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## **GUIDELINES FOR THE DEVELOPMENT OF A NATIONAL ENVIRONMENTAL CONTINGENCY PLAN**

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# GUIDELINES FOR THE DEVELOPMENT OF A NATIONAL ENVIRONMENTAL CONTINGENCY PLAN

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### Supplement Publication:

A SAMPLE NATIONAL ENVIRONMENTAL CONTINGENCY PLAN  
consisting of an organised collation of sample components of a Plan  
presented in these Guidelines

# **GUIDELINES FOR THE DEVELOPMENT OF A NATIONAL ENVIRONMENTAL CONTINGENCY PLAN**

## **PREFACE**

All societies face risks of accidents that have the potential to jeopardize the health and safety of individuals, groups or entire communities, and an organised response to such threats is usually achieved through disaster plans. A majority of such disaster plans establish a rigid command structure to address human health and safety issues, evacuation, crowd control and other emergency services, and may include a listing of expertise and/or specialized equipment and similar resources that may be of assistance. Most disaster plans are prepared for, and are administered by, those groups and agencies in society responsible, staffed and equipped for civil defense or similar emergency services. These agencies usually have authority to deal with life-threatening events, crowd control and other police-type matters, and society expects such services from these type of agencies.

When it comes to environmental emergencies, many disaster plans tend to be silent on the topic of environmental aspects of emergencies. Some disaster plans appear to be prepared with an assumption that environmental aspects would be taken care of by appointing, to a decision-making group under the disaster plan, a representative from an agency with responsibility for environmental programmes without elaborating on the expected participation of the representative, and a few disaster plans describe tasks for key members, assigned to decision-making groups created by the plan for the purpose of resolving issues, in only vague terms.

Disaster plans could count on environmental aspects of larger emergencies to be taken care of through separate environmental response procedures as a sub-plan to the disaster plan, or through a separate environmental contingency plan. Such environmental contingency plans or procedures can be developed to be quite focused, and could be implemented by government agencies with responsibility for environmental programmes. If such procedures or environmental contingency plans were to be detailed enough, they could also be implemented for those events where the environment is threatened, but for which the implementation of the overall disaster plan would normally not be considered. This situation could occur for events where health and police-type emergency services are not part of the response requirements, but for which an organised response is still essential. If an event is complex and involves serious health issues or the type of matters usually handled by fire, police or other first responders, these response components are best delivered by the associated overall disaster plan.

Environmental contingency plans tend to fall into the category known as 'agent-specific' plans and this group of plans usually cannot be expected to address matters beyond the mandate of the host agency. Environmental agencies are usually responsible for establishing and enforcing environmental standards, and these agencies normally do not have the authority to effect evacuations, rescue, crowd control or other emergency services that may come into play in large-scale events even if the event at hand may be described by some observers as an environmental disaster. Environmental agencies, thus, generally need to rely on civil defense, health or other emergency services to deal with issues that are beyond their own mandate. An effective partnership between various contingency plans and between various agencies for complex events is therefore indicated.

These Guidelines focus on the development of a national environmental contingency plan, and the Guidelines suggest a strong partnership amongst all agencies with expertise and response resources that can be utilized effectively in a response to the unauthorized or accidental release of materials or substances that are hazardous to mankind and other living things, or are a threat to any part of the ecosystem. The Guidelines suggest that a response to such pollution incidents will most probably require the expertise and response resources from several agencies, and that this requirement necessitates participation by, and close cooperation amongst, response partners.

The Guidelines suggest further that response procedures for environmental emergencies or environmental contingency plans should be developed so that they can form part of, or serve as sub-plans to, overall disaster plans. In this manner, environmental aspects of larger disasters can be satisfactorily addressed. In fact, these Guidelines focus on the development of environmental contingency plans, (within the mandate limitations of the host agency) as stand-alone instruments for major pollution incidents that do not require the implementation of an overall disaster plan. This focus is based on the assumption that a strong environmental contingency plan which can take care of environmental emergencies has the capacity to take care of environmental aspects of larger emergencies for which an overall disaster plan is implemented. The reverse is not necessarily true.

A national environmental contingency plan prepared with these Guidelines should be a valuable adjunct to a national disaster plan, and be able to serve as one of perhaps several types of sub-plans to an overall disaster plan. As any sub-plan to a national disaster plan, a national environmental contingency plan should be supplemental, and subordinate, to the overall disaster plan. It is given that the overall disaster plan is designed to address larger societal issues of which consequences to the environment are only one of possibly several aspects.

The **GUIDELINES FOR THE DEVELOPMENT OF A NATIONAL ENVIRONMENTAL CONTINGENCY PLAN** have been prepared as a suggestion for the development of a response structure suitable to deal effectively with environmental emergencies. These Guidelines focus on an organised response for an agency responsible for environmental matters in partnership with other agencies who may participate with the environmental agency in a response to an environmental emergency. An environmental contingency plan, developed under these Guidelines, should provide an adequate response to accidental releases of pollutants within the mandate limitations of the environmental agency, and at the same time, complement an overall disaster plan.

These Guidelines are presented in essentially two parts. Chapter 1 introduces, in general terms, desirable features and characteristics applicable to national

environmental contingency plans under the title of Planning Considerations, and was prepared with assistance of information obtained from an array of reference material listed at the end of the publication.

The second chapter of the Guidelines, and the bulk of this publication, is titled a Suggested Outline and Content of a National Environmental Contingency Plan. This portion of the Guidelines was prepared with the assistance of ideas found in existing contingency plans available during the preparation of this publication. Chapter 2 introduces nine segments, or parts, of a suggested national environmental contingency plan, and discusses the merits and contents for each part. Each part is illustrated with suggested wording for a sample plan, under the same segment title.

A supplementary publication to these Guidelines is available under the title of **A SAMPLE NATIONAL ENVIRONMENTAL CONTINGENCY PLAN**. This Sample Plan is an organised collation of the sample segments presented for illustrative purposes in the second chapter of these Guidelines, and the Sample Plan offers the complete content of a suggested national environmental contingency plan without interrupting the suggested plan with discussions.

In summary, the guidelines in this publication offer suggestions for the development of an agent-specific contingency plan, namely a national environmental contingency plan. These Guidelines are based on a review of applicable resource material at the Geneva library of the UN Office for the Coordination of Humanitarian Affairs (OCHA); resource material provided by the UN Environmental Programme, Industry and Environment Office (UNEP IE), Awareness and Preparedness for Emergencies at Local Level (APELL) programme; reference material of the author; and several existing environmental contingency plans included in the list of reference material in this publication; as well as comments received from a group of national experts charged with guiding the program activities of the UNEP/OCHA Environment Unit.

The UNEP/OCHA Environment Unit invites anyone who may need additional assistance in the preparation of a national environmental contingency plan, and anyone who may wish to comment on this publication, to contact the:

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## Chapter 1

# **PLANNING CONSIDERATIONS**

The effectiveness of emergency plans or disaster plans depends on a number of factors, most of which are associated with or rely on the willingness of response partners to facilitate an effective and timely response while making use of all possible resources and available expertise in a coordinated manner.

Most disaster plans are intended to be implemented in the event of a threat of major proportions to human health and safety, and when there is destruction, or the threat of destruction, to buildings, property, and/or the infrastructure of threatened communities. However, disaster plans do not address, in detail, environmental aspects that may be components of disasters, and general disaster plans usually do not address the type of environmental emergencies or pollution events which, by themselves, do not result in death, immediate injuries or property damage.

### **RELATIONSHIP**

Effective environmental contingency plans developed for site-specific, local level or for national needs usually take advantage of existing emergency or disaster plans to deal with those components of the event which require police, fire, ambulance or other emergency services. In the case where an environmental contingency plan is developed as part of a larger emergency or disaster plan, the associated disaster plan usually satisfies the needs for police, health and similar emergency services should these be required in a pollution event.

Where an environmental contingency plan is supplemental to, or an annex of, an overall disaster plan, the supplemental pollution contingency plan need only focus on issues, decision-making processes, and resource requirements specific to environmental emergencies. In this manner, evacuation and crowd control or other police, fire or other emergency services, should these services be required for an environmental emergency, are already addressed in the general provisions of the disaster plan and need not be repeated. This allows the environmental sub-plan to concentrate on the organizational structure and decision-making processes specific to environmental contingencies, and on the identification and coordination of expertise, and the acquisition of suitable response resources unique to the environmental component of disasters or pollution events.

In some countries, the interests of environmental aspects of disasters are served by the national disaster plan. This is accomplished by assigning participation of suitable representatives from the ministry responsible for the environment and/or for renewable resources to the body established to implement the national disaster plan. Representatives from the ministry of environment and/or ministry of natural resources, for instance, may be assigned to serve on a national disaster management group, or a disaster advisory group, and this group may be given duties and authorities under legislation that address civil defence or duties and authorities

extended by a decree from the head of state.<sup>1</sup> What is important is that the participation and response expected of the environment representative still needs to be organized, and organized presumably in some form of an environmental response manual as one of possibly several sub-plans to the overall disaster plan. The content of such a manual, or sub-plan, would not be too different from the environmental contingency plan outlined in these Guidelines.

For some situations, it may be tempting to develop an environmental contingency plan that is fully independent of emergency or disaster plans. This may be possible if the agency responsible for the environmental contingency plan were to have authority for all matters that arise in environmental emergencies. However, this is usually not the case. For an environmental contingency plan to function effectively for a wide range of environmental emergencies, therefore, it should be structured to accommodate and take advantage of existing emergency services. An efficient way to accomplish this is for the environmental contingency plan to be supplemental to emergency response systems that address health and safety concerns, and emergency matters that are best dealt with by police, fire and other first responders.

Figure 1 illustrates the linkage envisage between a national disaster plan and a national contingency plan designed to address environmental emergencies. An environmental contingency plan developed with the guidelines in this publication should permit an organized response to serious environmental problems as a result of unauthorized or accidental releases of hazardous materials or other pollutants. It is suggested that such a contingency plan should also be suitable as an organized response mechanism to environmental aspects of larger disasters, and be able to support, and serve as an effective component of, an overall national disaster plan.

## **SINGLE FOCUS PLAN**

The response to disasters is usually characterized by the urgent need for rapid decisions accompanied by acute shortages of trained personnel, material, and time to carry out the decisions effectively. Environmental emergencies or environmental aspects of larger disasters feature similar characteristic.

Even though environmental emergencies, or environmental aspects of larger disasters, may not always result in an imminent threat to health and safety of the surrounding population or to responders, the shortage of trained personnel and expertise, and the absence or shortage of suitable response material and effective and appropriate response techniques, can lead to long-term or permanent environmental damage. This, in turn, may lead to a threat to people and to other life forms and this threat may last for a very long time. An environmental emergency plan, or a plan that addresses environmental aspects of larger disasters, is intended to minimize such threats. It is recognized in the literature that there is no rigid or standard format suitable for the development of emergency plans. In recent years, disaster researchers, E. L. Quarantelli<sup>2</sup> and others, have favoured the development of generic emergency plans over agent-specific plans (overall emergency plans

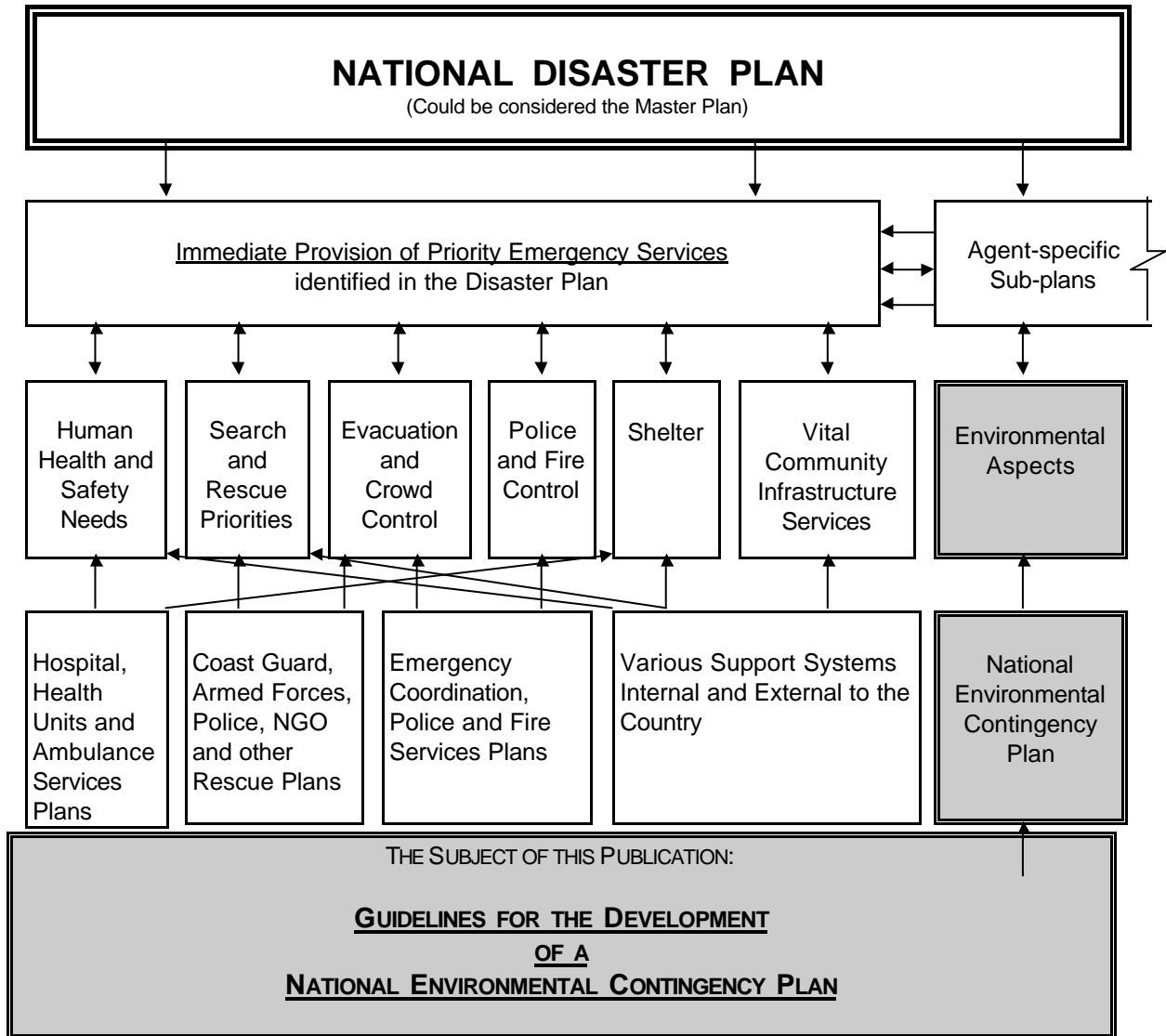
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<sup>1</sup> For example: in Venezuela, the interests of environment and renewable resources programmes at the national level are represented on the National Board of Civil Defence, and the Board's authority is established by Presidential Decree.

<sup>2</sup> "Disaster response: generic or agent-specific?", paper in *Managing Natural Disasters and the Environment*, 1990, The World Bank, pp. 97-105.

**FIGURE 1**

**SUGGESTED LINK  
OF A  
NATIONAL ENVIRONMENTAL CONTINGENCY PLAN  
TO A  
NATIONAL DISASTER PLAN**



suitable to address any disaster without consideration to the cause of the disaster, rather than plans specific for hurricanes, industrial accidents, etc.). At the same time, it is acknowledged that agent-specific plans tend to be more focused, and may be easier to develop. The guidelines advanced in this publication are suited to the development of what disaster researchers call an agent-specific contingency plan.

When properly designed, agent-specific plans can integrate well with and rely on other coordinating and response mechanisms, or other disaster plans that cope with issues for which the agent-specific plan was not intended.

A properly designed plan should also ensure that it does not assign a government department responsibility to develop and implement a plan, and to undertake actions, for which the department lacks the necessary authority or jurisdiction. Thus, an agent-specific contingency plan, including an environmental contingency plan, should rely on other departments, other agencies, or other contingency plans to carry out emergency functions that may be a component of a pollution incident, but for which others have specific authority or jurisdiction, and with it, more focused expertise.

While it is recognized that no single emergency plan can reflect the full scope of the jurisdictional and emergency response complexities of a modern society, society can be served well by the sum total of several well-designed and focused agent-specific contingency plans, if these plans take care to focus on the jurisdiction and expertise of the agency assigned the specific task, and take advantage of the authority and expertise available in other quarters and through other contingency plans without unnecessary duplication of effort.

A government which finds that certain elements of several agent-specific contingency plans (plans specific for flood, tornado, chemical/industrial accidents, etc.) are common once they are developed, could then consider to move the common elements of these plans into an overall generic emergency or disaster plan. A gradual shift to more generic plans is acknowledged in E. L. Quarantelli's paper, referred to in footnote 2 on page 6 of these Guidelines, and it is an acknowledged evolutionary process that may take several decades.

Although it is useful to have some specific sample events in mind during the development of a contingency plan, it has to be recognized that the language of the text needs to be generous enough to permit interpretation for a wide range of circumstances within the plan's stated overall goal. The plan should also be made flexible enough to accommodate moderate political and structural changes to government departments without the need to make structural changes to the plan or significant revisions to the plan's main elements. Such changes are usually subject to complex and time-consuming approvals processes.

## **FEATURES**

Certain features tend to apply to most types of contingency plans. The 1992 publication, Disaster Management, prepared by Nick W. Carter for the Asian Development Bank, outlines desirable characteristics of disaster plans. An environmental contingency plan that is to address the threat of a country's environment, and is intended to minimize the threat to the health and welfare of its citizens from accidental releases of contaminants, could be based on the format of other disaster plans, and the characteristics identified in Carter's text may apply.

These Guidelines suggest that a national environmental contingency plan be developed with the intent of incorporating the following features:<sup>3</sup>

⇒ *Clarity of aim*

The aim of the plan needs to be carefully and accurately selected. The aim of the plan determines the thrust and the scope of the plan. All information and instructions included in the plan need to be in line with the stated objective.

⇒ *Realism*

The plan must relate to an accurate assessment of the threat and take into account the scale and capability of available counter-measure resources.

⇒ *Level*

The plan should reflect the level of response with which it is concerned. A national environmental contingency plan is normally only broadly concerned with coordination, mobilization and deployment of national resources and requests for international assistance, rather than with the detailed management of the accident scene. For some countries where detailed government business is largely managed from the national level, the national environmental contingency plan may need a broad enough scope to deal with policy matters as well as some detailed action requirements.

⇒ *Flexibility*

Environmental emergencies tend to include, or are caused by, a great variety of events or accidents. Flexibility for environmental contingency plans is achieved by planning to cope with a wide range of environmental threats, and ensuring that response arrangements can be adapted readily to changing circumstances. Decentralization and making full use of available local expertise and resources is a useful adjunct towards achieving flexibility.

⇒ *Coordination*

All aspects and arrangements presented in the environmental contingency plan should bear in mind that the coordination of response and mitigation efforts is a key factor in all emergency response activities.

⇒ *Definition of responsibility*

It is important that responsibilities are clearly defined in the plan. This reduces the possibility of misunderstandings, duplications and omissions in the various activities outlined in the plan. Clear definition of responsibilities significantly helps in achieving coordination of response and mitigation efforts.

⇒ *Ease of use*

The plan should be formulated in a way to make it easy to use. The body of the plan needs to be as clear and concise as possible. Information and lists such as focal points or contact lists of expertise and resources, and other information or lists that requires frequent updating, should be placed in the annex section of the plan. The plan should provide for the ability to update such annexes readily without complicated or time-consuming updating approval requirements. Placing a date on every page of the plan will be of assistance in identifying the reliability of

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<sup>3</sup> Topics based on information presented in "The Format of Plans", in *Disaster Management*, 1992, Asia Development Bank, pp. 158-160, with text modified to focus on characteristics most suitable to environmental contingency plans.

key sections of the plan, especially those that contain information and contact points vital for initiating operational elements of the plan, and this feature also comes under the topic of making the plan easy to use.

⇒ *Plan components*

There are several options for dividing a plan into components or parts, such as:

*The main plan*<sup>\*</sup>

usually contains the primary parts of the plan, such as the statement of mission, definition of the threat, legislative authority, policy matters, relationship to other emergency plans, organizational and operational implementation, warning mechanism, resources, request for international assistance, de-briefing and updating practices, and custodianship.

*Sub-plans*<sup>\*\*</sup>

if they are developed, rely on the main plan and may deal with provincial/state or regional areas, or very specific contingencies such as oil spills, pesticide releases, or plans specific for derailments, pipeline ruptures, etc. Sub-plans may also deal with specific high risk areas, such as a concentration of petrochemical industries or environmentally sensitive areas such as threatened wetlands.

*Annexes*

will usually include lists of specific contact points or other focal points, expertise and resources; information that is subject to frequent updating.

⇒ *Viability*

The plan should include provisions for assigning to a designated organization, group or person the responsibility for periodically checking that the plan is up-to-date and viable for the purpose for which it is designed. Periodic exercises, and the associated benefit of training, are closely related to this topic.

⇒ *Check points*

It is widely accepted that any contingency plan should be:

- written - or it will not be remembered,
- simple - or it will not be understood,
- distributed - or it will not be in the hands of those who need it,
- tested - or it will not be practiced, and
- revised - or it will not be up-to-date.

The many tasks that must be performed in the response to a disaster cannot be performed by any one person, and the many decisions in connection with disaster response cannot be made by only one person. Thus, the concept of partnership and teamwork should be added to the above list of features for an effective response to all emergencies, and for a response to environmental emergencies the concept of partnership permits taking advantage of existing expertise and resources of several agencies and the cooperation and participation of industry.

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\* Within the context of this publication, the "main plan" referred to here is an agent-specific plan, in this case a national environmental contingency plan.

\*\* The Guidelines offered in this publication deal with the development of a main plan and annexes. Sub-plans can always be added at another time to this framework.

## **TERMINOLOGY**

These Guidelines make use of the term 'environmental emergency' without providing an elaborate definition for the term. The term 'emergency' is defined in the UN Office for the Coordination of Humanitarian Affairs' (OCHA) *Internationally Agreed Glossary of Basic Terms Related to Disaster Management*, and the Glossary also defines the term 'environmental degradation', as follows:

*“Emergency - a sudden and usually unforeseen event that calls for immediate measures to minimize its adverse consequences.”*

*“Environmental degradation - unfavourable modification of the ecological state and environment through natural processes and/or human activities.”*

This publication uses the term 'environmental emergency(ies)' within existing concepts implied by the terms 'emergency' and 'environmental degradation' as defined in the OCHA Glossary. The term 'environmental emergency' is used in these Guidelines to refer to degradation of the environment to an extent that it constitutes an emergency as the term 'emergency' is already defined, a sudden event that calls for immediate measures to minimize its adverse consequences:

Environmental emergency - and its implied concept refer to an event of sufficient magnitude to causes, or to threaten to cause, environmental degradation to the extent that it creates an emergency.

The term 'hazardous material' is also defined in the OCHA *Internationally Agreed Glossary of Basic Terms Related to Disaster Management*:

*“Hazardous material - A substance or material which has been determined by an appropriate authority to be capable of posing an unreasonable risk to health, safety and property.”*

It is noteworthy that the term 'hazardous material' makes no reference to posing an unacceptable risk to the environment. For this reason, these Guidelines introduce the term 'pollutant' or 'polluting substances', and define the term so that a response within the concept of 'emergency' may be undertaken for threats to the environment that may give rise to 'environmental degradation', as already defined:

Pollutant or Polluting Substance - any material or substance, or the derivative of any substance or substances, resulting from incomplete, uncontrolled or inadvertent reactions, that if released to or into the environment in contravention of applicable laws, causes or may cause damage to public health and welfare, property, or to the environment.

The introduction of the term and concept of 'pollutant' or 'polluting substance' permits a national environmental contingency plan to be prepared independently, or as part, of a national disaster plan for a national response to an event involving the release of hazardous materials and other substances that may give rise to environmental degradation, even though the release does not necessarily pose an immediate threat to human health and safety, and to property (for which a general disaster plan would have been considered).

The term 'disaster' is also defined in the OCHA Glossary:

*“Disaster - a serious disruption of the functioning of society, causing widespread human, material, or environmental losses which exceed the ability of (the) affected society to cope using only its own resources. Disasters are often classified according to their cause, natural or manmade.”*

Even though the definition of the term 'disaster' makes reference to environmental losses, the implementation of a disaster plan is usually not contemplated for events that do not immediately threaten human health and safety, property, or the infrastructure of communities. Chapter 2 focus on a threat to the environment by “hazardous materials and polluting substances”. Reference to both terms in relation to accidental and unintentional releases to the environment, permits a contingency plan to be developed for environmental events within existing concepts and criteria for disaster plans, either as part of, or independently of, a national disaster plan.

## **CONCEPT**

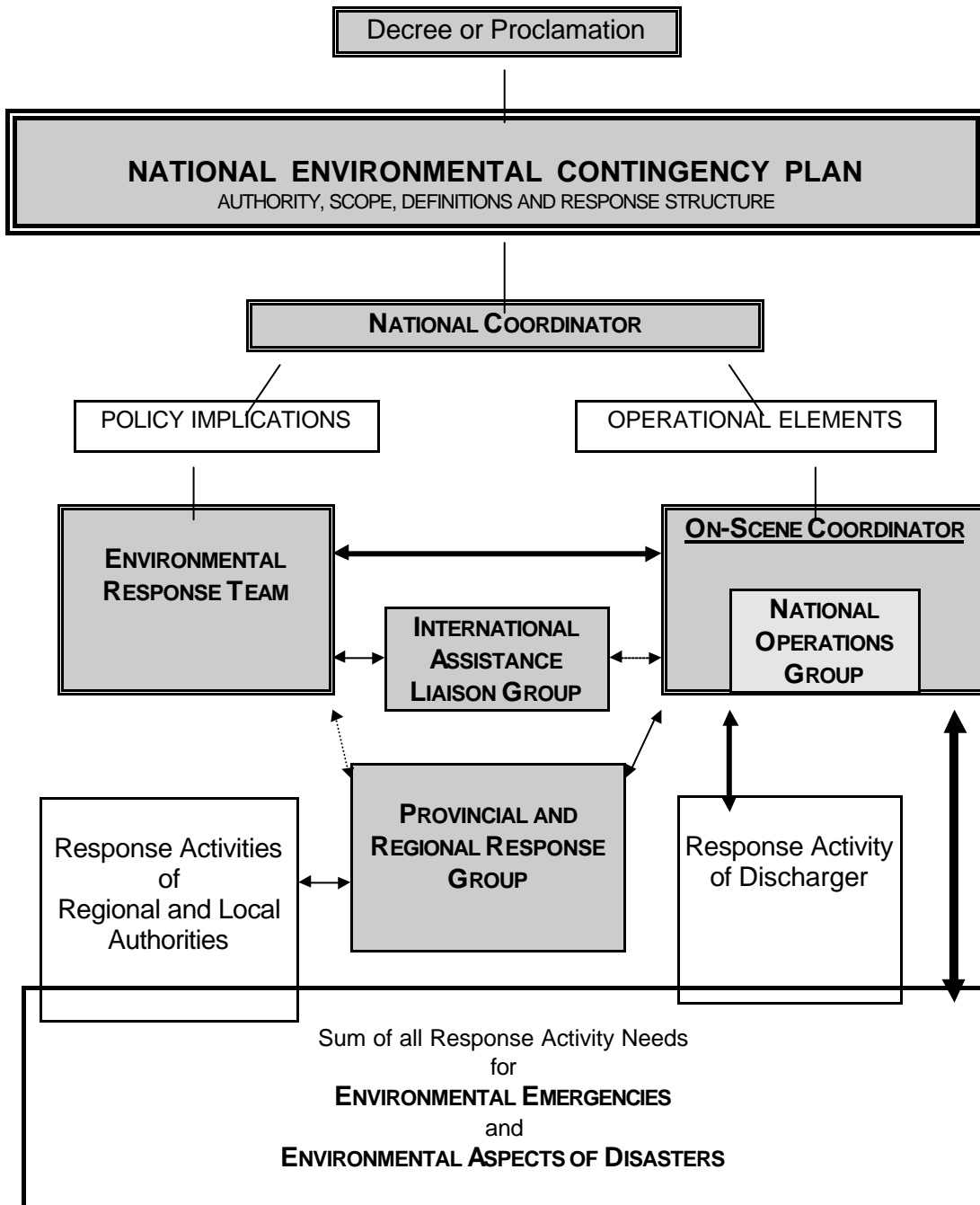
Concepts used in several existing contingency plans referred to in the list of Reference Material were reviewed in the preparation of these Guidelines with the intent of suggesting a simple and flexible organizational response structure. Figure 2 illustrates the structural components of a national environmental contingency plan, and their relationship, as presented in these Guidelines.

These Guidelines presume that a national environmental contingency plan would be based on legislative or other formal authority. These Guidelines suggest that a National Coordinator carries the responsible for the overall management of the response operation. The Guidelines also suggest that operational elements and policy implications are addressed concurrently, but through different structural mechanisms. Operational elements are suggested to fall under a competent On-Scene Coordinator. Policy implications and complex technical considerations are suggested to fall under the responsibility of an inter-disciplinary and multi-agency group referred to as the Environmental Response Team.

Regional, local or provincial interests, expertise and resources can be represented by a Provincial and Regional Response Group. Operational expertise from any agency that may wish or have to respond, including operational expertise from the private sector, should be readily available to the On-Scene Coordinator, and this resource is represented by a National Operations Group which works close with the On-Scene Coordinator. An International Assistance Liaison Group is also envisaged to facilitate exchanges under applicable bilateral agreements, and to serve as focal point and facilitator for any applicable assistance from the international community.

These Guidelines were developed on the basis of creating a strong multi-disciplinary and multi-agency structure. All interests that may wish, or may have, to participate in the response to an environmental emergency are envisaged to be represented by the Environmental Response Team, the National Operations Group, the Provincial and Regional Response Group, and the International Assistance Liaison Group introduced in these Guidelines.

**FIGURE 2**  
**SIMPLIFIED SCHEMATIC**  
**OF A**  
**NATIONAL ENVIRONMENTAL CONTINGENCY PLAN\***



\* Functional elements of a National Environmental Contingency Plan introduced in these Guidelines are shown shaded.

## CHAPTER 2

# SUGGESTED OUTLINE and CONTENT

## OF A NATIONAL ENVIRONMENTAL CONTINGENCY PLAN

The outline of a national environmental contingency plan and the suggested plan's content were developed by combining suggestions offered in reference material, with the suggested features of a national environmental contingency plan presented in Chapter 1. Topics for sections of a suggested national environmental contingency plan are presented in the summary table below, and Chapter 2 expands on these contingency plan components. Discussions are presented in Chapter 2 for the various topics that should be considered for inclusion in an environmental contingency plan, and a sample section for a national environmental contingency plan is presented for each topic and associated sub-topic of the main subject elements identified in the following Plan Outline Considerations Summary:

### **Plan Outline Considerations Summary**

<b>Part</b>	<b>Topics, Purpose, Content</b>
<b>A</b>	<b>Approvals Instrument</b> (Mission Statement) Formal Statement of Intent and Approval
<b>B</b>	<b>Table of Content</b> , including a <b>Quick Guide</b>
<b>1</b>	<b>Introduction</b> Statement defining the threat which the plan is to address, National Policy, General Response Concepts.
<b>2</b>	<b>Authority, Regulatory Tools, and Obligations</b> Primary Statutory Authority, Applicable Regulatory Tools, Statutory Notification and Response Requirements, International Obligations and Commitments.
<b>3</b>	<b>Scope and Responsibilities</b> Purpose and Limitations Objective Scope Definitions Lead Agency Participating Agencies Provincial / Regional or Local Authorities Responsibility of Discharger
<b>4</b>	<b>Relationship with Other Contingency Plans</b> Contingency Plans with Neighboring Country(ies) National Disaster Plan

	Provincial Contingency Plan(s) Other Plan(s), as applicable
<b>5</b>	<b>Response Elements</b> Environmental Response Team On-Scene Coordinator Deputy On-Scene Coordinator National Coordinator National Operations Group Provincial and Regional Response Group Field Response Centre International Assistance Liaison Group
<b>6</b>	<b>Response Operations</b> Phase I – Discovery and Alarm Phase II – Evaluation, Notification and Plan Invocation Phase III - Containment and Countermeasures Phase IV - Cleanup and Disposal
<b>7</b>	<b>Support Measures</b> Public Information Surveillance Post-Incident Reports Review of the Plan Exercising the Plan
<b>8</b>	<b>Administrative Elements</b> Cost Recovery Custodian Amendments and Updates
<b>9</b>	<b>Annexes</b> I. Lead Agency Contact List II. Participating Agencies Executive Focal Points III. Response Groups Contact Lists IV. Notification and Alerting Protocol V. Lead Agency Standard Operating Procedures VI. Public Sector Resources VII. Industry Expertise and Resources VIII. International Assistance Arrangements IX. Guidelines for Issuing Warnings X. Guidelines for Dealing with the Press XI. Guidelines for Dealing with Volunteers XII. Training Guidelines XIII. Contingency Plan Distribution List

The text of the discussions on the subjects identified in the Plan Outline Consideration Summary above is presented in the same font and style used in this sentence. Suggested sections or components of a national environmental contingency plan developed for illustrative purposes for each of the sections of a plan for Parts A through 8, are presented in a **slightly smaller font, in bold format**, and offset where possible so as to highlight the suggested examples. The sample Annexes presented as Part 9 of these Guidelines did not lend themselves to this highlighting process without loss of definition of the suggested content, and thus the sample annexes presented in Part 9 are not highlighted.

The publication, **A SAMPLE NATIONAL ENVIRONMENTAL CONTINGENCY PLAN**, consists of an organised collation of all sections of a suggested national environmental contingency plan developed in this Chapter for illustrative purposes, and this publication is intended to supplement these Guidelines.

### **A. APPROVALS INSTRUMENT**

It is a generally accepted truism that for any contingency plan to be effective, it must have strong support of senior members of the organization or of the government for which it is being prepared. This support, or approval, should be shown in the contingency plan to demonstrate the organization's or government's commitment to the actions outlined in the plan.

The approvals instrument can be prepared in several formats. A letter of promulgation, a letter of transmittal, or a simple letter-style note announcing, or proclaiming, the plan to be in force is a clear and effective approvals mechanism for this purpose. The letter should state in very brief terms the intent of the plan, the relationship of this plan to other contingency plans, if applicable, and the letter should express confidence in the plan's ability to address environmental emergencies which the nation may have to respond to, should they occur. Even if the contingency plan does not rely on the participation of other agencies or groups, such a letter or statement should be signed by the Minister of the lead agency, and possibly by the Head of State. The lead agency, by definition, is the ministry, agency or government department that carries the primary responsibility for implementing the plan. The lead agency is usually also responsible for the development of the plan.

A national environmental contingency plan, or a pollution contingency plan developed for a government department with the responsibility to address national environmental concerns will, in all probability, deal with or refer to subject matters that are normally the responsibility of several other ministries, agencies, or departments. When a plan relies on response partners, it is advisable that the plan be approved by the Minister of the lead agency and co-signed by other named government departments. In some cases it may be desirable for the Head of State to sign the plan as well. The approvals gesture of all response partners assists such a plan to be accepted by other departments, regional or local governments, industry and the public, and this in turn helps the plan to be effective.

A national environmental contingency plan is often developed to take advantage of the collective response capability of several ministries, agencies, or departments. This may be accomplished under the umbrella of a response partnership. If a national environmental contingency plan is developed with the cooperation of several ministries, agencies or departments, and the plan is structured to rely on the combined efforts of these groups by establishing inter-agency response teams in the plan for this purpose, the approvals instrument should reflect this cooperative nature of the plan. Under these circumstances, the approvals instrument should again be signed by the Minister of the lead agency, and also co-signed by appropriate representatives of the partners to the plan. The signatures of Ministers, Deputy Ministers, Assistant Deputy Ministers, or Executive Directors may be appropriate for some partners of the contingency plan.

Sample letters of promulgation, based on the types of approvals instruments referred to above, are offered on the next two pages of these Guidelines. Such approvals

instruments can vary significantly from situation to situation, and usually reflect the style of the applicable authority figure responsible for drafting the text.

## LETTER OF PROMULGATION

(EXAMPLE)

The National Oil and Hazardous Substances Pollution Contingency Plan (or the National Pollution Contingency Plan) outlines response measures for dealing with accidental and unauthorized releases of pollutants that cause or may cause damage to the environment and that may constitute a threat to the public health, property, or the welfare of the citizens of the Dominion of Cedar Brea.<sup>4</sup>

The National Pollution Contingency Plan provides for a coordinated national response to pollution incidents of major proportions which may escalate beyond the response capabilities of regional resources, and which may require the collective expertise or resources of the country.

The National Pollution Contingency Plan serves to supplement Cedar Brea's National Disaster Plan, and relies on the general provisions of emergency health and welfare services under the National Disaster Plan when, and if, such services are required for pollution events for which this Pollution Contingency Plan may be implemented.

The National Pollution Contingency Plan is also intended to supplement the Maritime Pollution Contingency Plan.

For events not addressed by the Maritime Pollution Contingency Plan, the National Pollution Contingency Plan also serves as the primary vehicle to respond to threats of pollution events from sources beyond Cedar Brea's borders, and to advise appropriate agencies of neighboring countries of pollution incidents which originate within Cedar Brea and that may cross into or affect the territories, land, or waters and threaten the health and welfare of the citizens, or the environment, of neighboring states or territories.

The National Pollution Contingency Plan enjoys the support of the Government of Cedar Brea, and the implementation and maintenance of the Plan is the responsibility of the Minister of Environment.

\_\_\_\_\_  
**Minister**  
**Department of Environment**

\_\_\_\_\_  
**Date**

<sup>4</sup> The fictitious country, "Cedar Brea," is used for the examples presented throughout these Guidelines.

## LETTER OF PROMULGATION

(EXAMPLE)

The National Oil and Hazardous Substances Pollution Contingency Plan (or the National Pollution Contingency Plan) provides for the coordinated actions by agencies of the Government of Cedar Brea to respond to accidental and unauthorized releases of pollutants that cause or may cause damage to the environment and that may constitute a threat to public health and welfare, and to property.

The National Pollution Contingency Plan provides for a coordinated national response to pollution incidents of major proportions which may escalate beyond the response capabilities of regional resources, and which may require the combined expertise or resources of the country.

The National Pollution Contingency Plan organizes the collective response capabilities of several agencies of the Government, and serves to supplement Cedar Brea's National Disaster Plan and the Maritime Pollution Contingency Plan. The Pollution Contingency Plan relies on the general provisions of emergency health and welfare services provided for under the National Disaster Plan when, and if, such services are required for pollution events for which this Pollution Contingency Plan may be implemented.

The National Pollution Contingency Plan also serves as the primary vehicle to respond to threats of pollution events from sources beyond Cedar Brea's borders, and to advise appropriate agencies of neighboring countries of pollution incidents which originate within Cedar Brea and that may cross into or affect the territories, land, or waters and threaten the health and welfare of the citizens, or the environment, of neighboring states or territories.

The National Pollution Contingency Plan enjoys the support of the Government of Cedar Brea, and the Minister of Environment is responsible for its implementation. The Minister of Environment and the Solicitor General share responsibility for maintaining the Plan up-to-date. The Plan has been approved by:

\_\_\_\_\_  
Minister of the Environment

\_\_\_\_\_  
Solicitor General

\_\_\_\_\_  
Minister of Natural Resources

\_\_\_\_\_  
Minister of Industry and Trade

\_\_\_\_\_  
Minister of Transportation

\_\_\_\_\_  
Commissioner  
Department of Public Works

\_\_\_\_\_  
Minister of Health

\_\_\_\_\_  
President  
State University of Kroy

\_\_\_\_\_  
Minister of Science and Energy

Date: \_\_\_\_\_

## B. TABLE OF CONTENT

The table of content of any text consists of the listing of material presented in that particular text, and the table of content, or index, for contingency plans serves the same purpose and is usually not significantly different.

A sample Table of Contents for a suggested national environmental contingency plan is not illustrated in these Guidelines, but is presented in the supplemental publication, **A SAMPLE ENVIRONMENTAL CONTINGENCY PLAN**. The Sample Plan consists of the aggregate of all sample components of an environmental contingency plan that are created in the main body of these Guidelines for illustration purposes, and a regular Table of Contents is part of this Sample Plan.

It is usually the hope of all those who develop contingency plans that the plan they are preparing never has to be used or implemented for the type of situation envisaged by the plan. In fact, the majority of organizational and decision-making structures and components created in most contingency plans are seldom made use of. Even if a contingency plan is never implemented fully, some elements of the plan serve to provide useful information, and the very presence of a contingency plan attracts users who seek information and contacts not readily available from other sources. A contingency plan's index or table of content can be a useful source of information and can be prepared so as to direct users to expertise and response resources not readily found in other publications.

In addition to the standard index which accompanies most publications, the guidelines presented in this publication suggest that a contingency plan includes one additional element as part of the index designed to assist users of the plan.

It is not uncommon for people to browse through contingency plans in the hope of finding out which agency or group may be best suited to take care of, or deal with, a particular problem. These Guidelines suggest that users of a contingency plan may be assisted with the introduction of what is called, for the lack of possibly a more appropriate term, a QUICK GUIDE as part of the plan's index or table of contents.

The concept of a Quick Guide was first introduced as part of an environmental contingency plan in the seventies.<sup>5</sup> The purpose of the Quick Guide is to provide very succinct information to the reader in order to help the individual find urgently needed information (usually telephone numbers) for various emergency services, services that may relate only remotely to the contingency plan. These emergency services sought may be mentioned in a particular plan which the user is browsing through, but the emergency services actually sought may be more appropriately obtained elsewhere. In short, the purpose of a Quick Guide is to steer the reader as quickly as possible either to the appropriate part of the plan at hand, or to other focal points for various emergency services which the reader may be looking for.

The usefulness of a Quick Guide is illustrated with the example on the next page:

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<sup>5</sup> The Province of Ontario Contingency Plan for Spills of Oil and Other Hazardous Materials, 1975; Canada.

## Quick Guide

<u>Type of Emergency</u>	<u>Contact</u>
<ul style="list-style-type: none"> <li>• involving death or injury</li> </ul>	<ul style="list-style-type: none"> <li>☞ nearest police, fire, and ambulance services *</li> </ul>
<ul style="list-style-type: none"> <li>• involving fire</li> </ul>	<ul style="list-style-type: none"> <li>☞ nearest fire department *</li> </ul>
<ul style="list-style-type: none"> <li>• involving evacuation of people</li> </ul>	<ul style="list-style-type: none"> <li>☞ nearest community or regional police force *</li> <li>☞ nearest health unit *</li> </ul>
<ul style="list-style-type: none"> <li>• incidents involving occupational health and safety matters</li> </ul>	<ul style="list-style-type: none"> <li>☞ nearest Ministry of Labour inspector</li> </ul>
<ul style="list-style-type: none"> <li>• involving goods regulated under the Transportation of Hazardous Materials Act</li> </ul>	<ul style="list-style-type: none"> <li>☞ nearest police force *</li> <li>☞ Ministry of Transport Emergency Centre; tel.: 123-45 67 89</li> </ul>
<ul style="list-style-type: none"> <li>• involving a release of large amounts of gaseous hazardous materials to the atmosphere</li> </ul>	<ul style="list-style-type: none"> <li>☞ nearest fire department *</li> <li>☞ local health units *</li> <li>☞ nearest Ministry of Labour inspector</li> <li>☞ Ministry of Environment contacts listed in Annex I of this Plan</li> </ul>
<ul style="list-style-type: none"> <li>• involving the discharge of oil or other substances from ships</li> </ul>	<ul style="list-style-type: none"> <li>☞ nearest Coast Guard office listed in Annex IV of this Plan</li> <li>☞ Ministry of Environment contacts listed in Annex I of this Plan</li> </ul>
<ul style="list-style-type: none"> <li>• involving pesticides</li> </ul>	<ul style="list-style-type: none"> <li>☞ local health units if human health is threatened</li> <li>☞ Ministry of Environment contact listed in Annex I of this Plan</li> </ul>
<ul style="list-style-type: none"> <li>• involving unauthorized or accidental releases of hazardous materials or other pollutants to the environment:               <ul style="list-style-type: none"> <li>- to satisfy Ministry of Environment reporting requirements )</li> <li>- to advise downstream surface water intakes )</li> <li>- to obtain approval for the transportation and disposal of recovered pollutants and debris from spill sites )</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>☞ Ministry of Environment contacts in Annex I of this Plan</li> </ul>

® ® ® \* Telephone operator can assist

The above sample may be one or two pages long, and should be placed in the contingency plan immediately before or after the regular table of contents. These Guidelines place the Quick Guide after the table of contents. It is hoped that it directs the reader, who is using the plan to find specific contact points, to the most appropriate sources quickly. The Quick Guide reflects the overall intent of the plan, and reinforces that this particular plan is not intended to deal with and resolve all possible events, and that the plan focuses on a very specific type of emergency.

# 1. INTRODUCTION

The introduction to a national pollution contingency plan serves to establish the background or the history of the pollution contingency planning process as applicable, defines the perceived threat that the plan is intended to deal with or address, refers to applicable national policy instruments, and sets the framework and general response concepts that are detailed in the body of the plan. The introductory part of an environmental contingency plan may include the type of material as illustrated in the following example:

## **1. Introduction**

- 1.1** **Unauthorized and accidental releases (spills) of oils, chemicals and other hazardous or polluting substances may present an immediate threat to the nearby community, may present an unacceptable short-term or long-term threat to the health and welfare of the population over a wide area, and may be deleterious to other living creatures and the environment in general. Such releases require timely action for alerting appropriate authorities and for coordinated countermeasures.**
- 1.2** **The discharge of hazardous materials and other pollutants is prohibited by law, and the threat, to human health and safety, to other living creatures, and to the environment in general, posed by unauthorized and accidental releases of pollutants, is recognized universally.**
- 1.3** **The National Oil and Hazardous Substances Pollution Contingency Plan (also referred to as the National Pollution Contingency Plan), including the Annexes, provides for coordinated response actions by agencies of the Government of Cedar Brea to protect the environment from damaging effects of unauthorized and accidentally released pollutants for pollution incident beyond the response capability of the local community and events of national interest.**
- 1.4** **The plan provides for:**
  - a) the assignment of duties and responsibilities among government agencies in relation to the responsibilities of the party, or parties, responsible for the pollution incident,**
  - b) a reporting system suitable for the rapid receipt of pollution reports and for notifying other jurisdiction as warranted,**
  - c) the establishment of a focal point to provide coordination and direction for the implementation of this plan,**
  - d) the identification of expertise and response resources that may be of assistance for the implementation of this Plan,**
  - e) policies with respect to emergency provisions applicable to the handling, treatment or disposal of certain pollutants, and**
  - f) a link to the international community for the acquisition of assistance if required.**

- 1.5 **The National Pollution Contingency Plan supplements the general provisions of the National Disaster Plan and the Maritime Pollution Contingency Plan.**
- 1.6 **The National Disaster Plan, and decisions under the National Disaster Plan, prevail for the provision and coordination of emergency services for all matters involving national security, all matters dealing with the health and welfare of the general population and responders including evacuation, and for matters dealing with damage, or the threat of damage, to the infrastructure of communities and to real property.**

Text for the introductory portion of an environmental contingency plan probably does not have to provide much more detail than shown in the example above. Other sections of the plan provide ample opportunity to expand some of the concepts referred to in the introduction.

## **2. AUTHORITY, REGULATORY TOOLS, OBLIGATIONS**

Every effort should be made early in the plan to establish that the plan is a lawful government instrument. This is accomplished, in part, by the inclusion of a letter of promulgation already referred to as Part A, Approvals Instruments, in the Plan Outline Considerations Summary. It is equally important to refer to all suitable legal instruments in the main body of the plan.

It is important that the plan includes legal authorization for the plan itself. This should be done whether or not specific environmental emergency legislation exists.

If no specific environmental emergency legislation exists that can be cited to demonstrate that the plan is a lawful instrument of the government, other consideration may be necessary. This includes reference to decrees, resolution or directives of Cabinet, Ministers, or the Head of State, as applicable, or inter-agency agreements, memoranda of understanding, or international undertakings, if relevant; all with the intent of affirming the authority and legitimacy of the plan.

References should also be made in the plan to laws or regulations that may be used to assist resolving situations that may be encountered for which the plan, or any of its components, may be implemented. This reference to legislation or regulations may consist of a simple listing of the names of the applicable rules; it may be a similar list with the addition of explicit reference to specific sections of the applicable rules; or the reference may be more detailed by including specific quotes or an interpretation of the intent of sections which the plan relies on or makes use of.

A suggested example for this part of the contingency plan may be:

## **2. AUTHORITY, REGULATORY TOOLS, OBLIGATIONS**

- 2.1 This Plan was developed and is promulgated under Cabinet Directive 234-5/96. The Directive requires the Minister of Environment to prepare a contingency plan that could be implemented for a major pollution incident which requires intervention at the national level.
- 2.2 There is no single national or local act which covers all actions that may need to be carried out under this Plan. This Plan relies on the following aspects for its effectiveness, and these are supported by legislation, agreements and contingency plans listed in Section 2.3 of the Plan:
- the prohibition to pollute;
  - duties and responsibilities for those who own, or those who have charge or management of hazardous materials and potential pollutants during production, use, transport, or storage of these substances, and who are involved in related business activities or ventures;
  - reporting requirements in the event of unauthorized and accidental releases of hazardous materials and pollutants;
  - expected response by the discharger;
  - cleanup and restoration duties for the discharger;
  - regulations and limitations that may affect the transport and disposal of recovered hazardous materials or pollutants, debris, and soils or other matter or things contaminated by the release;
  - applicable provisions for compensating affected parties;
  - expected response by the local community or regional or provincial agencies;
  - authority of the State to intervene or pre-empt;
  - the involvement of various government departments and agencies, and reference to applicable inter-agency or inter-departmental agreements and contingency plans;
  - the establishment of priorities among departments or agencies especially for incidents where there exists a threat to the health and welfare of the general public and responders;
  - international obligations; and
  - recovery of costs.
- 2.3 Parts or sections of the following acts, and disaster or contingency plans or components of these plans, may apply to events for which the National Pollution Contingency Plan may be implemented:
- ◇ The National Disaster Planning Act
  - ◇ The Emergency Measures Act
  - ◇ The Transportation of Hazardous Materials Act
  - ◇ The Energy Act
  - ◇ The Rail Act
  - ◇ Health Services Act
  - ◇ The Environmental Conservation Act

- ◇ **The Waste Management Act**
- ◇ **Clean Air Act**
- ◇ **The National Clean Water Act**
- ◇ **The National Maritime Shipping Act**
- ◇ **The Port Authorities Act**
- ◇ **The National Disaster Plan**
- ◇ **The Maritime Pollution Contingency Plan**
- ◇ **Cedar Brea's Applicable Bilateral and Multilateral Agreements.**

An environmental contingency plan would make reference only to those items listed in Section 2.2 of the above example for which actual laws or other mandate instruments exist. Likewise, the list of laws and other mandate instruments under Section 2.3 in the example would consist of those laws and other instruments which have provisions that address matters dealt with by the contingency plan.

The next section of an environmental contingency plan, Section 2.4 under the outline as presented with the guidelines of this publication, may consist of a short discussion that refers to the most important provisions of the listed mandate instruments. The discussion may also introduce the rationale as it applies to establishing on-site priorities. Such a discussion may be useful in complex events where several departments may find it necessary to exercise authority, possibly at the same time, for different components of the emergency at hand.

The inclusion of an interpretation of relevant sections of applicable mandate instruments, or actual quotes, in the plan is often useful in order to assist the decision makers and other responders at the time of the event. This type of interpretation or discussion is also useful for participants to future communication and simulation exercises, or drills, to which the plan should be subjected.

A discussion of applicable mandate instruments is very specific to the laws and obligations of every country and these Guidelines can offer only very general suggestions for the development of such a discussion as follows:

- 2.4 The Transportation of Hazardous Materials Act provides for immediate reporting of accidental releases of hazardous materials to the nearest police force. This is often a police force under the jurisdiction of a municipality.**

**Furthermore, the Environmental Conservation Act requires reporting to the Ministry of Environment and to the municipality in which an unauthorized or accidental release of any polluting substance, including hazardous materials, takes place.**

**Releases of hazardous materials or other polluting substances, including discharges as a result of accidents, may enter drains and sewer systems.**

**It is noted that the Clean Water Act makes the municipality responsible for all pollution to the environment that occurs as a result of discharges from municipal drains.**

**The 'municipality', therefore, is placed in a position by the Transportation of Hazardous Materials Act, in addition to the**

**Environmental Conservation Act, to be aware of accidents and discharges within their jurisdiction that have the potential for off-site effects, and discharges to which a municipal response may be essential and mandatory under the Clean Water Act.**

Where a country has agreements with neighbouring jurisdictions with respect to notification requirements, and/or arrangements for mutual assistance, that apply to industrial, transportation, or other accidents where hazardous materials affect or may affect the health and welfare of citizens or the environment of neighbouring countries, these undertakings or commitments should also be reflected in Part 2 of the contingency plan, as presented under these Guidelines. Section 2.5 could reflect such international arrangements. Specific notification details are normally left to other more operationally oriented parts of the contingency plan.

The following example represents the type of international arrangement or commitment that should be reflected in a national environmental contingency plan:

- 2.5 The Dominion of Cedar Brea and the Republic of Georgina<sup>6</sup> share a Memorandum of Understanding (MOU) that provides for early warning of the other Party in the event of unauthorized and accidental releases of hazardous materials or other pollutants in the jurisdiction of one Party that may impact the health and welfare of citizens or the environment of the other Party, and for related mutual assistance.**

**The Ministry of Environment is the designated agency responsible for this MOU for the Dominion of Cedar Brea, and the Ministry, through the contact points listed in Annex I of this Plan, serves as the focal point for Cedar Brea under the MOU for notification and alerting purposes, and for requesting or providing mutual assistance.**

**The Ministry contact points identified in Annex I of this Plan also serves as focal point for receiving or transmitting requests for assistance from the international community in the event that such assistance is required.**

### **3. SCOPE AND RESPONSIBILITIES**

The part of the contingency plan that addresses scope and responsibility, as presented with the suggested plan outline proposed with these Guidelines, expands the purpose of the plan and defines its limits. These Guidelines suggest that this can be accomplished under a number of sub-headings.

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<sup>6</sup> The fictitious country of Georgina is used as a country adjacent to Cedar Brea to exemplify international arrangements and/or commitments.

### **3.1 to 3.3 Purpose, Objective, and Scope**

Details normally presented in the part of a contingency plan that address the topics of Purpose, Objectives and Scope are very closely linked. For this reason, the three topics are addressed in a combined format in these Guidelines, and the example presented below deals with the three topics as one group, as Sections 3.1 through 3.3 of the sample plan for the fictitious country of Cedar Brea.

The topic of Limitations, as the term applies to the limits of a contingency plan, should also be included in the first opportune section of a plan. The example presented below ties the topic of Limitations to the topic of Purpose. It is equally common to address Limitations under the heading of Scope. In such a case, the essence of the text presented in Sub-sections 3.1.9 and 3.1.10 in the example would be placed in the section that addresses Scope, namely Section 3.3.

## **3. Scope and Responsibilities**

### **3.1 Purpose and Limitations**

- 3.1.1 The purpose of Cedar Brea's National Pollution Contingency Plan is to mitigate the effects of unauthorized or accidental releases of pollutants on public health and welfare, the environment, and property, by providing for a coordinated and integrated national response to pollution incidents.**
- 3.1.2 This Plan supplements Cedar Brea's National Disaster Plan.**
- 3.1.3 The National Pollution Contingency Plan focuses on coordinating available expertise and response resources required to deal with environmental emergencies caused by unauthorized and accidental releases of hazardous materials or other polluting substances, and environmental aspects of complex disasters. The Plan is a component of the nation's capacity to deal with emergencies and relies on the cooperation of several response partners for its effectiveness.**
- 3.1.4 The National Pollution Contingency Plan may be invoked for the conditions specified, and the Plan is limited to dealing with alerting procedures and monitoring efforts associated with an unauthorized or accidental release of hazardous materials or polluting substances; containment, cleanup and disposal of spilled pollutants, where possible; and the provision and coordination of applicable expertise.**
- 3.1.5 The Plan is intended to work together with other contingency plans for complex disasters or emergencies as one aspect, or a component, of an overall disaster response umbrella.**
- 3.1.6 Operational response decisions under this Plan may be superseded by any plan or authorized procedures that address matters specific to state security, health and welfare issues of the general public and responders, and the threat to the infrastructure of communities or to real property.**

- 3.1.7 The notification and alerting procedures developed in this Plan are applicable to all gaseous, liquid and solid substances spilled or released to the environment, and will be used to alert interested response partners even if the event is of a magnitude for which the National Pollution Contingency Plan will not be utilized otherwise.
- 3.1.8 It is essential that very close working relations be developed and maintained amongst several agencies. It is of particular importance that close relations be maintained with the Ministry of Health where expertise is available to interpret effects of hazardous materials and pollutant on human health and safety.
- 3.1.9 The National Pollution Contingency Plan does not provide the primary response mechanism for pollution incidents to the coastal waters and to navigable inland waters of the Dominion which occur as a result of activities associated with shipping. Such incidents are addressed by the National Maritime Shipping Act, and the Maritime Pollution Contingency Plan, both administered by Cedar Brea's Coast Guard.

In the event of a pollution event for which the Maritime Pollution Contingency Plan is implemented, the Coast Guard may seek assistance for matters related to environmental issues, and the identification and effects of hazardous materials and other pollutants, through the National Pollution Contingency Plan. Such requests should be made to the Ministry of Environment through the points of contact listed in Annex I of this Plan.

- 3.1.10 Furthermore, this Plan is not designed to provide a primary response mechanism for releases of hazardous materials or pollutants that cause minor or moderate impact, as defined in Section 3.4 of this Plan, for which the responsible party or the local community is expected to effect an adequate response.
- 3.1.11 Under all conditions, and without regard to the magnitude of the release, the discharger remains responsibility for the event, and remains responsible for all costs incurred as a result of a response initiated under this Plan.
- 3.1.12 Notwithstanding the above, the discharger, the local community, or regional authorities may seek assistance through this Plan where the circumstances of the event dictates such needs. Reimbursement to the State for such assistance may be required and this will be determined on a case-by-case basis.

### **3.2 Objective**

The objectives of this Plan are:

- to develop appropriate preparedness measures and effective systems for reporting unauthorized and accidental releases of hazardous materials and other pollutants within Cedar Brea,

- to institute countermeasures for events beyond the response capability at the local or regional level to neutralize and/or restrict, where possible, the further spread of pollutants; all in an effort to minimize, as applicable, hazard to life and the environment, and damage to community and private property,
- to supplement the National Disaster Plan and the National Maritime Pollution Contingency Plan, and
- to provide assistance, as may be appropriate, to pollution events responded to by industry or in concert with local or community response plans.

### **3.3 Scope**

- 3.3.1 This Plan applies to all areas within the jurisdiction of the Government of Cedar Brea.**
- 3.3.2 This Plan is intended to organize the activities of the various government agencies that may be involved in the control or monitoring of a pollution incident.**
- 3.3.3 This Plan and its Annexes are applicable in whole or in part in the event of unauthorized or accidental releases of hazardous materials and polluting substances that result in a major pollution incidents, as defined in Section 3.4 of this Plan.**
- 3.3.4 This Plan also provides a focal point for the provision of assistance in support of other contingency plans or response efforts, as well as for events with relatively minor impact for which the full thrust of the Plan would not normally be invoked.**
- 3.3.4 Nothing in this Plan shall prejudice existing or future international agreements, or affects the rights and obligations of partners to this Plan with respect to obligations they may have under the National Disaster Plan, or instructions they may receive from the Government or the Head of State for events involving national security, or other matters of national interest.**

The sample sections of a contingency plan for the fictitious country of Cedar Brea, developed for illustrative purposes in these Guidelines, presume that the country has water that is frequented by commercial ships, that the country has a coast guard, and that the country has developed or is developing a contingency plan that deals with shipping related pollution events. Sub-section 3.1.9 of the sample resented under the title of Purpose and Limitations deals with this assumption. Several countries prepare separate plans for marine pollution incidents and for other types of environmental pollution incidents, and these Guidelines follow this trend.

If a country wishes to combine the response to maritime pollution incidents within a national environmental contingency plan as envisaged in these Guidelines, then the exclusion clauses such as Sub-sections 3.1.9 and 3.1.10 would not be part of the plan. Efforts were made in the development of these Guidelines to permit the deletion of some clauses without affecting the thrust of the suggested example.

### **3.4 Definitions**

The definition sections of contingency plans reviewed in the course of preparing these Guidelines suggests that definitions are not only specific to the jurisdiction(s) addressed in a contingency plan, but also specific to the structure and the management style introduced for controlling events for which the plan is prepared.

The definitions section also provides a unique opportunity to introduce, constrict or expand words or concepts; all of which may be part of defining or reinforcing the scope and the application of the contingency plan. The following example of definitions is suitable for an environmental contingency plan:

#### **3.4 Definitions**

The following terms are defined for the purpose of this Plan:

- 3.4.1 **Containment**: Any measure which is taken to control or to restrict the spread of hazardous materials or pollutants involved in a pollution incident.
- 3.4.2 **Countermeasures**: Embraces all activities, including *in-situ* burning or chemical neutralization, which are implemented to reduce the impact and the consequences of a pollution incident.
- 3.4.3 **Emergency**: A sudden and usually unforeseen event that calls for immediate measures to minimize its adverse consequences.
- 3.4.4 **Environment**: The atmosphere, surface and ground waters, and land within the borders and under the jurisdiction of the Dominion of Cedar Brea, including all components of the ecosystem.
- 3.4.5 **Environmental Degradation or Degradation of the Environment**: Unfavourable modification of the ecological state and environment through natural processes and/or human activities.
- 3.4.6 **Environmental Emergency**: Degradation of the environment to an extent that it creates or constitutes an emergency.
- 3.4.7 **Environmental Response Team (ERT)**: A decision-making group consisting of senior representatives of ministries, government agencies or departments, and designated by their respective agencies to assist the On-Scene Coordinator with his tasks, by focusing on political and policy implications, and complex technical matters. The ERT also serves as facilitator for securing expertise and resources that may be required from the ERT member's host agency and other sources.
- 3.4.8 **Hazardous material**: Any substances, element, compound, mixture, solution, wastes, material or goods, including petroleum oils and pesticides and their associated products, which by itself, or in conjunction with other substances, elements, compounds, mixtures, solutions materials or goods as a result of incomplete, uncontrolled or inadvertent reactions, presents a hazard to man

or adversely affects man, animals or other living things including plants or the environment in general, and property, or has the potential to do so.

- 3.4.9 **International Assistance Liaison Group (ILG)**: A pre-designated group, under the leadership of a senior representative from the Ministry of External Affairs, responsible for the coordination of bilateral efforts with neighbouring jurisdictions or international assistance as may be required.
- 3.4.10 **National Coordinator (NC)**: A senior governmental official, representing the lead agency, responsible for the overall management of the pollution incident for which this Plan is implemented.
- 3.4.11 **National Operations Group (NOG)**: A group of experts, nominated by members of the ERT, with operational experience and expertise that may be of assistance to the OSC.
- 3.4.12 **On-Scene Coordinator (OSC)**: The government official, designated by the lead agency, responsible for operational decisions and coordinating government on-scene operational response activities of pollution incidents under this Plan.
- 3.4.13 **Pollutant, Polluting Substance or Contaminant**: Any material or substance, or the derivative of any materials or substances through incomplete, uncontrolled or inadvertent reactions, that if released to or into the environment in contravention of applicable laws of Cedar Brea, causes or may cause damage to public health and welfare, property, or to the environment; and any material or substance, including disease-causing agents which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through the food chains, will or may cause death, disease, behavioural abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring.
- 3.4.14 **Pollution Incident**: An unauthorized or accidental release of a hazardous material or a pollutant that causes, or threatens to cause, adverse effects to public health and welfare, property, or the environment, according to the laws of Cedar Brea, resulting in the necessity to respond to the event by the discharger, the local community, or regional or State authorities.

**Minor Pollution Incident**: A pollution incident that poses no threat to human life and health nor to public or private property; poses little, and only a temporary, threat the environment, and an environmental threat that is acceptable to authorities under the circumstances; and an incident that can be handled in a timely manner by the competency of the discharger or his agent, with no more than minor assistance from local authorities.

**Moderate Pollution Incident:** A pollution incident that poses, or may pose, a threat to human life or health in the immediate vicinity of the release; or poses, or may pose, a threat to public or private property, or to the environment; and that necessitates the direct involvement or intervention of local or regional authorities.

**Major Pollution Incident:** A pollution incident of national importance or of national interest that requires the direct involvement, or the intervention, of the Government at the national level in addition to the response at the local and regional level; or a pollution incident beyond the response capability of the discharger and the local community, or regional authorities, that requires response coordination at the national level; or a pollution incident that is not addressed by the discharger nor by regional or local authorities, and that requires the intervention of the Government of Cedar Brea.

- 3.4.15 **Provincial and Regional Response Group (RRG):** A group of experts representing the provincial, regional or local authorities, usually with local or site-specific knowledge, responsible for providing site-specific information to the OSC. The RRG is also responsible to coordinate regional response initiatives with activities undertaken under this Plan.

### **3.5 Lead Agency**

Discussions and applicable examples are presented, in Sections 3.5, 3.6 and 3.7 on the topic of the responsibilities of several agencies under a national environmental contingency plan. The concept of a lead agency was already referred to in these Guidelines, and it is assumed that the country's environment ministry would carry this role for an environmental contingency plan. Although it may be advantageous to have the environment ministry carry this responsibility, another agency may carry the role equally well, especially if a country does not have an environment ministry, or the nation's environmental expertise is dispersed amongst several agencies.

Similarly, it may be desirable to assign the role of lead agency for an environmental contingency plan to an agency or branch of the government with special authority and expertise to coordinate and manage the response to other types of emergencies. If this is to be considered, it must be kept in mind that pollution incidents, of a magnitude for which it may be necessary to implement a national contingency plan, probably have already exhausted local response capabilities, and will most likely require specialists in the fields of health, chemistry, and the environmental and engineering disciplines, as well as relevant response resources, from several agencies including industry and possibly from international sources. In this case, the references in these Guidelines to the concepts of response partners and team play may be especially important.

Let us then look at the role of the lead agency, and as pointed out, these Guidelines presume this to be a country's ministry of environment.

Within the scope of an environmental contingency plan, the lead agency:

- would normally take the lead role during the development of the Plan;
- would normally be designated to receive notification of events that may result in the implementation of the Plan, or would have legislation in place that required reporting to the agency;
- would undertake to advise response partners of minor events of interest; events that would not otherwise result in the Plan's implementation;
- would normally serve as the national focal point for international arrangements on environmental emergencies and other matters, for alerting adjacent jurisdictions for events that originate within the country and impact other jurisdictions or territory, to receive notification of "off-shore" events that may impact the country, and serve as focal point for international mutual assistance arrangements;
- would invoke the Plan and call on response partners to participate for events that require the implementation of the Plan;
- would normally provide the on-scene decision maker, the OSC, for operational decisions that need to be implemented;
- would normally chair a team of interdisciplinary and, most probably, inter-agency experts, that may be provided for under the plan, who are usually tasked to resolve complex technical and policy matters that should be taken into consideration by the OSC;
- coordinate liaison with the discharger, local and regional authorities;
- coordinate the planning and implementation phases of responses, or segments of responses, when the Plan is implemented;
- engage expertise and response resources available through the partnership arrangements under the Plan;
- engage contractors or other third party expertise and resources from the private sector, as needed;
- notify the public, and serve as focal point for the press;
- may serve as focal point to the international community for potential international assistance; and
- serve as focal point for contract arrangements and payments, where applicable, for undertakings initiated through the Plan.

If a country does not have legislation in place that gives authority to a lead agency to commence with the tasks, undertakings and commitments associated with a contingency plan, a directive from the Head of State, Cabinet, or a similar instruction instrument may be required before the head of an agency, ministry or department can proceed with the development of a contingency plan and with the implementation of serious and potentially costly undertakings. In the absence of applicable legislation, a Head of State or Cabinet, may instruct a minister, the Minister of Environment, for instance:

- to develop a national contingency plan to protect the environment,
- to establish the necessary infrastructure for the purpose of implementing a national environmental contingency plan, and
- to provide general instructions to other departments and agencies of the government to cooperate in the development of the plan and provide response assistance when required.

A plan created under the instructions of the Head of State or Cabinet could then be drafted in language that makes the plan itself the legal instrument for establishing the planning and response structure suitable to deal with environmental emergencies. The instructions by the Head of State or Cabinet could then be used to establish:

- an overall framework suitable for the response, at the national level, to unauthorized and accidental releases of hazardous materials and other pollutants to the environment,
- a clear definition of the expected response by industry, and local and regional authorities,
- the lead agency for developing and implementing a response plan,
- the basis for cooperation amongst response partners, and
- the infrastructure necessary to effect decisions that may need to be made under the Plan.

If the country has suitable legislation, it would be cited instead. The net effect would be essentially the same. With either legislation or a formal directive, a lead agency could be established, cooperation amongst potential response partners could be sought, and a response plan for pollution incidents could be prepared.

It is probably more difficult to provide a suitable example for a lead agency than for any other part of a contingency plan outline. The section of a contingency plan that addresses the lead agency is more subject to the specific inner workings of a particular country than any other single component of a plan. With these qualifying limitations, this publication offers the following example:

### **3.5 Lead Agency**

- 3.5.1 The Ministry of Environment is responsible for achieving and maintaining a quality of the environment that will protect human health and the ecosystem, and will contribute to the well-being of the people of Cedar Brea.**
- 3.5.2 The Ministry of Environment administers the Environment Conservation Act, the Clean Air Act, the Clean Water Act and the Waste Management Act, and operates, as a regulatory body, numerous surveillance and abatement programs designed to maintain acceptable standards.**
- 3.5.3 With respect to unauthorized or accidental discharges of hazardous materials or pollutants, the responsibility for containment and cleanup remains with the discharger.**
- 3.5.4 The Ministry's role is to ensure that the discharger responds promptly, and complies with requirements for cleanup, disposal, and the repair of damage to property and to the environment.**
- 3.5.5 Municipal or regional authorities may also be involved in the response to pollution incidents especially if there is concern for the protection of public safety, property, vital services and sensitive areas.**

**3.5.6 With respect to unauthorized or accidental discharges of hazardous materials or other pollutants, the responsibility of the Ministry of Environment is summarized as follows:**

- 1. to receive notification and information of such discharges of pollutants to the environment, and to assist in warning potentially affected parties or "downstream" users, where applicable.**
- 2. to inspect and monitor discharges of hazardous materials and other pollutants in order to:**
  - (a) ensure that the discharger takes appropriate measures,**
  - (b) give advice and make recommendations as to the best practicable cleanup and disposal measures to be followed,**
  - (d) monitor the response activities of responsible parties and, when warranted, to initiate disciplinary measures or to intervene or pre-empt response measures in order to protect the interests of the public and the Ministry, and**
  - (c) where applicable, make recommendations with respect to procedures or equipment for spill prevention.**
- 3. to provide assistance on environmental matters to the ministry or the department in charge of an event for which the National Disaster Plan or the Maritime Pollution Contingency Plan may be implemented, as applicable.**

**3.5.7 In the event that the National Pollution Contingency Plan is implemented, the Operations Division of the Ministry of Environment will provide the On-Scene Coordinator as well as the Deputy On-Scene Coordinator and, as required, alternates, technical expertise, and an emergency centre.**

**3.5.8 The Ministry of Environment will notify, as appropriate, participating and other agencies or groups as reflected by the intent of the index provided in Annex IV of this Plan.**

### **3.6 Participating Agencies**

The structure of the environmental contingency plan depends to a large extent on the degree to which other ministries, department or agencies will participate, in what may be referred to as a response partnership. For the purpose of these Guidelines, it is assumed that the development of the national environmental contingency plan would have the support of the government and would enjoy wide support from those agencies or groups who may be able to contribute expertise or resources in order to minimize the threat for which this contingency plan is being prepared.

With these assumptions, this publication offers the following example which suggests certain details on the types of roles and responsibilities for some participating agencies that could be named in a national environmental contingency plan. This type of information should be provided immediately after the part in the plan which addresses the role of the lead agency.

### **3.6 Participating Agencies**

**3.6.1 The Ministry of Natural Resources is responsible for exploitable natural resources, fish and wildlife, and parks and other recreational resources, within the Dominion of Cedar Brea. The Ministry will provide the necessary technical expertise in the management of wildlife and natural resources, and make available its surveillance, transportation and communications capability within the framework of this Plan.**

**3.6.2 The Ministry of Transportation is responsible for enforcement of safety standards in the transportation industry, and the maintenance of the nation's rail network. The ministry also has access to heavy equipment through maintenance contracts with private sector contractors. The Ministry will provide or make available its expertise in investigating causes of transportation accidents, and provide or make available heavy equipment and material in possession of the Ministry, or facilitate such acquisition from private sector companies under maintenance contracts to the Ministry, as may be required.**

**The Ministry will provide coordination with local road authorities that may be able to allocate additional equipment and material.**

**3.6.3 The Ministry of Health is responsible for the health of the general public and will provide its expertise for pollution incidents when required, and will also provide co-ordination with local health units.**

**3.6.4 The Ministry of Labour is responsible for occupational health and safety matters, and will provide advice as may be required by the circumstances of a pollution incident.**

**3.6.5 The Ministry of the Solicitor General will provide assistance in police matters, such as securing the site of operations, within their area of jurisdiction and, if requested, provide the necessary liaison with municipal or regional police forces, as applicable.**

**3.6.6 The Coast Guard, within the jurisdiction of the National Maritime Shipping Act, and the Port Authorities Act, and regulations made thereunder, is responsible for:**

- 1. taking direct and positive action to respond to spills, of oil or other hazardous materials, relating to marine activities that occur in the navigable waters under the jurisdiction of Dominion of Cedar Brea;**
- 2. preparing for other marine emergencies that may occur in or on navigable waters of Cedar Brea; and**

**3. maintaining a support capability with equipment, manpower and expertise, and will assist other agencies to deal with waterborne spills, on a request basis.**

**3.6.7 The Department of Public Works is custodian of all public and institutional property and responsible for its maintenance, either directly or through contracts with appropriate firms in the private sector. The Department will expedite contractual arrangements where emergency contracts have to be prepared for essential assistance from the private sector, as required.**

**3.6.8 The Ministry of Trade and Industry will serve as facilitator with industry and trade associations on an as-needed-basis.**

**3.6.9 The State University of Kroy will make available the expertise and laboratory facilities of the chemical and engineering faculties, as required.**

### **3.7 Provincial / Regional and Local Authorities**

Provincial, regional or local authorities often have responsibilities for some elements of environmental emergencies, and the complexity of an environmental emergency may involve several of these groups. It must be recognized that each emergency service has its own priorities and has to satisfy its own organizational needs. The task of a national environmental contingency plan is to provide the forum for each entity involved in some elements of the pollution incident to participate in the decision-making process when the national plan is invoked. This can be achieved by establishing a 'Provincial and Regional Response Group', the RRG, which represents the collective response resources at the regional and local level.

The responsibilities of provincial and local authorities in connection with elements of pollution incidents is a function of a country's legislative framework at these levels, or the latitude extended from the national level through legislation or through other mandate instruments such as decrees or cabinet directives. The section on Provincial / Regional and Local Authorities in this particular section of a national environmental contingency plan would make reference to existing response structures that may be available to the lead agency for a response to a pollution incident for which this contingency plan is implemented.

The sample contingency plan developed in this publication for the fictitious country of Cedar Brea assumes that the province with an industrial base and an industrialized city within this province would participate in a pollution incident for which the national contingency plan has to be implemented.

As with several other sections of this sample contingency plan and with its underlying contingency planning suggestions offered in this publication, if a country does not have a response capability at the regional or local level, this section would not be included in the plan a country may wish to prepare. Although the presence of this section significantly enhances a contingency plan that is based on the concept of a response partnership, the absence of this, and the absence of some other sections of the plan, does not jeopardize entirely the preparation of a viable national environmental contingency plan.

Section 3.7 prepared on the basis of the Plan Outline Considerations Summary presented at the beginning of Chapter 2 could be worded as follows:

### **3.7 Provincial / Regional and Local Authorities**

- 3.7.1 The Province of Kroy and the City of Telmah are responsible for the provision of a number of emergency services, including those of fire, police and ambulance services, and hospitals. Both jurisdictions have well developed response structures for these services, and these resources could be an asset for dealing with components of a pollution incident for which this Plan may be implemented.**
- 3.7.2 In the event that emergency services referred to in Sub-section 3.7.1 are required in the course of a pollution incident under this Plan, the appropriate authorities responsible for the service will make that service available either through the National Disaster Plan if the Disaster Plan is implemented, or directly for the purposes of this Plan if the National Disaster Plan is not implemented.**
- 3.7.3 With reference to Sub-sections 3.7.1 and 3.7.2, the intent of the provisions of Sub-sections 3.1.5, and 3.1.6 prevail.**
- 3.7.4 The Dominion of Cedar Brea may requisition any response resources from provincial / regional or local authorities that may be of assistance in the implementation of operational decisions made under duties of, or authorities extended to, the On-Scene Coordinator under Section 5.2 and Part 6 of this Plan.**

Regional and local authorities should probably be encouraged to enhance their state of preparedness. The United Nations Environment Programme's Industry and Environment Programme Activity Centre (UNEP IE/PAC) operates the Awareness and Preparedness for Emergencies at Local Level (APELL) programme. The main goals of the APELL programme are to prevent technological accidents and, failing this, to minimize their impact. To this end, UNEP IE/PAC has available handbooks and other publications that introduce processes for industry and local communities to work together on strengthening their accident prevention and emergency response capabilities. UNEP IE/PAC also facilitates the APELL process by conducting periodic on-site workshops on the topic. Inquiries for assistance on these topics should be directed to:

United Nations Environment Programme  
Industry and Environment  
Programme Activity Centre, APELL  
Tour Mirabeau  
39-43 Quai André Citroën  
75739 PARIS CEDEX 15, FRANCE  
Tel: 33 (1) 40 58 88 50  
Fax: 33 (1) 40 58 88 74  
Telex: 204 997F



### **3.8 Responsibility of the Discharger**

Many countries have environmental legislation in place, or are developing legislation, that is based on the 'polluter pays' principle. This principle is usually utilized as well for rules that apply to unauthorized and accidental releases of pollutants. Such provisions force those in charge of, or managing, potential pollutants into active spill prevention strategies. The element of prevention is often reinforced with rules that hold the discharger responsible for cleanup and disposal of spilled pollutants and, at times, impose certain civil and possibly criminal liabilities.

These Guidelines presume that the country considering the development of a national environmental contingency plan has in place, or is planning to put into place, legislation that addresses environmental pollution, and that this legislation also addresses the issue of unauthorized and accidental releases of hazardous materials or other polluting substance. The following example for the section in the contingency plan, that identifies the responsibility of the discharger, is provided with this assumption:

#### **3.8 Responsibility of the Discharger**

- 3.8.1 Under environmental legislation, the discharger is required to report unauthorized and accidental releases of hazardous materials and other pollutants to the Ministry of Environment, and to the municipality in which the release takes place, and the discharger is responsible for timely containment and cleanup. The discharger is also responsible for the disposal of spilled contaminants in an approved manner, as applicable, and to ameliorate the adverse effects of a release and to restore the natural environment to the satisfaction of authorities. For specific requirements, refer to the Environmental Conservation Act and the Waste Management Act, the Clean Water Act, and to applicable sections of the Clean Air Act.**
- 3.8.2 Notification to the Ministry of Environment does not relieve the party of notification requirements to other agencies or parties under other legislated notification requirements.**
- 3.8.3 Other notification and cleanup requirements at the national, provincial or regional level, as well as civil or other duties or liabilities that may apply to pollution incidents are a function of the type of occurrence. In addition to environmental legislation named in Sub-section 3.8.1 and any local requirements that may exist, the following legislation may also place duties and responsibilities on parties responsible for, or involved in, the release of a hazardous material or other polluting substances:**
- ◇ **The Transportation of Hazardous Materials Act**
  - ◇ **The Energy Act**
  - ◇ **The Rail Act**
  - ◇ **The National Maritime Shipping Act**
  - ◇ **The Port Authorities Act**

## 4. RELATIONSHIP WITH OTHER PLANS

A study titled "Qualities in Interagency Structures" reported by Thomas E. Drabek (1987) concludes that "*the creation and nurturing of interorganizational webbing is a major strategy for agency success*", and that "*communities lacking such structural bonding will have minimal disaster response capability, . . . a lesson clear for emergency management professionals.*"<sup>7</sup> This conclusion was reached on the basis of extensive research, and it supports the concept of response partnership and teamwork used as the basis for these Guidelines.

A response to environmental emergencies at the national level may be quite rare. When a national environmental contingency plan has to be implemented, it may require the involvement of several disciplines possibly from several agencies and from industry. It is possible that some entities, which were not identified when the plan was prepared, may have to be asked to provide assistance in order to deal with unforeseen elements of an incident. It is therefore important to establish a partnership structure into the contingency plan that invites and allows other experts to participate. The importance of teamwork is then again reinforced.

One way of establishing a strong team that could deal with a variety of environmental emergencies is to introduce the concept of response partners in the contingency plan. This concept is reflected in Section 3.6 of Chapter 2. Of similar value is to acknowledge other contingency plans and disaster manuals which address response activities that may apply to environmental emergencies, and plans that could be used to assist with specific elements of the pollution incident.

Reference in a national environmental contingency plan to applicable emergency plans and to other response capabilities should be considered essential. The participation of representatives on the Environmental Response Team (ERT described in more detail in Section 5.1 of the Plan Outline Considerations), who may already provide expertise to response structures of other contingency plans, should also be sought, and is recommended as the most effective way to foster and harness the benefits of response partnerships and teamwork.

These Guidelines suggest that this part of the environmental contingency plan identifies international, national, provincial/regional and other contingency plans that may provide support in an environmental emergency. A brief statement should be included for each plan, and the type of expertise or services that may be available.

An example of the relationship of other contingency plans for the fictitious country of Cedar Brea used in these Guidelines may read as follows:

### **4. RELATIONSHIP WITH OTHER CONTINGENCY PLANS**

#### **4.1 International Plans**

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<sup>7</sup> The Professional Emergency Manager, pp. 141

- 4.1.1 The Dominion of Cedar Brea shares an “Early Warning and Mutual Assistance Memorandum of Understanding” with the Republic of Georgina; referred to as the MOU in Section 2.5 of this Plan.
- 4.1.2 The MOU requires that the Republic of Georgina be advised of pollution incidents that originate in Cedar Brea and cross or may cross into the territory or waters of Georgina.
- 4.1.3 The MOU may also be used in the event that either country requires advice or assistance for pollution incidents that may, or may not cross, the common border.
- 4.1.4 Cedar Brea and Georgina also signed the “Georgina - Cedar Brea Joint Marine Pollution Contingency Plan” for spills of oils and other polluting substances to adjacent or shared navigable waters, through activities associated with maritime shipping.
- 4.1.4 The Joint Marine Pollution Contingency Plan addresses alerting and shared responsibilities for maritime pollution events that may affect either or both Parties. The Joint Plan also addresses conditions for mutual assistance of expertise and resources for events experienced by only one Party, but which may require assistance from, or the participation of, the other Party.
- 4.1.5 Contact points for alerting and mutual assistance arrangements with Georgina are in ANNEX IV of this Plan.

#### **4.2 National Disaster Plan**

- 4.2.1 Cedar Brea’s “National Disaster Plan” deals with a threat of major proportions to the health and welfare of the citizens of Cedar Brea, to property and the infrastructure of communities that is of a magnitude beyond the response capacity of the local or regional community, or other similar threats to which the Government should respond at the national level.
- 4.2.1 The National Disaster Plan focuses on many emergency services including health, police and crowd control services, and some of these emergency services may be of assistance for environmental emergencies to which Cedar Brea must respond, but for which the Disaster Plan may not normally be invoked.
- 4.2.3 Appropriate points of contact for the National Disaster Plan are identified in ANNEX IV of this Plan.

#### **4.3 Provincial Contingency Plan**

- 4.3.1 The “Kroy Pollution Contingency Plan” serves the industrialized Province of Kroy and addresses pollution incidents that requires a coordinated response by the Province.
- 4.3.2 The Kroy Pollution Contingency Plan identifies expertise and resources in the public and private sector within the Province,

and this resource may be of assistance to a response under the National Pollution Contingency Plan. The Province of Kroy has offered to provide support to pollution incidents for which the National Pollution Contingency Plan may be implemented.

- 4.3.3. The decision to request expertise or resources from the Province of Kroy rests with the OSC of this Plan, with input from the ERT.
- 4.3.4. Points of contact for access to the Kroy Pollution Contingency Plan are identified in ANNEX IV of this Plan.

#### **4.4 Other Plans**

- 4.4.1. The City of Telmah and the petrochemical industry within the city and surrounding area have developed effective emergency and spill contingency plans.
- 4.4.2. The expertise identified in the Telmah emergency and pollution contingency plans, and in the industry contingency plans, is significant and may be an important asset to this Plan. The City and the major industries have indicated their willingness to provide assistance on an as-needed and an as-available basis.
- 4.4.3. The decision to request expertise or resources from the City of Telmah rests with the OSC of this Plan, with input from the ERT.
- 4.4.4. Suitable points of contact for the Telmah and area contingency plans are identified in ANNEX IV of this Plan.

## **5. RESPONSE ELEMENTS**

The purpose of this part of an environmental contingency plan, developed on the basis of the outline presented in this publication, is to present a strong administrative structure suitable for carrying out the stated objectives of the contingency plan. This structure has to have the ability to translate the intent, purpose and scope of the plan, and combine this with available regulatory tools, with national and international obligations, and with the flexibility to accommodate other contingency plans in workable relationships.

Although the response structure in a contingency plan may vary significantly from one jurisdiction to another and from one country to another, the response structure of a contingency plan must accommodate the institutional and administrative arrangements of the country, and reflect the extent to which parties, who may participate in a given type of event, will interact and cooperate.

These Guidelines were developed with the assumption that reasonable interaction and cooperation exists amongst agencies, departments and different levels of jurisdiction during the development phase of a national environmental contingency

plan, and that the plan would reflect a similar tenor. As stated earlier, it is assumed that the Ministry of Environment would be designated as lead agency for the development and implementation of a country's environmental contingency plan, although it is recognized that this task could be undertaken equally well by any other department of a national government with appropriate authority.

Response elements presented in this publication also reflect two of the more important features for in any contingency plan. These two features are the designation of a lead agency with suitable authority to manage the threat for which the plan is intended, and the appointment of a pre-designated on-scene decision maker. These features take care of the operational functions under the contingency plan, and for some agent-specific or single focus contingency plans, little else is required. Environmental contingency plans, however, often have to deal with events that are multi-disciplinary as well as multi-agency in nature and that may involve major policy issues and complex technical elements which require rapid concurrent consideration by several agencies and possibly by other regulatory bodies at other levels of government. A third property of an environmental contingency plan, therefore, is a provision, within the response structure of the plan, that allows response partners the opportunity to contribute expertise and resources and, more importantly, where response partners are party to the decision-making process. These Guidelines suggest the creation of a strong mechanism that allows response partners opportunity to participate.

Part 5 of the Plan Outline Considerations introduces a response structure for a national environmental contingency plan intended to establish these features.

## **5.1 Environmental Response Team**

These Guidelines suggest that an environmental contingency plan response structure should rely on two primary response entities. The more familiar of these two entities is the on-scene decision maker, referred to as the On-Scene Coordinator (OSC) in these Guidelines. His task is to deal with operational decisions, and these decisions are usually made within the mandate limitations of his host agency, or within the mandate extended to the lead agency by authority of any special mandate instruments. This authority, or any special mandate instruments, would have been referred to in the letter of promulgation of the plan, and in the part on Authority, Regulatory Tools, and Obligations, presented as Part 2 of the sample national environmental contingency plan.

These Guidelines are based on the assumption that an interdisciplinary approach will most likely be required to assess and deal with an environmental emergency that requires the efforts of a country at the national level. It is, therefore, assumed that the assembly of an interdisciplinary group will most likely be required, and that it would be essential for such a group to be an active participant in the decision-making process during the response to a major pollution incident. It then follows that, unless the lead agency has all expertise and all resources necessary to respond to a major pollution incident, an interdisciplinary group would most likely consist of representatives from several agencies.

Therefore, the second important entity established within the response structure of an environmental contingency plan, and suggested in these Guidelines, is the creation of a strong and effective inter-agency and interdisciplinary team consisting of senior experts with decision-making authority from response partners. These Guidelines refer to this group as the Environmental Response Team (ERT).

The key tasks of an Environmental Response Team are:

- to deal with policy issues and complex technical decisions especially those involving matters that require timely consideration by several agencies,
- to nominate suitable candidates who can provide operational assistance to the On-Scene Coordinator,
- to provide logistical support in the areas of expertise or response resources that may be available through the agency of each ERT member, and
- to facilitate appropriate and timely resolutions to unexpected and complex administrative matters over which their respective host agencies have authority or influence.

It is suggested that the ERT should probably be chaired by a senior representative of the lead agency. As already mentioned in Part 4, membership of the ERT should include, if possible, representatives of agencies who are also involved in the planning for, and response to, natural disasters or other events for which other national emergency plans or disaster plans have been, or are being, prepared.

Environmental contingency plans tend to deal with events that are often somewhat different from other events. Many agent-specific contingency plans address events caused by or attributed to natural events or natural phenomenon, such as tornadoes, snow storms, hurricanes, volcanic eruptions, tsunamis, etc. Although a natural disaster may result in environmental degradation for which an environmental contingency plan should be implemented as one of possibly several agent-specific sub-plans, an environmental contingency plan will most likely be required more often for events for which someone may be responsible or at fault; an event caused by negligence; a pollution incident as a direct result of human activity.

The element of potential fault or negligence distinguishes environmental emergencies from most other emergencies or disasters, and influences the characteristic of an environmental contingency plan. Language in the environmental contingency plan has to accommodate the needs of regulatory authorities to satisfy their requirements that may exist for investigating causes for the event without interfering with the requirements to effect appropriate and timely countermeasures. Suitable representation on the ERT can be useful to accommodate these needs. The ERT may also effect the necessary investigative efforts by appointing appropriate nominees to the National Operations Group (defined in Section 5.5 of the Plan Outline Considerations).

These Guidelines introduce the ERT as the first entry in the contingency plan under the title of Response Elements. This is done to establish the importance in the decision-making process of an interdisciplinary and inter-agency group charged with political and policy matters, and complex technical issues. Introducing the ERT as first entity under Response Elements helps to illustrate the relationship between the importance of considering policy matters and complex technical issues and the

operational decisions that have to be made by the OSC; decisions which must consider, if not accommodate, 'the larger picture'.

In these Guidelines, the ERT has responsibility for 'the larger picture'.

With this as background, the first part of a plan's details on response elements may read as presented below. The example interprets and makes use of all elements of the sample plan presented in these Guidelines thusfar.

## **5. Response Elements**

### **5.1 Environmental Response Team**

- 5.1.1 Policy matters and complex technical issues that require appropriate and timely consideration, possibly by several agencies, will be dealt with by an inter-agency and interdisciplinary group established under this plan as the Environmental Response Team (ERT).**
- 5.1.2 The ERT consists of representatives of the participating agencies identified in Section 3.6 of this Plan. In addition, the Cedar Brea's Petroleum Industry Association, and the Chemical Institute may also be represented on the ERT at the discretion of the ERT Chairman on an as-needed-basis.**
- 5.1.3 A representative from the Ministry of Environment will serve as chairman of the ERT. A representative from the Ministry of Natural Resources will serve as Deputy Chairman.**
- 5.1.4 The ERT reports to the National Coordinator. (See Section 5.4)**
- 5.1.5 Members of the ERT are expected to contribute to the countermeasures operations of environmental emergencies for which this Plan may be implemented in whole or in part by focusing on political, policy, and international implications, focusing on complex technical issues, and serving, in the general sense, as facilitators.**
- 5.1.6 The functions of the ERT, and duties of its members, are:**
- a) to be fully aware of the proposed actions of the OSC by monitoring all reports and evaluating the possible impact of reports made or decisions considered,**
  - b) to ensure that all necessary information is made available to the OSC during a major pollution incident for which this Plan is implemented, and to provide timely collective advice and assistance to the OSC so that the most effective operational actions can be formulated (the OSC retains operational control over response activities),**
  - c) to provide the OSC, as quickly as possible, with suitable nominees to serve on the National Operations Group (NOG), and on the Provincial and Regional Response Group (RRG),**

- d) to provide logistical support in the areas of expertise or response resources that may be available through the host agency of each ERT member,
- e) to facilitate an effective communications link for all government or regulatory agencies that have a vital interest in the event, and all parties participating in the response to the major pollution incidents, including parties retained to assist in countermeasures activities, with the responsible party(ies) through the OSC,
- f) to recruit other agencies, industrial or scientific groups to play their appropriate part in support of countermeasures, if required, and with prior concurrence of the OSC,
- g) to facilitate appropriate and timely resolutions to unexpected and complex administrative matters over which their respective host agencies have authority or influence,
- h) to assist the OSC with the preparation of briefing notes and releases for the media, and to assist the OSC in periodic media briefings especially on matters of national policy,
- i) to facilitate the provision of necessary support staff for the proper functioning of a Response Centre including the orderly accounting of countermeasures activities,
- j) to facilitate the recording of records of contracts and costs incurred, and
- k) to participate in the preparation of post-incident reports.

**5.1.7** Some measures of response functions will be performed each time the Plan is implemented. The degree of response is subject to the demands of each particular situation.

**5.1.8** With regard to Sub-section 5.1.6(c), the ERT will ensure that no unnecessary duplication of membership exists between the NOG and the RRG if both groups are required for a response to a pollution incident for which this Plan is implemented.

**5.1.9** Pre-designated members of the ERT are listed in Annex III of this Plan. Any agencies may be represented by more than one team member on the ERT, and the ERT is encouraged to invite additional participants to the team with expertise unique to the particular pollution incident for which the ERT is assembled. Preference to ERT membership should be given to those with senior responsibilities under other contingency plans.

**5.1.10** The ERT Chairman and the ERT Deputy Chairman will make provisions for regular meetings of the ERT during a major pollution incident for which this Plan is implemented.

**5.1.11** The ERT may be activated to serve in an advisory capacity on environmental matters in the event the National Disaster Plan or the National Maritime Pollution Contingency Plan is invoked.

**5.1.12** The ERT Chairman and the ERT Deputy Chairman are responsible for holding annual ERT meetings, for conducting annual exercises of this Plan, and for maintaining this Plan up to date. ERT members will provide their full support for these requirements.

An important reason for creating an ERT is to be able to address as many complexities as possible that may be part of an environmental event for which a national response may be required. Establishing the ERT provides a forum and an opportunity to address potential difficulties, and at the same time makes best use of limited expertise and resources. Given the nature of the role that the ERT has in relation to the operational role of the OSC, it is suggested that the ERT is well suited for the responsibility of updating the plan and for arranging exercises. This makes the ERT aware of available resources suitable to support a response, and underpins the need for the consideration of the actual availability of expertise and response resources for any operational undertakings and for these limitations to be an integral part of any policy interpretations that may have to be made during an event.

The concept of an inter-agency team should also be seen as an opportunity for an effective link to expertise under other emergency plans, and a suitable mechanism whereby senior pre-designated representatives from various agencies have the opportunity to prepare for complex social issues that may need rapid solutions.

## **5.2 On-Scene Coordinator**

Operational decisions required to effect appropriate countermeasures usually rest with the lead agency, and this agency usually assigns the responsibility for on-site decision-making to suitably competent personnel. The on-scene decision maker in these Guidelines is referred to as the On-Scene Coordinator, or OSC. Again, these Guidelines presume that the OSC for a national environmental contingency plan would be appointed by the Ministry of Environment, and as was already pointed out, another agency with an appropriate mandate could perform this function.

The OSC is challenged with making appropriate and rapid decisions for all operational components associated with countermeasures to an environmental emergency or to environmental aspects of larger disasters. The OSC is charged with the responsibility of interpreting his observations and/or those of his field representatives, and the advice and input from the ERT, with the appropriate sequential mechanics of essential countermeasures operations, while minimizing adverse consequences. At times, these decisions have to be made with minimum information, and under political, public and media pressures.

The section on the OSC in the National Environmental Contingency Plan developed as sample for these Guidelines could read as follows:

### **5.2 On-Scene Coordinator**

**5.2.1 The coordination and direction of the pollution control efforts at the scene of a pollution incident will be achieved through an official appointed by the Ministry of Environment as the On-Scene Coordinator (OSC). The OSC can be reached through Ministry of Environment points of contact identified in Annex I of this Plan.**

**5.2.2 The OSC reports to the National Coordinator. (See Section 5.4)**

- 5.2.3** In the event of a pollution incident for which this Plan is implemented in whole or in part, the first official of the ERT arriving at the site shall assume coordination of response activities under this Plan until the pre-designated OSC or his Deputy becomes available to take charge of the operation.
- 5.2.4** In the event of a pollution incident for which this Plan is implemented in whole or in part, the OSC's responsibility will continue until the threat of the pollution incident has been dealt with satisfactorily, or, in a situation where a pollution incident escalates to such proportions necessitating the invocation of a contingency plan of higher order, he is relieved of his responsibilities upon invocation of such a plan.
- 5.2.5** The OSC shall determine the pertinent facts about a particular pollution incident, including the nature, amount and location of material spilled, probable direction and time of travel of the material (as applicable), resources required and available, the population groups, installations and property which have been or may be affected, and the agencies, entities or other jurisdictions that need to be advised of the incident.
- 5.2.6** The OSC shall initiate and direct, as required, Phase II and III of the response as described in Part 6. of this Plan.
- 5.2.7** The OSC shall call upon and direct the deployment of available expertise and resources to initiate and continue countermeasure activities including, as applicable, monitoring, modelling, containment, cleanup and disposal functions.
- 5.2.8** The OSC has at his disposal the services of the National Operations Group (NOG), nominated by the ERT; see also Section 5.5.
- 5.2.9** In carrying out this Plan, the OSC is to maintain an up-to-date and accurate information flow to the ERT to ensure maximum effectiveness of all efforts in protecting society, natural resources and the environment from pollution damage.
- 5.2.10** It is understood that the necessary direct liaison between personnel at all levels of participating agencies, the responsible party(ies) and affected or potentially affected parties is essential for the successful and efficient completion of the operation.
- 5.2.11** The OSC will arrange for the recording of costs incurred. This responsibility may be transferred to the ERT.
- 5.2.12** The OSC shall establish the priorities for protection on the basis of available approved plans or advice supplied by the ministries having resource responsibilities.
- 5.2.13** Upon request from the National Coordinator (Section 5.4) or the ERT, the OSC will prepare and submit such reports and recommendations as may be deemed necessary.

**5.2.14** The OSC may be requested to serve as the focal point for providing operational assistance on environmental matters to the Coast Guard for pollution events for which the National Maritime Pollution Contingency Plan may be invoked.

**5.2.15** The OSC may be requested to serve as the focal point for providing operational assistance on environmental matters to the Ministry of the Solicitor General or to the National Disaster Management Office, for environmental aspects of disasters for which the National Disaster Plan may be implemented.

### **5.3 Deputy On-Scene Coordinator**

Tasks of the OSC can be very demanding and the lead agency should consider the appointment of at least one Deputy OSC. The availability of a Deputy OSC ensures that events that require long hours in the field or those that take many days to resolve are adequately overseen. The Deputy OSC should have the same authority and responsibility as the OSC, and this permits the section on the Deputy OSC in the contingency plan to be very brief:

#### **5.3 Deputy On-Scene Coordinator**

**5.3.1** A Deputy On-Scene Coordinator (DOSC) is appointed by the Ministry of Environment, and the position serves to provide an alternate for the OSC.

**5.3.2** The DOSC has the same responsibility and authority as the OSC when the OSC is not available.

**5.3.3** When required, the DOSC may be called upon to assist the OSC.

### **5.4 National Coordinator**

The lead agency may wish to appoint someone with the overall responsibility of managing a response under the national environmental contingency plan. This person would likely carry senior ministry responsibility, would most probably remain in the head office of the lead agency throughout most, if not all, of the field activities, and could be referred to as the National Coordinator (NC).

If a National Coordinator is appointed, the OSC would most likely report to him. Such an arrangement would effectively make the OSC the on-scene representative of the National Coordinator. The ERT would most likely also report to the National Coordinator. The sample contingency plan developed for illustrative purposes provides the following for the NC:

#### **5.4 National Coordinator**

**5.4.1** When this Plan is activated, the Executive Director of the Operation Division, Ministry of Environment, will serve as the National Coordinator (NC).

- 5.4.2 The National Coordinator will be responsible for the overall management of the pollution incident for which this Plan may be implemented.**

## **5.5 National Operations Group**

These Guidelines suggest that provisions for a National Operations Group (NOG) be made. The primary purpose of the NOG is to serve as operational support staff to the OSC, and as such the NOG would consist of staff from the lead agency with operational experience, and staff from participating agencies and other entities with responsibility, authority, and expertise in operational elements. As illustrated in Figure 2, presented in Chapter 1 of these Guidelines, the National Operations Group works within the OSC quarters.

Members to the NOG are nominated by the ERT as one of the first tasks of the ERT. Membership is also reviewed periodically to ensure that all possible operational expertise is available to the OSC to deal with changing priorities. The intent of the NOG is to offer local knowledge that the members may bring to the group and to the OSC from their host agencies or entities. Membership to the NOG, therefore, is a function of the location of the pollution incident for which the national plan is implemented.

The section on the NOG for the sample environmental contingency plan presented in these Guidelines for illustrative purposes is suggested as follows:

### **5.5 National Operations Group**

- 5.5.1 Members to the National Operations Group (NOG) are nominated by members of the ERT as soon as possible after this Plan is implemented, and usually consists of staff from the Ministry of Environment and other participating agencies with operational experience, and staff from other entities with responsibility, authority, and expertise in operational elements.**
- 5.5.2 Members of the NOG report to the OSC, and support the many requirements placed on the OSC. The NOG serves as the OSC's operational staff.**
- 5.5.3 Membership on the NOG may change to satisfy changing operational requirements of the pollution incident. This allows for the introduction and participation of the best expertise to suit the operational requirements of the moment.**
- 5.5.4 Members of the NOG may be asked by the OSC to form various work cells each tasked with resolving components of the overall response requirements.**

The reader will note that these Guidelines suggest that the reporting relationship is between the individual members of the NOG and the OSC, and not the group as a whole and the OSC. This reporting relationship is significantly different in concept from the reporting relationships suggested for the other main groups established in

these Guidelines where the reporting relationship is between groups. A reporting relationship between the individual NOG members and the OSC is suggested to ensure a functional relationship within the quarters of the OSC.

## **5.6 Provincial and Regional Response Group**

Some countries may wish to include in a national environmental contingency plan an invitation to jurisdictions at the provincial or regional level to participate in a decision-making process and the response to events of national importance.

These Guidelines contain the suggestion to include a provision for a partnership with representatives from regional and local authorities and other local entities in the part of the contingency plan that deals with Response Elements. This provides ready access to expertise and resources often closer to the site than can be achieved nationally, and provides the platform for local authorities to participate in the decision-making process.

One way of achieving participation of local jurisdictions in a national environmental contingency plan is to provide for the creation of several local environmental response teams consisting primarily of local representatives. However, these Guidelines recommend the creation of one strong central ERT for the reasons cited in Section 5.1 of the Plan Outline Considerations, and particularly to staff the ERT with those who already serve on response teams under other contingency plans.

The alternate way of achieving participation of local jurisdictions in a national environmental contingency plan is to create a Provincial and Regional Response Group, abbreviated to RRG in these Guidelines, as a decision-making and liaison group. These Guidelines suggest the creation of a RRG, and the RRG as envisaged in this publication, would work closely with and report to the OSC.

Under the umbrella of the national environmental contingency plan, the RRG may consist of:

- senior representatives from any services at the provincial, regional or local level related to the program activities represented on the ERT at the national level, such as provincial or regional environment departments, local health units, water boards, etc.
- senior representatives from entities responsible for, or with expertise in, any of the infrastructure components of the community(ies) possibly affected by the environmental emergency, and
- local experts from other public or private groups including industry, institutions, and specialized services such as laboratories.

The wording for an RRG in the sample plan for Cedar Brea may be:

### **5.6 Provincial and Regional Response Group**

**5.6.1 This Plan provides for the creation of a Provincial and Regional Response Group (RRG).**

**5.6.2 The RRG is intended to make best use of existing provincial and regional/local response structures and other response resources**

that could be of assistance to the resolution of a pollution incident for which this Plan may be implemented.

- 5.6.3** The RRG works closely with and reports to the OSC.
- 5.6.4** Members and the Chairman of the RRG are nominated by the ERT, and the composition of the RRG will depend on the nature and severity of the environmental emergency for which this Plan is implemented.
- 5.6.5** The RRG will generally consist of senior representatives with decision-making responsibility and authority, and who can contribute information or resources to resolve the environmental emergency at hand. Membership to the RRG may include representatives from:
- a) provincial/regional environmental programs,
  - b) local health units,
  - c) local emergency services,
  - d) water boards or water authorities,
  - e) departments responsible for urban infrastructures; expertise in public works, roads, sewer departments, etc.,
  - f) the State University of Kroy, and
  - g) other representation and expertise as may be required, such as laboratory facilities, industry response cooperatives, etc.
- 5.6.6** The RRG will serve as principal liaison between response efforts at the local level and the efforts undertaken at the national level under this Plan.

## **5.7 Field Response Centre**

A pollution incident that may occur for which a national contingency plan may have to be invoked will probably be complex enough, and require significant time to deal with, that it is necessary to establish facilities that can serve as headquarters for the decision makers in the field and for others that may be required to attend the scene.

These Guidelines suggests that a national environmental contingency plan includes provisions for establishing a field office near the site of a potential event. A field office could be a trailer, temporarily rented facilities near the vicinity of the event, or near-by offices of another government department requisitioned for these purposes.

Reference to a field office, or a field response centre, in a contingency plan does not have to be elaborate and may be as short as the following example:

### **5.7 Field Response Centre**

- 5.7.1** When this Plan is activated, the Ministry of Environment will provide suitably functional facilities that will serve as the Response Centre as may be required.
- 5.7.2** The Response Center will serve as the operations quarters for the OSC, the NOG, the RRG and the ERT.

## **5.8 International Assistance Liaison Group**

It may be important in a national contingency plan to include provisions for the possible, albeit rare, need to obtain assistance from the international community. This may occur in the event more specialized expertise or a more timely response is needed than what can reasonably be provided by the collective response capacity of a country, or in the event that the pollution incident escalates beyond a country's response capacity. Assistance from the international community may also be advisable when it is simply expedient to reach for assistance from neighbouring countries or from the international community.

An International Assistance Liaison Group, abbreviated to ILG, would also be of assistance to bilateral arrangements that may exist between the country developing an environmental contingency plan and neighbouring jurisdictions. Such arrangements were discussed under Section 4.1. For instance, the ILG could serve a useful function in facilitating the movement of experts and response resources that may accompany mutual assistance under bilateral mutual aid agreements.

These Guidelines recommend that an International Assistance Liaison Group be established as part of a national environmental contingency plan. The ILG would probably remain a small group and consist of an expert in the environmental field probably from the lead agency, as well as a representative from the ministry responsible for international matters, probably the Ministry of External Affairs.

The ILG would be placed on alert when the national environmental contingency plan is implemented, and be called into action when the OSC and the ERT are first considering making a request for international assistance. The ILG would be task with defining the type of assistance sought, clearing the request with national authorities who may have to be consulted, and facilitating a rapid and unhindered entry of the required expertise or equipment into the country, as applicable. The ILG would be responsible for coordinating the request to, and serve as focal point for, the international community when and if an official request is to be made.

Section 5.8 of the sample contingency plan developed in these Guidelines may include the following provision:

### **5.8 International Assistance Liaison Group**

- 5.8.1 An International Assistance Liaison Group (ILG) is established under this Plan.**
- 5.8.2 Membership of the ILG consists of a senior representative from the Ministry of External Affairs and the Ministry of Environment. Designees for the ILG are listed in Annex VIII to this Plan.**
- 5.8.3 The ILG reports to the Chairman of the ERT.**
- 5.8.4 The ILG is placed on stand-by when this Plan is implemented and will be kept apprised by the ERT of the relevant status of all response activities and of the likelihood of the requirements for additional assistance. The ILG will be activated fully on an as-needed-basis.**
- 5.8.5 The ILG is responsible for coordinating and facilitating assistance that may be required by either party under the MOU with the**

Republic of Georgia (see Section 4.1 of this Plan), and for assistance that may be sought from, or offered by, the international community (see also Annex VIII of this Plan).

- 5.8.6 When international assistance is provided, the ILG is responsible for making all necessary arrangements within the Dominion to ensure timely passage of equipment and free access of expertise to the site of the pollution incident, as well as related transportation arrangements and other logistical support, and hospitality needs, as applicable.

## **6. RESPONSE OPERATIONS**

As was stated under the title of Planning Considerations, in Chapter 1 of these Guidelines, a national environmental contingency plan needs to be only broadly concerned with coordination, mobilization and deployment of national resources. A very detailed outline for the 'management of the accident scene' is usually not required, and often not recommended, for national contingency plans. Detailed action requirements tend to complicate contingency plans unnecessarily and tend to become out-of-date rather quickly. It is desirable, therefore, to word contingency plans broadly enough to accommodate some future changes in the manner that some departments deliver their programmes without jeopardizing the deliverability of the emergency services envisaged by the plans.

For countries where government business is managed from the national level, there may also be a need to word a national environmental contingency plan broadly so that policy matters can be interpreted and executed by those in charge of the pollution incident to fit the priorities of the scene at hand. It is important to appoint suitably senior people to key positions of responsibility under the contingency plan, and to permit these people to exercise adequate flexibility for dealing with the pollution incident within general operating guidelines provided in the plan. It is beneficial to have these operating guidelines worded with as few restrictions as possible, in order to permit field decision-makers adequate latitude to make interpretations in the process of resolving the myriad of problems that could arise while dealing with environmental emergencies.

The wording suggested in this publication for the section of a national environmental contingency plan that addresses response operations is based on environmental contingency plans of several countries reviewed in the process of preparing this publication. Some plans reviewed contained sections on response operations that were even more general than the sample offered below.

The part of the national environmental contingency plan that provides guidance to the On-Scene Coordinator and others on what actions may be considered under the sample plan for the Dominion of Cedar Brea, developed in these Guidelines for illustrative purposes, may be worded as follows:

### **6. Response Operations**

**Actions taken in connection with a response to pollution incidents usually separate into four relatively distinct phases:**

Phase I	-	Discovery and Alarm
Phase II	-	Evaluation, Notification and Plan Invocation
Phase III	-	Containment and Countermeasures
Phase IV	-	Cleanup and Disposal

Activities under any of the four phases may take place concurrently.

All phases are not necessarily applicable to all pollution incidents, and all members of the Environmental Response Team or the National Operations Group and the other groups identified in Part 5 of this Plan may not necessarily be involved in all phases of a pollution incident.

### **6.1 PHASE I - Discovery and Alarm**

- 6.1.1 The discovery of a pollution incident may be made through planned surveillance activities, through the observations of agencies or departments of the various levels of government, by those who caused the pollution incident, or by the alertness and concern of the general public. Reports of pollution incidents may be made to the Ministry of Environment through the contacts listed in Annex I of this Plan.
- 6.1.2 The reporting requirements for releases of hazardous materials and pollutants are established in legislation. These include, but are not limited to the:
- a) National Clean Water Act,
  - b) Clean Air Act,
  - c) Environmental Conservation Act,
  - d) Transportation of Hazardous Materials Act,
  - e) National Maritime Shipping Act, and
  - f) Port Authorities Act.
- 6.1.3 The reporting requirement is usually placed on the person who had custody, or charge, management or control of the material prior to the release, or the person who caused the release.
- 6.1.5 The severity of the pollution incident is a function of the location and nature of the release, the quantity of the hazardous material or pollutant released, and the response capability of the discharger and that of the local community or local and regional authorities. The severity will determine the level of response required and whether or not there is a need to invoke part or all of this Plan.
- 6.1.6 The first agency, with responsibility under this Plan, which is made aware of a pollution incident shall notify the Ministry of Environment immediately. For alerting the Ministry of Environment, use Annex I contact list of this Plan.
- 6.1.5 If the pollution incident is of a nature which should be dealt with by an agency other than the Ministry of Environment, or

through the invocation of a contingency plan other than this Plan, the appropriate agency will be notified as soon as possible as illustrated in Annex IV of this Plan.

## **6.2 PHASE II - Evaluation, Notification, and Plan Invocation**

- 6.2.1** The On-Scene Coordinator will determine the severity of the pollution incident and determine if other jurisdictions or the public should be notified of the event, and together with the ERT determine if this or another contingency plan should be implemented to deal with all or part of the event.
- 6.2.2** If it is determined that this Plan should be implemented in whole or in part, or if it is determined that this Plan is to be implemented in whole or in part or in conjunction with the invocation of another contingency plan, the On-Scene Coordinator shall:
- a) make a recommendation to the National Coordinator, his designate or in their absence the Chairman of the Environmental Response Team to invoke this Plan;
  - b) notify, or make arrangement for others to notify, as quickly as possible all appropriate parties who may have an interest in the incident, parties who may be subjected to adverse consequences by the incident, and all members of response partners and response groups identified in Part 5 of this Plan by making use of the contact lists in the Annexes of this Plan;
  - c) formulate plans to deal with the situation; and
  - d) with the prior approval from the National Coordinator, his designate, or in their absence the Chairman of the Environmental Response Team, initiate Phase III and IV actions as appropriate.
- 6.2.3** Concurrent with Sub-section 6.2.2(d), the Executive Director of Operations of the Ministry of Environment, his designate, or in their absence the Chairman of the ERT, may officially invoke this Plan at this time with appropriate formal notices to all parties, the public and the media.

## **6.3 PHASE III - Containment and Countermeasures**

- 6.3.1** Containment as defined in Section 3.4 of this Plan should be feasible for releases of hazardous material and pollutants in their liquid or solid state, and will not likely be feasible for substances in their gaseous state.
- 6.3.2** Countermeasures activities as defined in Section 3.4 of this Plan should be feasible for most pollution incidents and under most circumstances. Countermeasures activities for pollution incidents involving gaseous substances may be restricted to monitoring and modelling efforts aside from urgent notifications under Phase II, and supplying advice to those providing, or in charge of, emergency services, while priorities for the health and safety of the public and responders predominate.

- 6.3.3** Outside of the limits indicated in Sub-section 6.3.2, containment and countermeasure activities apply to the majority of pollution incidents where released hazardous materials or pollutants can be contained for the purpose of restricting the spread of these substances, and where released materials and soils or other things contaminated by the release can be controlled, and eventually removed, neutralized or disposed of.
- 6.3.4** Operational priorities for containment and countermeasures activities, for the purposes of this Plan, will be set by the On-Scene Coordinator.
- 6.3.5** Input to the decisions for Phase III activities will normally be made by the NOG, the RRG and the ERT, as applicable.

#### **6.4 PHASE IV - Cleanup and Disposal**

- 6.4.1** The cleanup and disposal phase of the operation is directed towards reducing the residual impact of a release of hazardous materials and other pollutants as much as possible. Where practical, it will include the removal of hazardous materials and pollutants, including residue and contaminated debris, from land, structures, water and shoreline, as the case may be, using available resources.
- 6.4.2** Hazardous materials and pollutants, including residue, contaminated soil and other debris, that are recovered as a result of cleanup actions shall be disposed of, used or reused, in accordance with applicable laws, or where no specific laws govern, in accordance with accepted procedures, and in all cases so as to preclude the possibility of further or continuing environmental damage.
- 6.4.3** The Ministry of Environment will determine the suitability of any disposal site which is being considered as receptor for any hazardous material, pollutant, contaminated soil or other debris. As provided for by the Waste Management Act, no wastes recovered from unauthorized or accidental releases of hazardous materials or other pollutants may be disposed of without prior Ministry concurrence. The Ministry will endeavour to facilitate approvals and expedite permits, as applicable, for the transportation and disposal of materials recovered from pollution incident sites, as necessary.
- 6.4.4** The OSC or his designate is responsible for obtaining Ministry of Environment clearance for the disposal of substances or wastes associated with pollution incidents within the context of this Plan. The ERT will facilitate such clearances.
- 6.4.5** Operational priorities for cleanup and disposal activities will be set by the On-Scene Coordinator.
- 6.4.6** Input to the decisions for Phase IV activities will normally be made by the NOG, the RRG and the ERT, as applicable.

Part 6 of the sample contingency plan presented in these Guidelines for illustration purposes reflects how the basis components of the operational response to an environmental emergency can be described in general terms for a national plan. The suggested wording is broad enough to accommodate most response elements and for sharing the decisions for response operations amongst response partners.

If the agency responsible for a national environmental contingency plan intends to respond to environmental emergencies with little or no assistance from other agencies, then the plan has to reflect this reality, and the details of Part 6 of the plan would have to reflect more closely the response capability of that agency.

Under these conditions, Part 5 and portions of Part 3 of the plan would then probably also reflect a slightly less complex administrative structure.

## **7. SUPPORT MEASURES**

### **7.1 Public Information**

When a major pollution incident occurs, it is usually advisable to supply the public with timely and accurate information on the nature of the incident and the steps that are being taken to cope with the problem. An open policy on public information is usually followed to obtain understanding from the public, and to ensure cooperation from all interested and potentially affected parties. It should also reduce the possibility of undue concern or alarm through misinformation.

Policies on public information vary significantly from country to country, and may be affected by the nature and the severity of a pollution incident. An example of a section on the topic of public information for the Dominion of Cedar Brea's national environmental contingency plan may contain the following:

### **7. Support Measures**

#### **7.1 Public Information**

- 7.1.1 When the Plan is invoked, the Ministry of Environment will make appropriate arrangements to assign an information officer to establish and direct a news desk at the Field Response Centre.**
- 7.1.2 Participating agencies may be required to provide professional staff to assist the public information officer.**
- 7.1.3 The public information officer shall report to the On-Scene Coordinator or his deputy. He shall be responsible for preparing news releases and for clearing those with the OSC, his deputy, and with the ERT, as the case may be.**

- 7.1.4 The public information officer is responsible to keep the ERT advised of his activities and is responsible to maintain an account of events in regard to public reaction.
- 7.1.5 Pollution incident situation reports and other factual releases of actions taken may be cleared by the OSC or his deputy, and releases that include policy issues must be cleared by the ERT.
- 7.1.6 The public information officer shall maintain liaison with participating agencies, including other government press offices, the media, and the concerned parties and industries.

## **7.2 Surveillance**

The requirement for carrying out surveillance will depend on the nature of each incident and on the availability of suitable surveillance support equipment. Pollution incidents can affect vast areas and very remote terrain, and the potential need for surveillance should be considered as part of a national environmental contingency plan. This publication suggests that the subject of surveillance be included in an environmental contingency plan, and offers the following example:

### **7.2 Surveillance**

- 7.2.1 Within the context of this Plan, the operational requirements for surveillance will depend on the circumstances surrounding each pollution incident. Evaluation factors will include the type and quantity of material involved; location, apparent direction and speed of movement; proximity to critical use areas; and the availability of response resources.
- 7.2.2 The decision to provide surveillance will be qualified by the type, extent and duration of the surveillance coverage needed, which will be re-evaluated as more up-to-date information becomes available.
- 7.2.3 The primary function of surveillance is to assess the extent of the threat. This information assists the On-Scene Coordinator to evaluate priorities and re-assign available resources if necessary, or identify the need for additional response activities required, including the need for additional surveillance.
- 7.2.4 The degree and type of threat during any particular pollution incident will condition the method, type and duration of surveillance required.

## **7.3 Post Incident Reports**

The need for someone to prepare post-incident reports is not unusual for serious environmental emergencies, especially if the event draws wide public or media interest. Since contingency plans are prepared as a mechanism to deal with certain

predictable eventualities in an organized manner, the plan should also include a mechanism that can achieve closure for certain events in an organized manner.

Post-incident reports provide an excellent opportunity for 'closure'. Post-incident reports are also quite useful for periodic evaluations of the plan's effectiveness, and invaluable as training tools for new emergency responders and others.

A section on post-incident reports in a contingency plan may read as follows:

### **7.3 Post-Incident Reports**

- 7.3.1 The National Coordinator or the ERT Chairman will determine the need for the preparation of a post-incident report.**
- 7.3.2 The severity and the nature of the pollution incident for which this Plan was invoked, in whole or in part, will determine when and if a post-incident report is to be prepared.**
- 7.3.3 The Ministry of Environment will be responsible for the preparation of a post-incident report if a report is required.**
- 7.3.4 All Ministries, agencies and departments, their staff, and others who participated in the response to the pollution incident, for which this Plan was implemented, may be required to participate in the preparation of the post-incident report.**

### **7.4 Review of Plan and Updating Process**

Many providers of emergency services know that the initial enthusiasm that gives rise to the development of contingency plans does not last as long as the plan.

As environmental awareness and environmental consciousness increases, and as spill prevention priorities and spill reduction techniques are incorporated into the fiber of industry and society in general, unauthorized and accidental releases of hazardous materials and pollutants can be expected to decrease. Furthermore, as the response capability of industry and those of authorities at the local or regional level improves, the need to implement an environmental contingency plan at the national level should also decline. These generalities of transition support the need for a rigorous periodic review and updating process for a national contingency plan.

Section 7.4 of the sample sections of a contingency plan presented in these Guidelines satisfies the need to check the viability of the plan as referred to in Chapter 1 of this publication. It is recommended that the lead agency be named as the responsible party for the review and updating process. After all, an up-to-date plan is in the interest of the agency responsible for its implementation. These Guidelines suggest that the ERT Chairman be named as the party responsible for approving update information, and suggest the following process:

#### **7.4 Review of the Plan**

- 7.4.1 The Ministry of Environment is responsible for reviewing the Plan on an annual basis.**

- 7.4.2** It is the responsibility of all participants to this Plan to advise the Ministry of Environment of any relevant changes to the Plan or related update information that they may become aware of as soon as possible. This insures that the deliverability of this Plan is not jeopardized.
- 7.4.3** All update information will be assessed by the ERT Chairman, who will evaluate the changes and when approved, with input of the ERT as appropriate, forward these to the Custodian for action. Updating and amending processes are also subject to the provisions of Section 8.3.
- 7.4.4** The ERT will hold general annual meetings in addition to meetings that may occur as a result of pollution incidents. Standing agenda items for the general meetings will be the review and updating requirements of the Plan, the Plan's annual exercises, and the exercise evaluation reports. Other topics and issues for the general ERT meetings may be suggested by any Plan participant on an as-needed-basis.
- 7.4.5** When update information or material has been approved by the ERT Chairman, the Custodian of this Plan will undertake to update all contacts and focal points identified in the Annexes of the Plan, and distribute all update material to Plan participants, and others, via the contacts identified in the Distribution List, Annex XIII, of this Plan.

## **7.5 Exercising the Plan**

Foster (1980) noted in Disaster Planning that no disaster plan is likely to prove effective if it does not have strong support of senior members of the government for which it is being prepared. One might add another truism, and it is that no contingency plan is likely to remain effective if it is not subjected periodically and rigorously to exercises.

Many emergency plans are placed on shelves once they are prepared in the belief that the plan will be noted when the event occurs for which the plan was designed, and that those who are named in the plan to respond will know what is required of them. Unfortunately, all too many plans are allowed to collect dust on these shelves and, by the time the plan has to be invoked in earnest, those named to carry out specific functions have forgotten that the plan exists, or those named have been reassigned to other job functions, or have retired.

Periodic exercises serve as an excellent vehicle to refresh important elements of a contingency plan for key players assigned various responsibilities. Exercises also serve as excellent training vehicles for new members of participating agencies and other groups, who may be assigned duties under the environmental contingency plan, as part of career moves or as a result of organizational re-structuring.

The section on exercising the national environmental contingency plan developed in these Guidelines for illustrative purposes could read as follows:

## **7.5 Exercising the Plan**

- 7.5.1 The ERT Chairman and the ERT deputy Chairman are jointly responsible for conducting a communications exercise every second year.**
- 7.5.2 The ERT Chairman and the ERT Deputy Chairman are also jointly responsible for conducting a simulation exercise that incorporates various field response elements in addition to testing communication capabilities, every alternate year to the communications exercises under Sub-section 7.5.1.**
- 7.5.3 The Ministry of Environment will retain an outside expert to evaluate the communication and simulation exercises.**
- 7.5.4 Evaluation reports prepared by the outside observer will be considered by the Ministry, and the ERT at the annual meetings of the ERT, for assessing the Plan's effectiveness.**
- 7.5.5 Approved reports of the communication and simulation exercises will be distributed to all contacts on the Distribution List in Annex XIII of this Plan by the Custodian.**

## **8. ADMINISTRATIVE ELEMENTS**

### **8.1 Cost Recovery**

Few government contingency plans have the opportunity to address the topic of documentation and cost recovery. Pollution incidents may have a great variety of causes, and several reasons may contribute to the pollution incident for which a national contingency plan may be implemented. Unlike most natural disasters for which disaster plans are prepared, many pollution incidents can be traced to causes and reasons involving human fault, omissions of duties, or negligent acts. Environmental emergency plans, therefore, should contain provisions that accommodate investigative functions concurrently with response activities under the plan. An environmental contingency plan should also include provisions for the rigorous accounting of activities and accounting of costs. Costs may be substantial, and these costs may be recoverable once parties or entities responsible for the event have been identified.

One reason for assigning the lead agency responsibility to the Ministry of Environment is that an environmental ministry would normally already have a mandate to investigate the cause and reason for pollution events, and the associated responsibility for collecting evidence and samples, if sampling is required. If environmental legislation exists in a country, pollution abatement programmes would probably also exist and the expertise in these programmes would probably be housed within the nations environment ministry.

This abatement, enforcement or investigative expertise could readily be incorporated in the operational decisions made under the environmental contingency plan through appropriate representation of ministry of environment staff on the National Operations Group, and to a lesser extent on the Environmental Response Team. The placement of the NOG as operational staff for the OSC provides the opportunity to nominate some staff, who normally have responsibility for pollution abatement, enforcement or investigative activities. Their participation on the NOG could be of assistance to determine cause and fault, and this could be of significant assistance to the State for the recovery of costs.

The statement in the contingency plan on cost recovery does not need to be elaborate and only needs to identify that this topic is part of a response to environmental emergencies. The sample contingency plan developed as part of these Guidelines already suggested reference to costs or cost recovery in Sections 2.2, 3.1, 3.5, 3.8, 5.1, and 5.2 in Chapter 2. Reference to cost recovery under the part of the plan that addresses administrative elements serves to complete the topic by placing responsibility on a given department or individual, as applicable.

The section in a contingency plan on cost recovery may be worded as follows:

## **8. Administrative Elements**

### **8.1 Cost Recovery**

- 8.1.1 The Ministry of Environment is responsible to investigate the cause and reasons for pollution incidents for which this Plan may be implemented. The Ministry is also responsible for any associated documentation and preparation of reports including the collection of samples.**
- 8.1.2 Where it is determined that the incident was caused by a person or an entity in contravention to applicable laws, the Ministry of Environment is responsible to compensate those who encounter expenses as a result of activities on the basis of requests made by the OSC in the response to a pollution incidents for which this Plan was implemented.**
- 8.1.3 The Ministry of Environment, on behalf of the State, is responsible for the recovery of costs incurred as a result of a response to a pollution incidents under this Plan where fault or negligence can be established, or where an activity or act, or the failure to carry out an activity or act, in contravention of applicable laws resulted in, or contributed to, the pollution incident.**
- 8.1.4 Costs incurred by participating agencies in the response to pollution incidents to which fault or negligence cannot be assigned, may have to be born by the responding agencies. Cost sharing under these circumstances may have to be addressed on a case-by-case basis.**

## **8.2 Custodian**

A contingency plan probably receives attention between events only if someone is assigned the responsibility to look after routine administrative matters in connection with updating functions and the associated maintenance activities. Even though the suggested plan to this stage has assigned key responsibilities for regular meetings and an update process to the ERT Chairman, the ERT Deputy Chairman, and the OSC, a designated custodian would have the responsibility for carrying out much of the actual work involved in the updating process, setting meetings, and other related administrative processing functions.

To minimize costs and to maximize efficiency, the function of custodian should be assigned to someone who carries out similar functions for other contingency or disaster plans. That work function may reside in a ministry other than the Ministry of Environment.

This publication assumes that a national disaster plan exists on which the environmental contingency plan can rely for certain emergency services, or for which the environmental plan serves as one of possibly several agent-specific sub-plans. This assumption leads to the suggestion that another ministry responsible for the national disaster plan, perhaps the Ministry of the Solicitor General, may already have staff to provide the function of custodian for the environmental plan without creating duplication.

If it is felt that the function of the custodian should be carried by the lead agency instead, then this task could be assigned to a responsible individual or a position in the middle management range.

Reference to the custodian and his responsibility does not need to be elaborate and may read as follows:

### **8.2 Custodian**

**8.2.1 The Custodian of this Plan and its Annexes, and any amendments and supplementary publications thereto, is the Contingency Coordinator, Ministry of the Solicitor General.**

**8.2.2 The Custodian is responsible for all administrative matters that relate to the annual ERT meetings, the biennial communication and simulation exercises, for updating this Plan, its Annexes, and related publications, and for preparing and distributing related notices and other printed matter.**

## **8.3 Amendments and Updates**

A contingency plan should include a word on how periodic amendments may be made. It is probably impossible to prepare a contingency plan that can foresee all eventualities which it may have to accommodate. Nor it is possible to prepare a contingency plan that can accommodate all future programme or structural changes to government ministries or agencies. For these reasons it is advisable to include,

from the onset of the plan, a mechanism that outlines how amendments to the body of the plan can be made without the need to re-negotiate all earlier arrangements.

A section on amendments of the plan is more important for contingency plans that rely on the cooperation of several agencies for a response, similar to what these Guidelines have referred to as a response partnership. Pre-arrangements to accommodate future amendments in plans that rely primarily on the response from one agency are less important, since the primary agency responsible for such a plan does not rely on concurrence from response partners.

The amendments section for the sample plan developed in these Guidelines, and similar plans built on a response partnership concept, could read as follows:

### **8.3 Amendments and Updates**

- 8.3.1 Amendments to the National Oil and Hazardous Substances Pollution Contingency Plan of the Dominion of Cedar Brea that have State or ministry policy implications may be made only by mutual agreement of the Ministry of Environment and all participating agencies of this Plan.**
- 8.3.2 The ERT will serve as platform for discussions of such changes, and the heads of all agencies listed in the Letter of Promulgation must be consulted before amendments with State or Ministry policy implications can be carried out.**
- 8.3.3 Amendments to the Plan that do not have State or ministry policy implications may be considered following full discussions of the matter by the ERT, preferably at scheduled ERT meetings.**
- 8.3.4 Routine updating of the Plan and its Annexes, usually consisting of focal or contact point, and similar updating of any supplemental publications that may be developed, may be made on the recommendation of the ERT Chairman with concurrence from the ERT Deputy Chairman and the OSC.**
- 8.3.5 Amendments to the Plan and the updating of its Annexes will be carried out by the Custodian and disseminated to those on the Distribution List in Annex XIII.**
- 8.3.6 The official date of this Plan is the date indicated on the Letter of Promulgation, and each page of the Plan is dated accordingly.**
- 8.3.7 The processing of amendments and any updating of the Plan requires that the affected pages of the Plan, it's Appendixes or supplemental publications, be dated to indicate when the changes became effective, or to reflect the date of a new or revised publication, as applicable.**

## 9. ANNEXES

Annexes to a contingency plan should be seen as an integral part of the plan and should consist of information and lists of contacts that are subject to frequent updating requirements; information that can be updated without the need to enter into complex approvals processes. A list of 13 suggested annexes has been presented in the Plan Outline Consideration Summary presented on pages 15 and 16 of these Guidelines. Only Annexes I through VIII and Annex XIII are presented in these Guidelines for illustrative purposes. Annexes IX through XII address 'guidelines' for IX) issuing warnings, X) dealing with the press, XI) dealing with volunteers, and XII) training, respectively. The development of such guidelines is beyond the scope of this project, but these topics are important and should be included in a comprehensive contingency plan. For this reason, these topics are reflected in the list of suggested suitable annexes presented in the Plan Outline Considerations Summary at the beginning of Chapter 2 of these Guidelines.

Unlike the sample segments presented as Parts A through 8 of a suggested national environmental contingency plan in the discussion component of Chapter 2, the sample annexes presented in the next few pages could not be highlighted by bolding. Bolding of all of the annex material, to reinforce that the annexes are samples, would have resulted in the loss of definition for some of the material shown, which would have negated the desired effect of highlighting only selected components of some of the material presented in the sample annexes.

# **ANNEX I**

(SAMPLE)

## **MINISTRY OF ENVIRONMENT CONTACT LIST**

### **LEAD AGENCY**

Unauthorized or accidental discharges of hazardous materials and other polluting substances must be reported to the Ministry of Environment. Reporting requirements are found in the following:

- ◇ The Environment Conservation Act
- ◇ The Waste Management Act
- ◇ The Clean Water Act
- ◇ Clean Air Act
- ◇ The Transportation of Hazardous Materials Act
- ◇ The Energy Act
- ◇ The Rail Act
- ◇ The National Maritime Shipping Act
- ◇ The Port Authorities Act

Reports of Discharges of hazardous materials or other polluting substances may be made to the following Ministry of Environment offices:

<u>Office</u>	<u>Telephone Number</u>	<u>Hours</u>
▷ <b>Pollution Control Desk</b>	<b>13 57 - 924 68</b>	<b>08:00 to 17:30 hrs</b>
▷ <b>Information Office</b>	<b>12 34 - 567 89</b>	<b>08:30 to 17:00 hrs</b>
▷ <b>Kroy Regional Office</b>	<b>19 75 - 318 64</b>	<b>08:00 to 17:30 hrs</b>
▷ <b>Off-Hours</b>	<b>12 34 - 666 66; pager 345</b>	<b>All off-hours</b>

The Ministry of Environment may require written confirmation of pollution incidents. When there exists urgency to forward written reports, these may be submitted via facsimile to:

⇒ **Ministry of Environment, Pollution Control Desk, Fax: 13 57 - 999 77**

This Plan calls for the designation of the On-Scene Coordinator (OSC) and the Deputy On-Scene Coordinator (Deputy OSC) who carry operational responsibility under this Plan (see Sections 5.2 and 5.3 of this Plan). These responsibilities have been assigned to experienced personnel of the Ministry, and they will be contacted by any of the offices identified above in serious pollution incidents and where it appears that the implementation of this Plan should be considered.

This Plan also designates the Executive Director, Operation Division as the National Coordinator (NC). The NC is responsible for the overall management of a response under this Plan (see Section 5.4 of this Plan). The NC will be notified by the Ministry offices above when a pollution incident requires the invocation of this Plan.

## **ANNEX II**

(SAMPLE)

### **PARTICIPATING AGENCIES EXECUTIVE FOCAL POINTS**

These lists consist of contact points for senior executives of the co-signatories to the National Oil and Hazardous Substances Pollution Contingency Plan, and senior representatives of ministries, agencies and departments identified as Participating Agencies in Section 3.6 of the Plan. This listing is maintained for administrative purposes of the Plan and is not provided with copies of the Plan that are made available to the public.

The Plan creates a mechanism for the Ministry of Environment to receive reports of discharges of hazardous materials and other polluting substances, and establishes the responsibility for the Ministry of Environment to notify other agencies who may participate in a response to the pollution incident in the event that this Plan is implemented. Points of contact to carry out the functions of the Plan are provided in other Annexes of this Plan.

The points of contact in the following list are NOT be used for operational purposes of the National Oil and Hazardous Substances Pollution Contingency Plan. The primary points of contact for reporting pollution incidents is Annex I of this Plan and the primary list of focal points for notifying other agencies and interested parties is Annex IV. Annex III serves as contact list for various response groups established under this Plan.

#### **Executive Focal Points**

<u>Agency</u>	<u>Office</u> Director/Head of:	<u>Telephone</u>	<u>Fax</u>
Min. of Environment	Operations Division	12 34 - 678 69	12 34 - 678 99
Min. of Natural Resources	Conservation Branch	12 34 - 909 22	12 34 - 909 23
Min. of Transportation	Standards Office	12 34 - 876 45	12 34 - 876 98
Min. of Health	Health Policy Branch	12 34 - 875 33	12 34 - 875 79
Min. of Labour	Compliance Branch	12 34 - 873 29	12 34 - 873 93
Min. of Solicitor General	Enforcement Branch	12 34 - 878 11	12 34 - 878 97
Coast Guard	Ship Safety Office	19 88 - 432 44	19 88 - 432 95
Dept. of Public Works	Properties Branch	16 18 - 300 68	16 18 - 300 94
Min. of Industry & Trade	Business Relations Br.	12 34 - 872 41	12 34 - 872 89
State University of Kroy	Faculty of Engineering	14 67 - 265 12, ext. 83	14 67 - 264 91

## **ANNEX III**

(SAMPLE)

### **RESPONSE GROUPS CONTACT LISTS**

#### **Environmental Response Team (ERT)**

The ERT represents a senior advisory group to the On-Scene Coordinator (OSC). The ERT is chaired by a representative from the Ministry of Environment, and co-chaired by a Ministry of Natural Resources Ministry official. Other members of the team consist of representatives of the participating agencies identified in Section 3.6 of the Plan. Any of the agencies may be represented by more than one team member on the ERT, and the ERT is encouraged to invite additional participants to the team with expertise unique to the particular pollution incident for which the team may be assembled.

<u>Agency</u>	<u>Name/Function/Specialty</u>	<u>Telephone</u>	<u>Fax</u>
Environment	'Name', Chairman	### ####	### ####
	'Name', Assistant	### ####	### ####
Natural Resources	'Name', Deputy Chairman	### ####	### ####
Transportation	'Name'	### ####	### ####
Health	'Name', chronic health	### ####	### ####
	'Name', emergency services	### ####	### ####
Labour	'Name'	### ####	### ####
Solicitor General	'Name'	### ####	### ####
Coast Guard	'Name', search and rescue	### ####	### ####
	'Name', spill response		
	'Name', aids and navigation		
Public Works	'Name'	### ####	### ####
Industry and Trade	'Name'	### ####	### ####
University of Kroy	'Name', Faculty of Science	### ####	### ####
	'Name', Engineering Faculty		

#### **National Operations Group (NOG)**

Members of the NOG are nominated by the ERT as soon as possible after this Plan is implemented. Members of the NOG report to the OSC and provide operational support functions. It is the responsibility of the ERT to select, as expeditiously as possible, nominees to the NOG with expertise and experience to be of direct assistance to the OSC for the type of pollution incident the OSC has to deal with.

The ERT is encouraged to nominate NOG members from their own agency and may nominate any other persons from the public or private sector who may be of assistance to the OSC for any particular pollution incident. NOG members may serve on the group for the duration of an incident, or they may serve for only a particular part of the event. The table below is provided for convenience only and may

be used for selecting candidates for the NOG. Participants to this Plan are encouraged to submit additional candidates who could be added to this listing. This could be of assistance to future response requirements.

The following list is provided as a guide only and membership for the NOG should not be limited to selections from this listing:

<u>Candidate/Specialty</u>	<u>Association</u>	<u>Telephone</u>	<u>Fax</u>
'Name', Primary contact 'Name', Alternate(s)	Min. of Environment	### #####	### #####
'Name',	Min. of Natural Resources	### #####	### #####
'Name',	Min. of Transportation	### #####	### #####
'Name',	Min. of Health	### #####	### #####
'Name',	Min. of Labour	### #####	### #####
'Name',	Min. of Solicitor General	### #####	### #####
'Name', Primary Contact 'Name', Alternate	Coast Guard	### #####	### #####
'Name',	Min. of Labour	### #####	### #####
'Name',	Min. of Industry & Trade	### #####	### #####
'Name',	Public Works	### #####	### #####
'Name',	University of Kroy	### #####; ext. 45	### #####
'Name', Atmospheric dispersion modeling	State Institute of Technology	### #####	### #####
'Name', Chemical Engineer	Chemical Institute	### #####	### #####
'Name', Chemist	Industrial Laboratories Inc.	### #####	### #####
'Name', Spill Response Coordinator	Dept. of Environment, Province of Kroy	### #####	### #####
'Name', Waste Management	Dept. of Environment, Province of Kroy	### #####	### #####
'Name', Response Expert	Retired, former refinery manager	### #####	### #####

### **Provincial and Regional Response Group (RRG)**

Membership to the RRG and the RRG Chairman are nominated by the ERT. The purpose of the RRG is to create a group that takes advantage of existing provincial or regional/local response structures and resources. The RRG reports to the OSC and represents expertise and site-specific knowledge usually available at the local and regional level, and authorities that can provide additional response resources which could be of assistance to the pollution incident for which this Plan is implemented.

The need for the creation of the RRG and its composition is a function of the type of pollution incident and the location of the event for which this Plan is implemented. As is outlined in Section 5.6 of the Plan, membership on the RRG is varied, and may include representation from:

- a) provincial/regional environmental programs,
- b) local health units,

- c) local emergency services,
- d) water boards or water authorities,
- e) departments responsible for urban infrastructures; expertise in public works, roads, sewer departments, etc.,
- f) the State University of Kroy, and
- g) other representation and expertise as may be required, such as laboratory facilities, industry response cooperatives, etc.

The following list is provided to assist identifying candidates for the creation of an RRG. Participants to this Plan are encouraged to submit additional candidates who could be added to this listing. This could be of assistance to future response requirements. The list is provided as a guide only and membership for the RRG should not be limited to selections from this listing:

<u>Candidate/Specialty</u>	<u>Association</u>	<u>Telephone</u>	<u>Fax</u>
'Name', Spill Response Coordinator, responsible for Kroy's Spill Contingency Plan and response resources available from the Province	Dept. of Environment, Province of Kroy	### #####	### #####
'Name', Water Quality Expert		### #####	### #####
'Name', Waste Management Consultant		### #####	### #####
'Name', Emergency Measures Coordinator	City of Telmah	### #####	### #####
'Name', Technical Director	Telmah Petroleum Association	### #####	### #####
'Name', Operational Manager	Telmah Oil Spill Response Cooperative	### #####	### #####
'Name', Refinery Manager	Oil Company Inc.	### #####	### #####
'Name', Chemical Engineer	Chemical Institute	### #####	### #####
'Name', Chief Analyst	Chemiekalien Inc.	### #####	### #####
'Name', Bio-Chemist, expert on exposure to hazardous materials	PGB Environmental Consultants Inc.	### #####	### #####
'Name', Risk Analyst		### #####	### #####
'Name', Organic Chemist	Industrial Laboratories Inc.	### #####	### #####
'Name', Spill Response Expert	Semi-Retired	### #####	### #####

### **International Assistance Liaison Group (ILG)**

The nominees and the points of contact are included in Annex VIII of this Plan.

# ANNEX IV

(SAMPLE)

## NOTIFICATION AND ALERTING PROTOCOL

### UNAUTHORIZED AND ACCIDENTAL DISCHARGES OF HAZARDOUS MATERIALS OR POLLUTANTS

Reported:      - by party responsible for the discharge  
                   - by the public  
                   - through surveillance  
                   - through other government agencies  
                   - through other contingency plans

to



Ministry of Environment Offices  
 listed in Annex I of this Plan.

The Ministry will  
 alert or notify any of the following agencies or groups, as appropriate:



⇒	Pesticides Control Services, Ministry of Agriculture, in all cases: - of uncontrolled releases of pesticides, or discharges of pesticides that affect unintended areas or unintended species.	### ####
⇒	Conservation Branch, Min. of Natural Resources, in all cases: - affecting fish and wildlife habitat and government park areas, - where resource data may or surveillance craft may be required	### ####
⇒	Regional Health Units, in all cases: - affecting the health and welfare of residence in the proximity of the discharge of hazardous materials, or - where evacuations are considered.	Area specific telephone numbers
⇒	Coast Guard, in all cases: - of spills from ships, - of spills during the loading or unloading of ships, or - involving pollution of navigable waters from any source.	### ####
⇒	Fuel Safety Office, Min. of Commerce, in all cases: - involving petroleum products spills at commercial fuel outlets	### ####
⇒	Radiation Protection Services, Min. of Health, in all cases: - involving radioactive substances	### ####
⇒	Hazardous Goods Emergency Office, Min. of Transport, for: - information on proper handling of hazardous goods.	### ####
⇒	Rail Safety Office, Min. of Transport, in all cases: - involving rolling stock or rail property.	### ####
⇒	Province of Kroy, to solicit spill response assistance	### ####
⇒	City of Telmah, to solicit assistance for identifying hazardous materials	### ####
⇒	National Disaster Management Office: - when a pollution incident is part of a larger disaster	### ####
⇒	Republic of Georgina, in all cases: - where a pollution incident threaten to impact the Republic, or - when mutual assistance may be required	### ####
⇒	UN Environment Unit, Switzerland, for international assistance	+4122 917 2010

⇒etc.

# **ANNEX V**

SAMPLE

## **LEAD AGENCY STANDARD OPERATION PROCEDURES**

### **MINISTRY OF ENVIRONMENT**

The Ministry of Environment is responsible for achieving and maintaining environmental quality that will protect human health and the ecosystem, and will contribute to the well-being of the people of Cedar Brea.

With respect to unauthorized or accidental discharges of pollutants into the environment, the Ministry's primary role is to ensure that the discharger responds promptly, and complies with requirements for clean up, disposal, and repair of damage to the environment.

#### **Role of the Ministry in Complex Disasters**

The primary responsibility for the welfare and safety of residents rests with the community, the municipality or the regional authorities, which are encouraged to have or to prepare emergency plans to deal with threats to life, limb and property. Areas of the Dominion which do not have a community, municipal or other local organization structure rely on the Ministry of the Solicitor General for a response to emergencies. In an emergency involving hazardous materials or other polluting substances that requires the invocation, in whole or in part, of the National Disaster Plan, Ministry resources and personnel are placed at the disposal of the agencies in charge of the emergency scene.

Where a pollution incident is only part of a complex disaster or larger emergency, the Ministry will, in consultation with the agency in control of the larger emergency:

- provide information available on hazardous materials to the medical officers of health, fire departments or police departments,
- recommend appropriate procedures to the agency in charge of the emergency where necessary,
- determine the nature and extent of environmental damage which may be caused by the emergency,
- evaluate the adequacy of clean up and disposal efforts, and
- enforce the duties imposed on any persons responsible for the pollution component of the emergency.

## **Role of the Ministry in Pollution Incidents**

The Ministry will give the discharger, and regional and local authorities, adequate opportunity to respond to, and to deal with, the unauthorized or accidental release of hazardous materials or other polluting substances, and the Ministry will assist in making decisions regarding response actions.

The Ministry's primary role in pollution incidents is that of a regulatory agency enforcing the duties and provisions imposed by legislation. When notified of a pollution incident, the Ministry will evaluate the threat posed by the discharge, and assist in warning potentially affected parties, and other agencies, where applicable (see Annex IV).

The usual role of the Ministry staff sent to investigate pollution incidents is to:

- determine the nature and extent of environmental damage,
- evaluate the adequacy of the clean up and restoration efforts and recommend appropriate procedures where applicable,
- enforce the legislated responsibilities imposed on the discharger and others as applicable, and
- recommend spill prevention measures.

## **ANNEX VI**

(SAMPLE)

### **PUBLIC SECTOR RESOURCES**

This Annex provides a short list of public sector response resources that may be available for pollution incidents for which this Plan is invoked. Most of these resources have not been acquired for the sole purpose of pollution incidents, and these resources are usually intended for other commitments. However, the agencies identified have indicated that these resources may be made available to respond to pollution incidents if the items or services identified are not required for other more important commitments at the time.

<u>Resource</u>	<u>Agency</u>	<u>Contact</u>
Emergency flood lights	National Defence Min. of Solicitor General	### #### ext. 78 ### #### ext. 324
Air monitoring equipment	Min. of Environment	### ####
Laboratory & analytical capabilities	Min of. Environment Min. of Health Min. of Agriculture	### #### ### #### ### ####
Oil containment and recovery equipment	Coast Guard	### ####
Large capacity pumps	Province of Kroy Water Board	### ####

## **ANNEX VII**

(SAMPLE)

### **INDUSTRY EXPERTISE AND RESOURCES**

This Annex provides a list of expertise and response resources in the private sector that may be available for assistance to pollution incidents for which this Plan is invoked. The entities identified have indicated that the expertise and response resources may be made available to respond to pollution incidents for which this Plan is invoked if the expertise and response resources identified are immediately available and not essential for other more important commitments at the time.

<u>Expertise / Resource</u>	<u>Source</u>	<u>Contact</u>
Hazardous materials sampling and analysis	- Industrial Laboratories Inc.	### #####
Breathing apparatus, chemical suites and other protective gear	- Safety Supply Unlimited	### #####
Monitoring and sampling equipment and supplies	- Laboratory Equipment and Supplies Inc.	### #####
Hazardous materials containment and cleanup	- Detox Inc. - Telmah Waste Systems Inc.	### #####; 24 hrs ### #####, 24 hrs
Oil spill containment and cleanup expertise and response resources	- Detox Inc. - Telmah Oil Spill Response Cooperative	### #####, 24 hrs ### #####, 24 hrs
Pumper trucks, hazardous materials haulage	- National Waste Management Inc. - Sani Mobile Inc.	### #####, 24 hrs ### #####
Bulldozers, loaders and other heavy equipment	- Greenbelt Construction Inc. - Town Sand and Gravel Inc.	### #####, 24 hrs ### #####
Hazardous materials disposal	- Environmental Services Inc.	### #####
Site assessment	- PGB Environmental Consultants Inc. - SENES Environmental Inc. - Spill Control Inc.	### ##### ### ##### ### #####
Soil vapour extraction and bio-remediation	- Dr. H. Rue, retired, formerly with Telmah Waste Systems Inc.	### #####

## **ANNEX VIII**

(SAMPLE)

### **INTERNATIONAL ASSISTANCE ARRANGEMENTS**

In the event of unforeseen occurrences, the Dominion of Cedar Brea endeavours to do everything possible to respond to the event and to cope with the needs of the event. However, there are possibilities that unauthorized or accidental releases of hazardous materials and other pollutants may cross international boundaries despite all possible efforts to prevent that from occurring. Events may also occur where it is expedient to seek assistance from neighbouring countries through mutual assistance arrangements. Assistance from the international community is also available. This assistance is available to augment the efforts and the resources of the Dominion.

As outlined in Section 4.1 of the Plan, the Dominion of Cedar Brea and the Republic of Georgina share an “Early Warning and Mutual Assistance Memorandum of Understanding”. This MOU provides for a shared response to pollution incidents where hazardous materials or other pollutants may cross our shared border or where such substances affect shared waters. The MOU is also intended to provide a mechanism whereby either party may request assistance from the other party for expertise or response resources for pollution incidents even though the substances released do not threaten to cross our borders or affect shared waters.

Assistance is also available from the international community. The International Maritime Association (IMO) may be contacted for maritime pollution events caused through activities associated with shipping, and the Coast Guard will notify the IMO, if required. The Environment Unit, Relief Coordination Branch (RCB) of the UN Department of Humanitarian Affairs may provide co-ordinated international assistance if required. The International Liaison Group (ILG) established under this Plan is involved in such arrangements.

The ILG (see Section 5.8) is composed of senior representatives from the Ministry of External Affairs and from the Ministry of Environment. The ILG is responsible to coordinate and facilitate all facets associated with international assistance. This includes assistance that may be provided by the Republic of Georgina for pollution incidents within the Dominion of Cedar Brea, assistance that may be provided by the Dominion of Cedar Brea for requirements by the Republic of Georgina, and assistance that may be sought from or offered by the international community.

Nominees of the ILG, and the principle focal points for international assistance are:

- ⇒ ILG Chairman, Operations Officer, Min. of External Affairs; tel. ### ####, fax ###
- ⇒ Member, Operations Coordinator, Min. of Environment; tel. ### ####, fax ###
- ⇒ Republic of Georgina focal point for notification and mutual aid, tel. ## ## #### ##
- ⇒ IMO assistance, if required, will be co-ordinated by the Coast Guard, tel. ### ####
- ⇒ Environmental assistance may be sought through the United Nations, Department of Humanitarian Affairs, Geneva, Switzerland; tel. +4122 917-2010

**ANNEX IX**  
(SAMPLE)

**GUIDELINES FOR ISSUING WARNINGS**

**ANNEX X**  
(SAMPLE)

**GUIDELINES FOR DEALING WITH THE PRESS**

**ANNEX XI**  
(SAMPLE)

**GUIDELINES FOR DEALING WITH VOLUNTEERS**

**ANNEX XII**  
(SAMPLE)

**TRAINING GUIDELINES**

## **ANNEX XIII**

(SAMPLE)

### **CONTINGENCY PLAN DISTRIBUTION LIST**

The responsibility for the maintenance of this Plan is shared between the Ministry of Environment and the Ministry of the Solicitor General through tasks assigned to the ERT and those assigned to the Custodian (see Section 8.2 and Section 8.3 of the Plan). Part of the tasks assigned by the Plan involves the distribution of the Plan and any supplemental publications and other related printed matter, and the periodic distribution of related update material.

The distribution of the Plan and any supplemental publications and related update material is prescribed in the Plan, and is made to the list in the table below. Further distribution is the responsibility of the contact person identified in the table.

<b>Agency</b>	<b>Department</b>	<b>Contact</b>	<b>Number of Copies</b>
Min. of Environment	Operations Division		12
Min. of Environment	Environmental Sciences Div.		5
Min. of Natural Resources	Fish & Wildlife Branch		9
Min. of Natural Resources	Parks & Recreation Branch		7
Min. of Transportation	Maintenance Branch		11
Min. of Health	Health Services Division		14
Min. of Sciences & Energy	Technology Development Br.		2
Min. of Solicitor General	Enforcement Branch		6
Min. of Industry & Trade	Standards Division		5
Dept. of Public Works	Contracts Branch		5
Min. of External Affairs	Policy Branch		2
Coast Guard	Marine Emergencies Br.		8
University of Kroy	Engineering Faculty		4
Dept. of Emergency Services, Prov. of Kroy	Emergency Preparedness Br.		3
City of Telmah	Police Services Br.		2
Chemical Institute			2
Petroleum Industry Association			2
Republic of Georgina	Min. of External Affairs		2
UN - OCHA, Geneva	Disaster Response Br.		1
etc.			

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