

## **Environmental Guidelines**

318-3

## Environmental Emergency Plan (EEP)

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## ENVIRONMENTAL GUIDELINES (EG) – ENVIRONMENTAL EMERGENCY PLAN (EEP)

### PRIMARY GOALS

To eliminate, reduce and/or mitigate environmental impacts in the event of hazardous substance releases at Correctional Service of Canada's institutions.

### SPECIFIC OBJECTIVES

To ensure preparedness to react in the event of accidental spills of hazardous materials in accordance with pollution prevention rules and obligations.

To establish formal response procedures that will minimize damage which may occur as a results of accidental spills of hazardous substances.

For each institution, to develop, adapt and integrate an Environmental Emergency Plan to respond to accidental spills of hazardous materials, to provide specific training, and to hold drills, so as to ensure preventive and responsible environmental protection management.

To prepare staff and inmates for quick and effective responses to equipment failure, accidents, sabotage, or other incidents that could cause environmental damage (impacts), more specifically:

- adjacent soil contamination and devaluation of the land;
- contamination of nearby watercourses;
- release of atmospheric pollutants (particularly when fire occurs subsequent to spills);
- contamination of the aquifer (underground water) and consequently of drinking water when there are artesian wells on the affected site;
- introduction of toxic substances to the food chain via contamination of ecosystems and/or vegetable and animal species;
- destruction of natural habitat, animals and/or material assets; and
- losses, injuries or assaults on the quality of human life.

### **AUTHORITIES**

Correctional Service of Canada Commissioner's Directive 318 - Environmental Programs.

Sustainable Development Strategy (SDS) of the Correctional Service of Canada.

Canadian Environmental Protection Act, 1999.

Fisheries Act, 1985.

Transportation of Dangerous Goods Act, 1992.

Hazardous Products Act, 1985.



## SECTION 1 – DEFINITIONS, RESPONSIBILITIES AND SCOPE

### **DEFINITIONS / ACRONYMS**

For the purpose of these Environmental Guidelines:

- AWMS Assistant Warden, Management Services.
- **Contaminant** Any chemical substance whose concentration exceeds background concentrations or which is not naturally found in the environment.
- **CPM** Chief of Plant Maintenance or Chief of Works.
- **Environmental Emergency Plan (EEP)** In the spirit of resource conservation and pollution prevention, an EEP consist of a procedure to minimize and mitigate the environmental impacts through rapid response in case of special incidents involving accidental release of contaminants in the environment.
- **Environmental emergency** The uncontrolled, unplanned or accidental release of a substance into the environment; or the reasonable likelihood of such a release that may affect the environment, human life or health, or the environment on which human health depends.
- EMS An Environmental Management System is a tool for ensuring that an institution meets all of the environmental legislation and performance requirements for which its Institutional Head is accountable. According to ISO 14004, an EMS provides the framework to help an organization to manage its environmental agenda and to document, evaluate, and communicate its environmental performance. An EMS will assist federal organizations to ensure that major environmental risks and liabilities are properly identified, minimized and managed. At a minimum, an EMS helps institutions ensure that operations are conducted in compliance with environmental laws.
- **REO** Regional Environmental Officer.

### RESPONSIBILITIES

The Institutional Head, his or her assistants and the Corcan Operations Managers are accountable to ensure compliance with these Environmental Guidelines.

The Chief, Plant Maintenance (CPM) will normally be the person responsible for implementing and monitoring these Environmental Guidelines, so that Environmental Emergency Plan activities may be managed, reviewed and maintained from a central point in the institution.

### <u>SCOPE</u>

All Correctional Service of Canada's sites are subject to these Environmental Guidelines.



## SECTION 2 – GENERAL REQUIREMENTS

ENVIRONMENTAL EMERGENCY PLAN (EEP)

- 1. The Institutional Head must formally assign responsibility for developing and maintaining a state of preparedness for staff and inmates to implement an Environmental Emergency Plan (EEP) for the institution [refer to Annex A].
- 2. The persons assigned to the institution's EEP must put in place mechanisms and procedures that will allow for preventive and responsible management of emergency responses to environmental incidents (e.g. accidental spills of hazardous materials) in conformity with local safety regulations.
- 3. In order to be able to contend with potential spills of hazardous materials, the CPM will plan for response measures. In general, preparation for an EEP comprises three main stages:
  - a. response plan;
  - b. related training; and
  - c. drills (simulations).
- 4. The CPM will identify and describe the incident scenarios that are to be addressed in the institution's EEP. The incident scenarios that are deemed to be material should then be screened for duplication in the institution's other emergency response plans.
- 5. For each incident scenario addressed in the institution's EEP, the CPM will coordinate the development of a response plan which:
  - a. describes each incident scenario;
  - b. identifies and describes the tasks that must be carried out to respond to the incident effectively;
  - c. specifies which officers (and inmates) must carry out each defined task;
  - d. identifies any special equipment or supplies to be used, where they are kept, and how they are accessed;
  - e. prescribes how contaminated supplies and equipment are to be cleaned up or disposed of;
  - f. communicates requirements for reporting the incident as identified in these Guidelines;
  - g. updates the EEP annually before March 31<sup>st</sup>. (It is suggested that the annual updating of EEPs be done concurrently with the annual updating of WHMIS sheets.)

6. The Institutional Head or his or her assistant will test the institution's environmental emergency response capability by carrying out annual simulation exercises. This requirement is waived in a particular year if the institution has responded to a real incident during that year.

## SECTION 3 – SPECIFIC REQUIREMENTS

#### IDENTIFICATION AND ASSESSMENT OF RISKS

- Hazardous materials and hazardous wastes present on site [refer to Annex A] must be identified and categorized using an appropriate classification system – such as WHMIS. Risks (environmental impacts, toxicology, explosions, fires, etc.) related to these substances should be clearly described, by consulting their Material Safety Data Sheets, the Fire Safety Procedures Manual and/or the Transport Canada CANUTEC – Emergency Response Guidebook 2000 (ERGO) [refer to Section 5 – References].
- 2. The CPM will identify potential scenarios or spills and the nature of risks related to substances and wastes present such as handling errors and breakages of containment apparatus (petroleum storage tanks, barrels of toxic substances, hazardous material containers, etc.), locations where spills may occur (storage areas), and, as appropriate, quantities which may spill and the scope and significance of potential damages and risks for each scenario identified [refer to Annex B].<sup>1</sup>
- 3. The CPM will locate areas at risk, hazardous materials and toxic products present, as well as approximate quantities in storage. This information should be clearly marked on a detailed, updated site plan of the institution.

**Note:** In case of a major ecological incident (e.g. regional flood), the institution's evacuation plan has priority over these guidelines.

#### RESPONSE EQUIPMENT

- 4. The CPM will assess requirements with respect to response equipment and/or environmental emergency kits, absorbents, protective clothing, recovery containers, fire-fighting equipment, neutralizing chemicals, pumps, etc. and, as appropriate, acquire these in sufficient quantity to ensure their availability at all times [refer to Annex C].
- 5. The CPM will locate response equipment available in the institution on a detailed, updated site plan of the institution. As appropriate, attach a list of external contacts (agreements) for all other complementary response equipment.

<sup>&</sup>lt;sup>1</sup> Following this analysis, preventive measures should be taken to reduce the risks identified, in addition to measures required by regulations, directives, codes of practice and any other government documents.



- 6. The CPM will establish procedures designed to ensure:
  - a. regular inspection of response equipment to verify its condition;
  - b. as appropriate, maintenance of response equipment; and
  - c. maintenance of an updated inventory of response equipment.

#### COMMUNICATION NETWORK, MUTUAL AID AGREEMENTS AND CONTACTS

- 7. The CPM will establish a communication network, including a list of telephone contacts in the institution, as well as for industries and municipal, provincial and federal authorities.
- 8. The CPM will establish written mutual aid agreements (as needed). For example, organizations dealing with similar spill risks may assist each other, loaning either resource persons or response equipments.
- 9. The CPM will draw up a list of contacts for the notification procedure (organization chart or checklist). The notification procedure must assign roles and responsibilities to the officers involved for each work shift, to cover all times (day, evening, night and weekend) when an environmental incident may occur in the institution [refer to Annex D].

#### ALARM AND MOBILIZATION

- 10. The CPM will establish a clear and concise alarm procedure, i.e. a method of notifying those concerned that an environment incident has just occurred: local authorities, internal spill response team, Regional and National Headquarters, the regional office of Environment Canada, contractors and consultants (as needed). In addition to these authorities, technical information may be quickly obtained from the Canadian Transport Emergency Centre CANUTEC, at (613) 996-6666.
- 11. The CPM will establish a process for mobilizing internal and external resources. He must also define roles and responsibilities for all those involved in responding to hazardous material spills and inform them accordingly. The mobilization process must take into consideration times (day, evening, night and weekend) when incidents may occur.
- 12. The CPM will develop and adapt a response measures plan, in terms of quantities spilled, environmental emergency and associated risks [refer to Annexes E and F].
- 13. The response plan, equipment and list of contacts for the notification procedure must be available in relevant institutional locations and accessible at all times.

**Note:** It would be advisable to attach the EEP to institutional security manuals, i.e. enclosed with other institutional contingency plans.



## SECTION 4 – DATA MANAGEMENT AND REPORTING

#### REGISTER / RECORDS

- 1. Appropriate on-site records must be kept that will show the ongoing results on the institutional EEP.
- 2. An institutional register of hazardous material spill prevention actions taken (e.g. development of a response plan, contacts and agreements established in this regard, training sessions, simulation exercises, reports on actual incidents, etc.) must be kept up to date at all times.
- 3. All documents required in these Environmental Guidelines (EEP, annual reports, training records, simulation log, etc.) must be kept on site for at least five years following the date of issue.

#### INCIDENT REPORT

- 4. If any leak or spill of hazardous materials occurs, the CPM or a member of his or her team must document for future reference with supporting photographs or video the relevant circumstances surrounding the event, and the steps taken. When the situation is over, an appropriate incident report should be drafted within 48 hours [refer to Annex G].
- 5. Once completed, the incident report signed by local authorities (CPM, AWMS or Institutional Head) must be sent to the Regional Environmental Officer and to the Manager of Environmental Programs at National Headquarters whose mandate is, as appropriate, to inform and/or forward the incident report to Environment Canada.

#### LEGAL OBLIGATIONS – INCIDENT NOTIFICATION

- 6. Depending on the nature of the incident, the Environmental Emergency Plan must also take into consideration regulations, directives, codes of practice, guides and other federal and provincial documents which require or recommend that immediate incident notifications or reports be forwarded to the government agencies concerned. <u>Thus, for accidental spills</u>:
  - a. pursuant to the *Canadian Environmental Protection Act (CEPA)*, it is mandatory to notify Environment Canada of any accidental spill of a toxic substance identified in Schedule 1 of the CEPA (PCBs, ODSs, asbestos, mercury, etc.);
  - b. pursuant to the *Fisheries Act*, it is mandatory to notify Fisheries and Oceans Canada of any spill of contaminants into waters where fish live, and the incident must also be reported to Environment Canada, which administers the relevant sections of the *Fisheries Act*;



- c. pursuant to the *Transportation of Dangerous Goods Act, 1992,* Transport Canada must be notified of a spill which occurs while a contaminant is being transported; and
- d. the Environment Ministry of the province concerned should be notified of the accidental release of a contaminant.

### SECTION 5 – TRAINING / REFERENCES

#### TRAINING

- The CPM will develop a plan for training all staff (and if appropriate, inmates) who are assigned emergency response duties in the EEP, and for keeping their training up to date. The purpose of training is to give response personnel members the knowledge and skills they need to carry out their roles and responsibilities safely and effectively, in accordance with the procedures stipulated in the EEP. Therefore, the CPM will:
  - a. give or arrange for the required training so that response personnel members are trained as required in terms of risk related to hazardous materials present in their unit; and
  - b. ensure that the frequency of training or refresher sessions is established in accordance with circumstances and requirements.
- 2. The CPM will ensure that annual simulations/drills are carried out to test and improve the institution's Environmental Emergency Plan [refer to Annex H].
- 3. The CPM will keep a log (in the local register set up for that purpose) of the status of all EEP training, simulations and updating events (including pertinent recommendations).

#### REFERENCES

- 4. Environment Canada infonet site Environmental Emergencies: <u>http://www.ec.gc.ca/ee-ue/main/main\_e.cfm</u>.
- 5. Environment Canada infonet site Environmental Emergencies Contacts: <u>http://www.ec.gc.ca/ee-ue/contact/contact\_e.cfm</u>.
- 6. Environment Canada infonet site for "Environmental Emergency (E2) Plans": <u>www.ec.gc.ca/ee-ue/plans/e2qa\_e.cfm</u>.
- 7. Environment Canada's Implementation Guidelines on "Environmental Emergency (E2) Plans": <u>http://www.ec.gc.ca/ee-ue/plans/e2guide\_e.pdf</u>.

- 8. Transport Canada CANUTEC infonet site (home page): <u>http://www.tc.gc.ca/canutec/en/menu.htm</u>.
- Transport Canada CANUTEC infonet site Emergency Response Guidebook 2000 (ERGO): <u>http://www.tc.gc.ca/canutec/en/guide/guide.htm</u>. (Through this link, the PC version of the ERGO 2.5 can be downloaded.)
- 10. Fisheries and Oceans Canada infonet site (home page): http://www.dfo-mpo.gc.ca/home-accueil\_e.htm.
- 11. Fisheries and Oceans Canada/Canadian Coast Guard infonet site Environmental Response: http://www.ccg-gcc.gc.ca/rser-ssie/er-ie/main\_e.htm.
- 12. Practical Handbook for Emergency Operations Response to Oil Spills First Alert to Final Cleanup (Environment Canada, 1995). Environment Canada infonet site (The Green Lane home page): <u>http://www.ec.gc.ca/envhome.html</u>.
- 13. Emergency Planning for Industry, Major Industrial Accidents, Canadian Standards Association, CAN/CSA-Z731-95. CSA internet site: <u>www.csa.ca</u>.

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## ANNEX A

## Major Hazardous Materials Commonly Used in CSC Institutions and EEP Preparation

MATERIALS	SPECIFICATIONS
Fuels	Gasoline, diesel fuel
	Heating oil (fuel oil)
	Natural gas, propane
Oils	Used
	Hydraulic
	Lubricating
Chemicals and maintenance products	Acids, neutralizers, additives
	Pesticides and fertilizers
	Antifreeze, solvants, detergents, paints
	CFCs, HCFCs, halons
Special wastes	Biomedical
	Batteries, tires, PCBs, etc.

## Preparation of an Environmental Emergency Plan (EEP)

While equipment failures, accidents, or sabotage can happen in any organization, the possibility of malicious events leading to environmental damage (although these events usually occur on a small scale) may be higher in a CSC institution than in many other settings. The CPM should first attempt to identify all of the types of incidents that could occur at the institution that would cause significant environmental damage. These should then be screened for materiality, as preparations to respond to an incident scenario are time consuming and expensive. The CPM should judge whether an incident scenario is material based on whether the likelihood that it would occur is "not insignificant", whether if it did occur it would be a big or small event, and whether the big or small event would cause much environmental damage.

- Other contingency plans at an institution deal with security incidents, fires, WHMIS and other health risks, power failures, etc. that may be due to equipment failure, accidents, sabotage, riots, etc. These plans may already include measures to reduce the likelihood of an incident scenario or minimize its environmental impacts. For example, it may be possible to augment the institution's fire response plans or WHMIS documents to deal with some environmental contingencies.
- The standard operating procedures for some apparatus include measures for responding to unusual conditions. For example, the sewage treatment plant operator may already have contingency plans for dealing with chemical shocks in or blockages of sewage influent.
- Environmental Guidelines identify most of the environmentally hazardous substances in an institution and include measures to prevent or contain spills or leaks of these substances in most ordinary circumstances. EEPs normally deal with only a few of these substances.
- On the other hand, it may become evident that the institution's other emergency response plans, standard operating procedures, or the Environmental Guidelines do not cover some types of incidents. For example, the water plant operator may require a contingency plan for dealing with water that has a low disinfectant level, or that has become contaminated, or that has been poisoned.



## ANNEX B

## Principal Locations in CSC Institutions Where There Is a Risk of Accidental Spills

ACTIVITIES	LOCATIONS	HAZARDOUS MATERIALS		
	Tanks	Fuel		
Storage	Infirmary	Biomedical waste		
	Garage	Lubricating oils, solvents, batteries		
	Stores, laundry, workshops and storage buildings, rooms, cabinets	Miscellaneous products (hazardous wastes, flammable materials): bleach, fabric softener, detergents, solvents, etc.		
	Power plant	Acids, heating oil		
Onerstiens	Pumping station	Gasoline, diesel fuel		
Operations	Workshops	Oils, paints		
	Parking	Gasoline, diesel fuel, natural gas		
Transportation	Everywhere on the site	Gasoline, diesel fuel, natural gas, heating oil, ethanol		



## ANNEX C

## Contents of a Basic Institutional Environmental Emergency Response Kit

#### Container:

• one marked 75-gallon polyethylene drum with a screw-on lid

#### **Contents:**

- 1 perforated roll, 19" x 144" x 3/8"
- 25 pads, 17" x 19" x 3/8"
- 3 absorbent pillows, 21" x 16" x 6"
- one 21-litre bag (selective loose sorbent for hydrocarbons)
- 8 socks, 3" x 48"
- 1 drain cover, 36" x 36"
- 1 tube of epoxy filler
- 2 pairs of Solvex gloves
- 2 pairs of Tyvek disposable coveralls
- 2 recovery bags, 40" x 60" x 6 mm
- 1 recovery container

## Examples of Basic Response Kits for Hydrocarbon Spills



45 gallons capacity kit







<sup>75</sup> gallons capacity kit



## ANNEX D

## Summary List of Federal Environmental Emergencies Contacts

SUBJECT	AGENCY	NUMBER	NOTES
Environmental emergencies (spill notification)	Environment Canada – National Environmental Emergencies Centre	Tel: (819) 997-3742 Fax: (819) 953-5361	Emergencies 24/7 service (collect calls accepted)
Environmental emergencies (spill notification)	Transport Canada – CANUTEC	(613) 996-6666	Emergencies only (24/7)
Chemical products	Transport Canada – CANUTEC	(613) 992-4624	Information only
CCG Environmental response – Marine spills response system	Fisheries and Oceans Canada – Canadian Coast Guard (CCG)	(613) 993-0999 (613) 993-0409 (613) 993-3138	DFO Communications Branch Information only Env. Preparedness Program
Biomedical products and health problems	Health Canada	(613) 957-0323	Casualty Officer
Pesticides	Agriculture Canada	1-800-267-6315	

ENVIRONMENT CANADA –	FISHERIES AND OCEANS CANADA –
Regional Environmental Emergency	Canadian Coast Guard Regional Contacts for
Coordinators	Reporting Environmental Incidents and Cleaning Up
Atlantic	BC and Yukon
(902) 426-2576	1-800-889-8852
Quebec	Alberta, Saskatchewan, Manitoba, Ontario, NWT, Arctic
(514) 283-2345	1-800-265-0237
<u>Ontario</u>	Quebec
(416) 739-5908	1-800-463-4393
Prairie and Northern	Maritime
(780) 951-8753	1-800-565-1633
Pacific and Yukon	Newfoundland
(604) 666-6496	1-800-563-2444
For questions, comments or suggestions concerning environmental emergencies, contact Environment Canada by e-mail at: <u>environmental.emergencies@ec.gc.ca</u> .	For general questions on the Canadian Coast Guard programs and services (e.g. marine spills response contacts), send an e-mail message to: info@dfo-mpo.gc.ca.



## ANNEX E

## Major Response Steps

Typical response steps in the event of a spill of hazardous materials		
Step	Notes	
1. ASSESS THE SITUATION, IDENTIFY THE PRODUCTS INVOLVED, CAREFULLY LOCATE THE SOURCE OF THE LEAK AND DEFINE A SAFETY PERIMETER	<ul> <li>Depending on the scope of the spill, it may be useful at this stage to launch a preliminary internal notification procedure if you have enough information.</li> <li>It may also be useful at this stage to immediately inform CANUTEC and your Regional Environment Canada Emergencies Division to obtain technical support on line.</li> </ul>	
2. CAREFULLY STOP OR CONTROL THE LEAK	<ul> <li>Only if the site is deemed safe enough (e.g. valves or taps are turned off).</li> <li>Approach the site with the wind at your back.</li> </ul>	
3. CONFINE THE SPILL OR CONTAIN THE PRODUCT	<ul> <li>Insofar as the situation permits, an attempt must be made to contain the spilled product in the smallest possible space close to the source.</li> <li>Avoid directing the product toward the sewer system.</li> </ul>	
4. NOTIFY AUTHORITIES	<ul> <li>Institution management</li> <li>Environment Canada (Environmental Emergency)</li> <li>Provincial Ministry of the Environment (Emergencies Division)</li> <li>Local specialized firms (e.g. residue pumping)</li> <li>Other (Transport Canada, CANUTEC, firefighters, police, etc.)</li> </ul>	
5. RECOVER SPILLED MATERIALS	• The product must be recovered quickly to limit its migration or spread, taking into consideration the properties of the product and weather conditions.	
6. SAFELY DISPOSE OF CONTAMINATED MATERIALS AND WASTE	<ul> <li>Use an accredited firm.</li> <li>Obtain a correctly completed waybill (i.e. an hazardous waste transportation manifest).</li> </ul>	
7. PREPARE AN INCIDENT REPORT	<ul> <li>See the following example.</li> <li>Forward the report to the competent CSC authorities (Regional and National Headquarters).</li> </ul>	
8. REPORT TO THE COMPETENT AUTHORITIES	<ul> <li>Institutional management</li> <li>CSC Regional Headquarters</li> <li>CSC National Headquarters <ul> <li>(Note: NHQ will assume responsibility for informing and reporting to Environment Canada or other authorities as a result of the environmental incident).</li> </ul> </li> </ul>	

## ANNEX F

## **Response Methods**

### LOCATING THE SOURCE OF AND STOPPING A LEAK

The Emergency Response Officer or any employee assigned responsibility for dealing with the spill or leak <u>must</u> <u>act as quickly as possible</u> to locate the source and, if possible, to neutralize the spread of the liquid product. The following procedures are suggested:

- be careful do not take any action if there is imminent danger (if toxic fumes or gases are present, or if there is any risk of explosion, wait for the response team to arrive);
- if appropriate, approach the site carefully, with the wind at your back;
- close taps or valves;
- make temporary repairs to containers and temporarily seal all cracks;
- reposition the container (e.g. drum) so that the perforation causing the leak is at the top; and
- recover spilled liquids by transferring them to an empty container.

#### CONTAINMENT

To ensure effective response at strategic locations, clearly identify the potential pathways of substances spilled into the environment. Consider the following points:

- spread on ground or floor surface;
- infiltration into the ground or floor; and
- penetration into the sewer system (drains, access shafts, manholes, ditches, cable ducts, etc.).
- Then take the necessary measures to limit soil or water borne damage spread.

#### SPILL ON THE GROUND

To contain such spills, dig pits or trenches, build retaining dikes around the contaminant and use sorbents [see following table]. Use of a sorbent-containing emergency kit is prescribed. <u>It is important to isolate all water</u> sources (sewer outlets, watercourses, etc.) with sorbents.

#### SPILL INTO WATER

When contaminants are spilled into water or reach a flat body of water, the most appropriate response will take into account the dimensions and rate of water flow and the morphology of the banks. Possible responses (avoiding directing liquid spills toward sewer systems) are:

- construction of retaining dikes with ducts;
- use of natural topography or a ditch;
- excavation of a well or trench;
- floating barriers made of sorbents and/or absorbent socks;
- booms (logs and planks, drums, etc.); and
- plywood sheets installed at culverts.

### RECOVERY

Once the contaminant has been contained, recovery operations must be carried out as quickly as possible. This means picking up, cleaning and temporarily storing the spilled substance and any sorbents used. It is important that any products spilled be removed from ground and water, to reduce the risk of contaminant migration. When conditions allow, it is always preferable to pump a spilled substance directly, without using sorbents. A number of specialist pumping firms are accredited to respond in this type of situation, and contacting them to recover the contaminant and contaminated materials is recommended.

### POST-SPILL ACTIVITIES

Following completion of the emergency response, a number of other tasks must be carried out:

- clean-up and restoration of contaminated areas;
- disposal of contaminated soil and water and residual hazardous waste; and
- preparation of a report on the spill [see Annex G].



# ANNEX F

## Materials That Can Be Used to Absorb Hydrocarbon Spills

Materials	Capacity to absorb hydrocarbons <sup>2</sup>
Inorganic Sorbents	
Sand	Moderate to high
Ash	Moderate
Vermiculite / Perlite	Low
Organic Materials	
Ground wood fibers	Moderate
Cellulose fibers	Moderate
Corn flour	Low
Straw	Low
Wood shavings and sawdust	Low
Peat / Sphagnum	Low
Compost	Moderate to high
Synthetic Materials	
Urea-formaldehyde foam	High
Polyethylene fibers	Moderate
Polypropylene fibers	Moderate
Polyurethane foam	High
Polystyrene powder	Moderate to high
Polyester pellets	Low

#### Scale

- Low: Can absorb 200 to 700 grams of hydrocarbons per 100 grams of sorbent.
- Moderate: Can absorb 500 to 2000 grams of hydrocarbons per 100 grams of sorbent.
- High: Can absorb more than 2000 grams of hydrocarbons per 100 grams of sorbent.

<sup>&</sup>lt;sup>2</sup> Sorbent efficacy may vary in terms of area affected and hydrocarbon type involved: gasoline, light oil, diesel fuel, bunker, etc.



## ANNEX G

## **Environmental Incident Report \***

	AL INCIDENT RE	PORT SPILL	DÉVERSEM	INT ACCIDENT	EL DE MATIÉRI	ES DANGEREUSES
GENERAL INFORMATION - IN	FORMATION GENER	ALE:				
Address					_	
Date and invers of incident and respon	near - Dates at hearing the	Createrd at the Detervends	007			
SPILL.	0	B 111779-00103-4444-0012-1		0	Tirtig - Hay	·**
DEVERSEMENT						
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INTERVENTION	• Dw	B INVIVABLED AAAAAMALIA		0	Tirtes - Hes	-
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Estimated quantity (I, or lightin the or	ordainer before the split					
Environment contacting (), the logit martin be of	endersterer använd im Streem	an and a				
Chartelle extende (1, pa kg) Miverade						
Casardid quantity (L. or kg) recovery Casardid endersite (L. os kg) recovery	a 92					
TYPE OF ACCIDENT AND REP	COVERY - TYPE D'A	CCIDENT ET RÉCUPÉ	RATION			
Gause of the accident - Cause de l'a	acaders.					
Description of the relatived sectories	Transmission balant internal	L. Description das provis	alon researces dive	any method in the set of the	a contra	
Conception on Pressper Insperior		d . manufactor and haven				
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Norman Terramony location						
Entreposage: Lieu temporaire						
Storage Permanent location						
to a share the same har constraints	NTAMINANT - DISP	DISTION DEFINITIVE	DU CONTAMINA	NT		16
FINAL DISPOSAL OF THE CO		Considerate - D	and international rest			Date prevenues according
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Note: This official CSC form is available on the infonet at: <u>http://infonet/forms/1265-03.doc</u>.

## ANNEX H

## Simulations

Simulations make it possible to prepare to respond to an incident by practicing procedures stipulated in the Environmental Emergency Plan. The purposes of simulations are:

- **u** to improve effectiveness and check the implementation of knowledge acquired in response training;
- to validate environmental emergency plans and other significant response reference works;
- to put into practice and to improve response techniques and procedures; and
- to improve the design and execution of future exercises.

Simulations may be carried out internally or with external resources. Internal exercises permit the evaluation of risks, roles and the existing response capability. Exercises in cooperation with external resources make it possible to plan and conduct a similation with pooled resources and efforts. These exercises allow external participants to become familiar with the site and the factors which may be involved in an accident and to check whether external response teams are able to respond adequately.

#### Simulations can be of three types:

- Operational exercises are aimed more specifically at groups which carry out practical tasks. Generally, they are based on prescribed standards and operating procedures. The purpose of these exercises is to improve first response capability.
- □ **Management exercises** are intended for response team members, not operational employees. They are designed and carried out by those who wish to improve their degree of response preparedness.
- **Combined exercises** are designed to evaluate the response team's capability to manage a number of crucial response functions simultaneously.