

DEPARTMENT OF ENVIRONMENT
ENVIRONMENTAL PROTECTION SERVICE

STANDARD RECOMMENDATIONS FOR LAND USE APPLICATIONS
(AS APPLICABLE)

Spill Contingency Plan

The applicant should have a contingency plan for responding to chemical and petroleum spills which might occur during the proposed activity. The plan should include a list of available spill response equipment and the names of trained personnel who will be on-site and available in the case of a spill.

The proponent is referred to DoE's *Spill Contingency Planning and Reporting Regulations* and *A Guide to the Spill Contingency Planning and Reporting Regulations*.

Fuel Storage

To prevent spreading in the event of a spill, fuel stored in drums should be located, whenever practical, in a natural depression a minimum distance of 90 feet from all streams, preferably in an area of low permeability. All fuel storage containers should be situated in a manner that allows easy access and removal of containers in the event of leaks or spills. MSDS sheets should be provided for each fuel and be posted in a central location; accessible by all camp personnel. This information will provide the hazards of each fuel (i.e. flammability) and the methods of dealing with the fuel in the event of a spill. Large fuel caches in excess of 20 drums should be inspected daily.

Chemical Storage

All chemicals should be stored in a safe and chemically-compatible manner a minimum of 90 feet from all bodies of water. The applicant should be required to remove unused chemicals for reuse or disposal to an approved site using methods approved by the Land Use Inspector. Material safety data sheets (MSDS) should be provided for each chemical and be posted in a central location; accessible by all camp personnel. Camp personnel should be conversant in the handling of these chemicals as well as able to deal with any accidents or spills.

Location of Hazardous Materials

Hazardous materials stored on-site should be marked so they will be visible under all conditions, in all seasons. This recommendation is intended to help prevent possible injuries to camp personnel and/or damage to the containers. Unless otherwise specified by the land use inspector or license -issuing agency, all hazardous materials should be removed from the site upon completion of the activity. The proponent is referred to DoE's *Environmental Guideline for the General Management of Hazardous Waste*.

Waste Oil/Waste Fuel Disposal

Waste oil and waste fuel should be removed and returned for recycling when the land use activity is completed. Alternative methods of disposal that provide an equivalent level of environmental protection will be considered on a case by case basis.

Used Drums

Used fuel and oil drums should be removed from the site, returned for deposit, or reused.

Contaminated Soils

Soil contaminated by fuel (e.g., soils under an old storage tank) should be treated on site or removed to an approved disposal site and replaced with new soil. The proponent is referred to DoE's *Environmental Guideline for Site Remediation*.

Winter Roads

Existing winter road routes and trails should be used whenever possible, to avoid unnecessary land clearing.

Drill Sumps

The sumps should only be used for inert drilling fluids, not any other materials or substances. The sumps should be properly closed out.

Garbage Disposal

Garbage should be removed from the camp periodically; alternatively, all combustible wastes can be incinerated on site and non-combustibles collected and removed upon termination of the activity or periodically.

Incineration

For camps of less than 10 people, it is recommended that a draught barrel be employed to burn wastes. A draught barrel is essentially a 45 gallon drum or equivalent, with a hole in the bottom to facilitate air intake, and is closed at the top with a lid and a chimney for the exhaust. EPS does not consider burning wastes in a draught barrel to be true incineration, however, for small camps; this is an acceptable means to deal with camp wastes. The draught barrel should be operated so that a high temperature burn is maintained at all times. This will promote complete combustion and eliminate pollutant and odor concerns.

For camps of more than 10 people, it is recommended that a forced air incinerator be used to manage wastes. Once again maintaining a high temperature burn to reduce wastes is imperative.

Kitchen wastes, cardboard, paper products, packaging and untreated wood wastes are suitable for burning in a draught barrel and a forced air incinerator. Industrial wastes and non combustible wastes should be removed from the camp and disposed of at a designated landfill or other approved facility. Under no circumstance should hazardous wastes be managed through burning or incineration.

For camps of greater than 50 people, it is recommended that a municipal waste incinerator, which produces emissions that meet CCME air quality guidelines, be used to dispose of camp wastes. The manufacturer will specify operating conditions and types of wastes that can be disposed of in the incinerator in order to meet the specified CCME standards. It is recommended that municipal waste incinerators be operated to meet manufacturer specifications.

The aforementioned comments are a brief thumbnail sketch of what DSD suggests that a proponent should be implementing to mitigate any damage or alterations to the environment during the course of their proposed activities. The proponent is referred to the Government of Nunavut's acts, regulations and environmental guidelines for details.

Acts, Regulations and Environmental Guidelines

The Environmental Protection Service, Department of Environment derives its regulatory authority and operational mandate from the Government of Nunavut's *Environmental Protection Act* (EPA). A number of regulations and guidelines have been developed and adopted under the EPA; some, or all of which might prove to be of assistance to a proponent in planning their activities. The guidelines are listed here for the information of the proponent and are available to the public at any DoE's office in Nunavut or from DoE's Headquarters office located at:

Department of Environment
Environmental Protection Service
Government of Nunavut
Box 1340
Iqaluit, NU
X0A 0H0
(867) 979-5119
E-mail: matkinson@gov.nu.ca or ebaddaloo@gov.nu.ca

Acts and Regulations

Environmental Protection Act

Environmental Protection Act: Simplified Summary

Environmental Rights Act

Spill Planning and Reporting Regulations

A Guide to Spill Contingency Planning & Reporting

Asphalt Paving Industry Emission Regulations

Pesticide Act

Pesticide Regulations

Used Oil and Waste Fuel Management Regulations (undergoing completion; proposed for June 2000)

Environmental Guidelines

Dust Suppression

General Management of Hazardous Waste

Industrial Projects on Commissioner's Lands

Industrial Waste Discharges

Ozone Depleting Substances

Site Remediation

Sulphur Dioxide & Suspended Particulates

Waste Antifreeze

Waste Asbestos

Waste Batteries

Waste Paint

Waste Solvents

Wildlife

1. Carnivores

DoE is concerned that there may be possible attraction of Carnivores (Grizzly Bears, Wolves, Foxes and Wolverines). The proponent is advised to minimize odors that potentially attract carnivores through timely camp housekeeping. Should the proponent experience any interaction with carnivores, they are advised they should contact the local wildlife officer.

2. Bear-People Conflicts

The operation is in an area where bears may be encountered. Proper food handling and garbage disposal procedures should be followed to reduce the likelihood that bears will be attracted to the operation. Careful planning and attention to details of camp design and maintenance will decrease the attraction of bears to camp.

The applicant should follow procedures outlined in the "Safety in Bear Country Manual", and should contact the Regional/Area Biologist or the Renewable Resource Officer indicated below for information and advice on measures which should be taken to minimize the possibility of bear-people conflicts.

DoE Contacts

Manager, Wildlife
-Dan Shewchuk, (867) 857-2828
Biologist, Kivalliq Region, Arviat
- Mitch Campbell, (867) 857-2828

3. Caribou Protection Measures

See attached. [Recommendation of these conditions is not restricted to the Kaminuriak and Beverly herds (i.e., they may be applied to other herds as well).]

4. Raptor Nesting Areas

The project area includes known raptor nesting sites and other areas where it is likely that raptors nest. To minimize negative impacts of this operation on raptors, the applicant should be advised to:

(a) take care not to disturb nesting raptors from 15 April to 1 September by staying at least 1.5 km away from them when in transit by aircraft, and to avoid approaching them closely while on foot, and

(b) contact the Regional Biologist in Arviat (857-2828) to identify areas which should be avoided.

The following clause could be included in the covering letter: "If raptors are disturbed during the nesting period, they often abandon the eggs or young. Loud, repeated noises and close approach by humans on foot are particularly harmful."

5. Low Level Flights

Aircraft activity with no specific requirements for low level flying should be restricted to a minimum altitude of 300m above ground level.

6. Storage of Chemicals Containing Salts

Chemicals containing salts, which may attract wildlife to the site, should be stored so that they are inaccessible to wildlife.

CARIBOU PROTECTION MEASURES¹

1. (a) The Permittee shall not, without approval, conduct any activity between May 15 and July 15 within the Kivalliq region.

(b) **A Permittee may, upon approval by the Land Use Inspector (DIAND) or Land Manager (KvIA), operate within the Kivalliq region beyond the May 15 deadline set out in 1(a), provided that when caribou cows are approaching the area of operation, the Permittee will implement 1 (c).**

(c) **During the period of May 15 to July 15, the Permittee will suspend all operations, particularly blasting, overflights by aircraft at any altitude of less than 300 metres above ground level, and the use of snowmobiles and ATV's (all-terrain vehicles) outside the immediate vicinity of the camp, and all personnel will remain quietly in camp or, upon advice from the Land Use Inspector (DIAND) or Land Manager (KvIA), the Permittee will remove all personnel from the site who are not required for the maintenance and protection of the camp facilities and equipment.**

(d) **The Permittee may resume activities prior to July 15 if the caribou cows have ceased to use the area for calving or post-calving.**
2. (a) During migration of caribou, the Permittee shall not locate and operation so as to block or cause substantial diversion to migrating caribou.

(b) The Permittee shall cease activities that may interfere with migration, such as airborne geophysics surveys or movement of equipment, until the migrating caribou have passed.
3. The Permittee shall not construct any camp, cache any fuel or conduct blasting within 10 km, or conduct any diamond drilling operation within 5 km, of any "Designated Crossing" as outlined on the map annexed to a Land Use Permit.
4. Concentrations of caribou should be avoided by low-level aircraft at all times.

¹ Based on the **Caribou Protection Measures (Qamanirjuaq and Beverly Herds) 1988**, DIAND

