for Saskatchewan" (Saskatchewan Environment)

NOTE: This document was issued in 2005 and consists of a series of Best Management Practices. The former "Surface Exploration Guidelines" are now obsolete.

#### 6. REFERENCES

EXPLORATION DEPARTMENT ENVIRONMENTAL POLICY, in Q:\Exploration\14001\Support Files