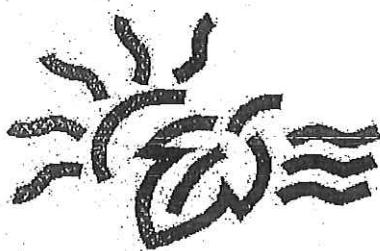




**Training and
Education for
Environmental
Stewardship**

Self-Study Package

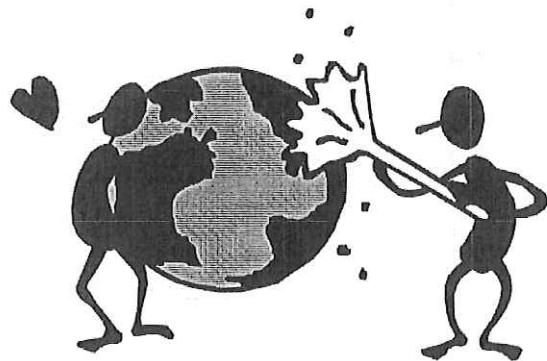
General Awareness





SECTION 1

GENERAL AWARENESS



"Conserve the water, the rain dance won't always work..."
Anonymous



Introduction



All Canadian citizens are personally responsible for the protection of the environment as they carry out their duties. Furthermore, as members of the Regular and Reserve Forces or civilian employees of DND, we are required to use reasonable standards of care, referred to as due diligence, to uphold Canada's environmental laws as we perform our duties.

Whether you are a Commanding Officer, a Cadet, a member of the Cadet Instructors' Cadre (CIC) or a civilian instructor, it is your responsibility to protect the environment around you. Your actions whether you are sitting at your desk, fuelling an aircraft or on an exercise have a direct impact on the environment. As such, you must be aware of the laws, policies and Standing Operating Procedures (SOPs) in place for your activities or workplace and keep them in mind as you carry out your duties.

As members of the CCO, we have an **OBLIGATION** to make sure that we and our cadets act in a responsible manner and are good stewards towards the environment. More importantly, as good citizens, we must look after the environment which sustains us.

The main objective of the General Awareness section is to make sure that you, as a member of the Canadian Cadet Movement, are aware of your responsibilities and legal obligations towards the environment. Section One provides you with the essential knowledge to protect the environment during the execution of your duties. As such, it will deal with various environmental concepts, policies and spill response procedures.

Outline

Upon completion of Section One, you will be acquainted with the following elements of Environmental Stewardship:

- key environmental definitions
- key environmental legislation
- emergency response procedures

You will be expected to confirm, through a self-assessment, that you have achieved the desired level of knowledge through the indicators listed below:

- understand key environmental concepts
- acquainted with the environmental legislation and policies
- understand the steps necessary to respond to spills



Lesson 1: Key Environmental Definitions

In order to understand environmental policies, it is important to comprehend the following key concepts:



- Environment
- Environmental protection
- Energy conservation
- Due diligence
- Sustainable development

1. Environment

Environment means all of the components of the Earth and includes:

- air, land and water
- all layers of the atmosphere
- all organic (e.g. plants), inorganic matter (e.g. stones) and living organisms
- the interacting natural systems that include the three components listed directly above

2. Environmental Protection

Environmental protection, through a variety of methods, prevents, reduces or reverses environmental degradation. Environmental protection promotes sound environmental management and stresses the need for continuous improvement.



Think about it...

Every ton of paper that gets recycled saves approximately 17 trees

3. Energy Conservation

Energy conservation is making the most economical use of all energy sources involved in the propulsion of ships, aircraft and vehicles. It is also designates the most economical use of utilities.



Think about it...

Shutting off your computer every night will not only save energy, but also saves you \$63.00 a year.

4. Due Diligence

Due diligence is a legal term that requires individuals, in their course of action or duty, to maintain a reasonable **standard of care**. Most environmental legislation involves strict responsibilities where the only course of action that is justifiable is due diligence.

The concept of **standard of care** has three components:

- behave in a responsible manner by observing applicable statutes, regulations, by-laws and guidelines
- prepare for risks that a thoughtful and reasonable person would foresee
- respond to risks and incidents as soon as practicable

The repercussions for not exercising due diligence could be:

- destruction of the environment
- possible fines or imprisonment under civilian and/or military law



Think about it...

Did you consider environmental matters the last time you planned a cadet activity?

5. Sustainable Development

Sustainable development refers to management or development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.



Lesson 2: Key Environmental Legislation

Environment-related legislation may affect the conduct of some cadet activities more directly than others may. It is important that cadet activities be carried out with consideration for their environmental impacts, which means respecting all environment-related laws, policies and SOPs.

✓ Can you be fined and/or go to jail for being negligent towards the environment?

Yes obviously, acts of negligence during activities may cause damage to the environment in different degrees of seriousness. Common sense must be used. For instance, wasting paper is negligent but will not land you in jail! However damages such as fuel spills may be extremely costly to repair and may have serious consequences on different life forms, including yours. This is why Canadians have demanded meaningful laws and appropriate punishment for such offences. Although environmental stewardship is not specifically about laws, it is essential that you become familiar with the basic laws, which will enable you to demonstrate due diligence.

Some environmental laws that all DND/CF personnel are bound by:



- The Canadian Environmental Protection Act
- The Fisheries Act
- The Canadian Environmental Assessment Act
- Applicable provincial, territorial and municipal laws in your area
- NDHQ Policy Directive P5/92: Canadian Forces and National Defence Policy on the Environment.
- Cadet Administrative and Training Order (CATO) 11-08— Environmental Protection and Stewardship

1. Canadian Environmental Protection Act (CEPA)

CEPA provides a framework for protecting the environment from pollution (e.g. PCBs, ocean dumping) and for federal control over the management of chemical substances. The Act contains the entire life cycle of toxic substances — from their development and manufacture, through transport, distribution, use and storage, to their ultimate disposal.

Penalties for Violation:

- fines up to \$1 M per offence,
- imprisonment (up to 5 years)
- the cost of clean up

supervisors can be prosecuted too...

NOTE: *Most environmental statutes provide that where an offence continues over an extended period of time, the guilty person can be charged separately for each day that the offence occurs.*

2. Fisheries Act

The Fisheries Act has been legislated since Confederation (1867). It is Canada's oldest environmental statute. DND has been convicted on two occasions for having violated the Act which protects fish, including shellfish, crustaceans and marine animals, and their habitat from alteration or destruction.

In accordance with the Fisheries Act as paraphrased below, no employee/member of DND/CF shall:

- carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat (ref. 35 (1))
- throw overboard ballast, coal ashes, stones or other prejudicial or polluting substances in any river, harbour or roadstead, or in any water where fishing is carried on (ref. 36 (1)(a))
- leave/deposit or cause to be thrown/left/deposited, on the shore/beach/bank of any water, or on the beach between high and low water mark, remains or waste parts of fish or marine animals (ref. 36 (1)(b))
- deposit or permit the deposit of a polluting substance of any type in water frequented by fish or deposit a harmful substance somewhere where it may enter water frequented by fish (ref. 36 (3))

Penalties for Violation:

- fines up to \$1 M per offence,
- imprisonment (up to 3 years)
- the cost of clean up

supervisors can be prosecuted too

✓ *Think about it...*

If your cadets build a rope bridge over a salmon river, should you be concerned about the Fisheries Act?

✓ *For your information ... A DND example*

DND pled guilty to one count of depositing a harmful substance (fuel) in water frequented by fish, in violation of section 36.3 of the Fisheries Act. The charge relates to an incident that occurred at CFB Trenton, wherein fuel from an underground storage tank on the base discharged fuel through storm sewers into the Bay of Quinte nearby. The court fined DND \$1 and ordered DND to provide \$40,000.00 to various environmental agencies in the Bay of Quinte area in support of the conservation and protection of wetlands and fish habitat. In addition, DND had to publish articles in two local newspapers explaining the details of the offence. Criminal charges, which were initially laid against two of the officers involved, were later dropped on a technicality.



3. Canadian Environmental Assessment Act (CEAA)

CEAA establishes in law the obligation to conduct Environmental Assessments (EAs). It outlines a progressive approach, starting with initial screenings and ranging upward to full public hearings and panel reviews. CEAA requires DND/CF to undertake EAs. Any proposed construction, operation, modification, decommissioning or abandonment of a base is subject to an EA before action is taken.

✓ *For your information...*

An EA will not normally be conducted at the unit level. The EA Chart in CATO 11-08, covers the areas most likely to cause an environmental problem and indicates those which may require an EA. If there is a requirement for an EA based upon the harmful potential of your activities, it must be completed by a qualified U Env O who you must contact at your Detachment, RHQ, NDHQ, or CSTC.

4. Provincial Legislation

DND/CF must comply with all applicable provincial/territorial, municipal, regional and international standards concerning the environment. Due to geographical considerations, it is beyond the scope of this package to examine all of the different provincial, municipal and local by-laws. It is, therefore, the responsibility of unit officers to research the local and municipal by-laws when preparing an activity. To do this, you should contact your local Detachment and/or Regional Env O or the local Conservation Office, as they will be able to guide or give you information about environmentally sensitive areas.

5. NDHQ Policy Directive P5/92: Canadian Forces and National Defence Policy on the Environment.

The foundation for DND/CF's environmental policy framework is NDHQ Policy Directive P5/92. It calls for identifiable plans and targets, and stresses the importance of increasing the visibility of our environmental initiatives.

NDHQ Policy Directive P5/92 includes a key element called the Code of Environmental Stewardship which commits DND/CF to the following:

<ul style="list-style-type: none"> ☛ integrate environmental concerns into decision making ☛ meet and exceed the legal requirements of international, federal, provincial, municipal and local environmental legislation and standards ☛ educate members and recognize efforts to protect the environment 	<ul style="list-style-type: none"> ☛ ensure environmental concerns are taken into procurement policies ☛ promote cost effective reproduction in energy, water, waste, noise resources, and pollution by adopting 4 Rs and other green office policies: <ul style="list-style-type: none"> ➢ Reduce ➢ Reuse ➢ Recycle ➢ Recover
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6. CATO 11-08– Environmental Protection and Stewardship

Last, but not least, is CATO 11-08. It is a tool that you should always use when planning cadet activities. Whether you intend on fuelling a plane or a boat, going out in the forest or simply building a base camp, CATO's Activity Assessment Chart (pages 25 and 26 of this document) will help you plan your activity and ensure that you are following the environmental policies.

In accordance with CATO 11-08 which prescribes CCO/CIC policies with regard to the environment, an Organization must:

- ensure that all CCO/CIC activities meet various environmental legislation
- educate all CCO/CIC members on environmental awareness
- adopt the Code of Environmental Stewardship (ref. CATO 11-08, page 12 of this document)
- ensure that all environmental incidents are reported promptly

Legal Liabilities

A member of the CF who commits an offence in violation of environmental legislation may:

- suffer penalties under the National Defence Act or other federal legislation (for instance, the Fisheries Act); and/or
- be personally liable to cover any financial or imprisonment penalties.

A supervisor who commits an offence may be charged personally for the actions of the cadet(s).

A cadet who commits an offence under the environmental legislation may be charged under the Young Offenders Act.



Think about it...

Here are some suggestions of what you can do with your cadet unit to protect the environment:

- *recycle cans, paper or cardboard*
- *clean-up a park or a river*
- *save water*
- *shut off electrical appliances when they are not being used*
- *develop a recycling program*
- *practice low-impact camping*



Lesson 3 : Emergency Response

In demonstrating due diligence and maintaining a reasonable standard of care, it is fundamental to respond to spills when and where possible.

Environmental incidents include the release, spill or discharge of Hazardous Materials (HAZMAT) into the environment, for example, breaches or leaks in fuel tanks, or the mishandling of naphtha.

✓ *Think about it...*

Did you know that the CCO/CIC uses many different HAZMAT like paint, naphtha, cleaners, adhesives, ammunition, photographic chemicals, fuels, oils and other chemicals?

1. Spill Response Emergency Procedures

If you are faced with an environmental spill, these are the steps you should follow. **Remember that your priority is your personnel's safety and your own.**

- stay calm
- ensure safety of personnel
- secure the area
- identify and assess the situation. **Do not assume any details about the incident.**
- respond to spill when and where it is safe to do so (using a spill kit as described below), by
 - confining the spill using booms or socks
 - absorbing the spill using the absorbent material and/or absorbent pads
- restore the site when and where it is safe to do so
 - clean up the site
 - dispose of used spill response equipment
- report the incident

✓ *Think about it...*

Have you briefed your cadets on what to do if an environmental spill happens?

2. Spill Response Kit

A spill response kit contains the following items:

- absorbent, such as "Cansorb" or "Kitty Litter" suitable for Hazardous Materials
- receptacle/plastic bag which will contain the contaminated absorbent
- protective glasses and gloves
- dust pan or shovel
- carrying bag

It is possible to put together a homemade spill kit, by buying these elements at, for instance, a hardware store or home improvement store.

3. Determine the Reporting Requirements

If the environment is damaged in the course of your activities you must report it. Incident reports must be forwarded to your Commanding Officer, who will in turn report it to the designated person in the environmental chain of communication (as described in CATO 11-08).

As a rule, an investigation will follow to determine if the damage was the result of an unforeseen accident or if it was caused by negligence.

If charged, legal representation may be provided at public expense, but if convicted, as an individual, YOU are liable for any fine or jail term that may result.

Conclusion: Section 1 General Awareness

The aim of Section 1 General Awareness was to make you aware of your responsibilities and legal obligations towards the environment and ensure that you have the necessary knowledge to protect the environment during the execution of your duties.

In order to know more, you should read CATO 11-08 – Environmental Protection and Stewardship. You may also want read the Section 2 Leadership, or discuss environmental topics with your superiors.

✓ *Think about it...*

560 Moncton RCACC has been recycling newspapers, cardboard and paper through a local recycling company (BFI). They received \$0.05 per pound of paper. The money earned was used for a year-end trip.