



# STUDY ON STATUS OF NATIONAL CONTINGENCY PLANS IN CENTRAL AMERICAN COUNTRIES



RAC/REMPEITC-Carib (Regional Activity Centre - Regional Marine Pollution Emergency, Information and Training Centre - Caribbean)

## **ARPEL Study Report**

### **Study on Status of National Contingency Plans in Central American Countries**

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## 1. INTRODUCTION

### *Study Background*

The Latin America and Caribbean area is the third largest oil-producing region in the world. The member companies of ARPEL (Regional Association of Oil and Natural Gas Companies in Latin America and the Caribbean) are responsible for more than 90% of the investment in exploration, production, transportation and refining operations in Latin America. Overall, the oil and gas industry in the area is raising the standard of the quality and quantity of products, environmental performance, international market behavior and other quality-related issues.

Currently, the need for comprehensive environmental regulations has risen significantly. Industry and government have realized the need for working together in pursuing their common objectives. Oil spill contingency plans are not the responsibility of industry alone but are the result of a combined effort of industry and government.

With economic globalization, new players are increasingly operating in the regional oil and industry scenario in Latin America and the Caribbean. With higher levels of oil production, storage and transportation, the risk of environmental damage from oil keeps increasing. Thus, industry needs to analyze the most cost-effective options to be prepared for and respond to not only oil spills but also to other related emergencies.

ARPEL –individually and in keeping with objectives established in previous work developed in the context of ARPEL/CIDA Environmental Programs- has been supporting regional and sub-regional efforts to develop cooperation programs to strengthen oil spill preparedness and response through joint government/industry cooperation. To assist in these endeavors, ARPEL coordinates and develops several activities with relevant international and regional organizations, including –among others -- the International Maritime Organization (IMO), the International Petroleum Industry Environmental Conservation Association (IPIECA), the Regional Activity Center - Regional Marine Pollution Emergency, Information and Training Center - Caribbean (RAC/REMPEITC-Carib), Clean Caribbean & Americas Cooperative (CCA) and International Tanker Owners Pollution Federation (ITOPF).

Following a Workshop on regionalization of Oil Spill Contingency Planning in the Northeast Pacific held in Nicaragua in April 2004, sponsored by the United Nation Environment Programme (UNEP), developed by the Central American Commission of Maritime Transportation (COCATRAM) and supported by IMO and the Centre of Documentation, Research and Experimentation on Accidental Water Pollution (CEDRE/DELICAR) through RAC/REMPEITC-Carib, a formal request was made by the Executive Directors of RAC/REMPEITC-Carib and COCATRAM to receive assistance in the context of the ARPEL/CIDA Environmental Program, Phase 3 to start up regionalization efforts in Central America for the following countries: Panama, Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua. The government delegates of the countries involved and mentioned above endorse this request. Belize was later added.

The Cartagena Convention and Protocol Concerning Co-operation in Combating Oil Spills in the Wider Caribbean Region comprise a legal commitment by participating governments in the Wider Caribbean Region to develop a response capability to spills in their common waters -- individually and jointly. The Convention provides a framework agreement that sets out the political and legal foundations for actions to be developed. The purpose of this study is to provide more specific guidance to the



countries of Central America on implementing the spill response planning objectives addressed in the Cartagena Convention.

This project was initiated following a formal request made by the Executive Directors of RAC/REMPEITC-Carib and COCATRAM to receive assistance as part of the ARPEL/CIDA Environmental Program, Phase 3 on regionalized spill response planning in Central America. The underlying premise of the work is that comprehensive National Contingency Plans must be in place in order to expedite both national and mutual assistance when needed. A "Framework" and "Guideline" for regionalized planning were identified as study results.

It is recognized that there are many aspects of spill planning that could be investigated at length including, for example, risk assessment, sensitivity mapping, organizational structures, financial matters, communications, reporting, dispersant use policy, etc. Rather than trying to define each of these specifics, a focus of this study was a broader-based examination of contingency plan elements that are basic to effective response at national and international levels. Detailed reviews and recommendations on each of the many individual aspects of planning were therefore not included.

### ***Study Objective***

Following from the above, this study's prime objective was to analyze the commonalities of existing national contingency plans in the following six Central American countries: Belize, Costa Rica, El Salvador, Honduras, Nicaragua and Panama (as of May/2005 Guatemala did not have an approved national contingency plan).

Components included the spill response planning that has been or is being conducted, the plan components that can be considered to be basic requirements, and the steps to be taken leading to regional planning (i.e., a framework for regional cooperation).

The study identifies the status of planning in the region and, leaving alone political and financial aspects, indicates steps to be considered in pursuing regional planning.

### ***Study Methodology***

Documentation was received from ARPEL, REMPEITC and COCATRAM on regionalization efforts and existing National Contingency Plans emergency planning projects.

Prior to analyzing of the individual National Plans, the authors prepared a list of suggested required elements for National Plans (Section 2.0). The list was derived from selected international contingency planning guidelines (e.g. IMO, IPIECA and ARPEL), published papers, documents, individual industry sources, and the authors' previous contingency planning work.

From the list a comparative matrix was developed based on the key chapters of the relevant management and operational features of National Plans. Section 3.0 contains the study's comparative matrix completed for the current National Plans of the subject countries. The matrix simply indicates the relative importance of a planning element (high, medium or low), whether the element has been included in a National Plan, and highlights of the plans (expressed in a comments column).

A complete more detailed tabular analysis of each National Plan is contained in Section 4.0.



Section 5.0 contains background summaries of each country's relevant regulatory commitment to international agreements, petroleum industry activity, and response capability.

### ***Study Limitations***

The authors endeavored to conduct a meaningful cross comparison of the National Plans. However interpretations had to be made of some documentation due to inconsistencies of information and of a particular Plan's format. The study centred on a review of available information and, as such, no consultation took place with the individual plan authors or responsible agency.

During the time of this study, the authors were not able to confirm or locate an accepted National Plan Guideline – authored by an organization, individual or country. While contingency planning guidelines have been published by the above-noted international organizations, a National Plan focus was lacking in most cases. Individual industry representatives confirmed this observation. Consequently, Section 2.0 presents the authors' perspective on the required elements of a National Plan with only minor reference to existing guidelines.





## 2. NATIONAL PLAN ELEMENTS

A National Contingency Plan is often developed for a single Lead Agency within the specific country that must administer spill-related regulations and guidelines nationally often with support agencies that oversee and enforce complementary legislation. Reference to Laws, Statutes, Acts, and/or Standards and to their primary requirements is usually made that forms the basis for the National Plan.

Usually there are clearly defined roles for the Lead Agency and for various other agencies that are involved in emergencies, with responsibilities assigned according to transportation, environmental, energy and defense issues. For example, in a country such as Panama with significant vessel traffic in the Canal, a focus would be expected on Shipboard Oil Pollution Emergency Plans along with physical cleanup and training as part of contingency planning activities. For Panama, Guatemala, Honduras, Nicaragua and Costa Rica, National Plans must consider spills affecting both Atlantic and Pacific coasts. In all seven Central American countries, the National Plan should also include a commitment to cooperative arrangements for the response to spills that have international implications whether receiving or providing assistance. This would expedite a regional approach to spill response.

A National Plan must also address policies that would facilitate effective response. Countermeasures alternatives and/or cleanup phases such as the use of mechanical equipment, dispersant application, in-situ burning, shoreline cleanup and disposal are often considered – sometimes with a division of responsibility identified between federal and regional, state or provincial authorities. Reporting, legal sampling, cost recovery and claims, training standards, health and safety issues, insurance, cross-boundary movement of personnel and equipment, communications and salvage are other areas that are often considered.

Other important aspects that require planning that can be managed regionally but under national directives are risk assessment, sensitivity mapping and trajectory modeling. While the risk to the environment in the vicinity of marine terminals, pipelines and other facilities can be assessed and documented as part of local plans, the symbols used, color coding, endangered species, shoreline types/sensitivity and many other factors can be specified in a National Plan. The high probability that a large coastal spill will affect shorelines further reinforces the need for mapping and modeling work.

The many elements that can comprise a National Plan are set out below. Sections and sub-sections will vary from Plan to Plan. This list will be used as a basis of comparison for reviewing the National Plans to determine common elements as well as those missing that could play a key role in effective response planning. It is not expected that every Plan will contain all elements; however, key aspects for every main section of a Plan, however organized, should be included for each country if regionalization is indeed viewed as a realistic objective.



## ***National Plan Elements List***

### **1. Introduction / Preface**

**Table of Contents**

**Distribution**

Lead Agency

Support Agencies

Other Organizations

**Plan Custodian**

Updating & Revisions

**Purpose & Scope**

Statement of Authority

Geographical Area Covered, Regions

**Glossary / Definitions / Abbreviations / Units**

### **2. Response Organization**

**Lead Agency**

Team Members

Roles (including National OSC)

Responsibilities

**Support Agencies**

Technical, Advisory and other roles defined

Areas of Jurisdiction (*e.g., vessels, ports, platforms, SBMs*)

Organizational Charts and Links

**Other Participating Agencies / Companies**

Roles

Responsibilities

Relation to Private Industry

Interagency Agreements

**National Regulations' Administration**

Supporting Legislation, Laws, Agreements & Guidelines



### **International Conventions & Agreements Ratified**

OPRC 90  
OPRC-HNS Protocol 2000  
CLC '69 '92 Fund '92  
Marpol 73/78 III IV V VI  
Linkage to Other National Plans  
(bi- and multi-lateral)  
Cartagena Convention  
Exchanging Expertise & Information

## **3. Preparedness & Policies**

### **National Response Resources**

### **Local and Area Plan Requirements**

### **Use of Scenarios**

### **Risk Assessment**

Trends, Sources, Causes of Spills (vessel traffic, transfer, production, exploration, collision, grounding)  
Areas of High Risk  
Environmental Data  
Oils of Concern  
Protection Priorities (coastal areas for protection & cleanup)  
Prevention Programs

### **Training / Exercises**

Joint Programs

### **Dispersants Policy**

List of Approved Dispersants  
Pre-approved Locations  
Conditions of Use

### **In-Situ Burning Policy**

Applicable Situations  
Monitoring



## **Environmental Policies**

### **Sensitivity Mapping / Trajectory Modeling**

Spills of Concern

Inventory of Shorelines

Mangroves, Coral Reefs

Parks, amenity beaches, marinas, other recreational facilities

Wetlands, other areas of environmental significance

Mariculture

Archaeological, cultural sites

Birds, other wildlife

Fisheries

Endangered Species

Water intakes, e.g., industrial, municipal

Desalination Plants

### **International Policies**

Receiving Spill Response Assistance

Giving Spill Response Assistance

## **4. Response**

### **Response Management**

Tiered Concept with escalation of incident (1 to 3)

Regional Responsibilities

Organization of Lead Agency

Interagency roles (ICS, Unified Command)

Specialists / Contractors Assistance

Health & Safety

Net Environmental Benefit Analysis

Logistics, Administration



### **Response Operations**

- Spill Assessment (slicks and impacts)
- Response Strategies (mechanical, dispersants, burning)
- Actions to Mitigate & Control Spills (including mobilization)
- Shoreline Cleanup (see "*Shoreline Protection & Treatment*" below)
- Spill Surveillance and Monitoring (vessels, aircraft, remote sensing)
- Salvage (vessels, salver)
- Ongoing Monitoring of Cleanup

### **Response Centre**

- Communications
- Meeting Rooms
- Library/References
- Computer Links

### **Equipment Inventories**

- Agency Capabilities, Staging Areas, Control Points

### **Shoreline Protection & Treatment** (*assessment and cleanup*)

- Workforce
- Debris
- Oil Removal
- Cleanup Standards

### **Storage & Disposal**

- Transportation
- Sites for Interim Storage, Final Disposal and Decontamination

### **Restoration & Post-Spill Monitoring**

- Lead Agency with Support Organizations
- Further Study of Cleanup

## **5. Reporting, Communication, Legal & Financial Matters**

### **Reporting & Alerting Systems**

- Notification & Reporting Requirements
- Report Form (spill details, environment, reporting - POLREPs)
- Notification Charts and System
- Means of Communication
- Post-incident Review



### **Communications**

Systems between Response Centre & Vessels, Aircraft

Repeater Stations, frequencies, radios, telephones, fax

### **Contacts**

Internal / External

### **Public Information**

Designated Public Affairs/Media Advisor

Community Liaison

### **Financial Commitment / Claims / Record Keeping**

Sample Worksheets

Reimbursement to Fishermen, Property Owners, etc.

Commitment to Regional Centre or Secretariat

### **Legal Matters**

Samples/Evidence

Taking Statements

Mechanisms for settling disputes and claims

Notes

### **Other Factors**

Formatting

Use of charts, tables, checklists, graphics



### 3. NATIONAL PLANS COMPARATIVE MATRIX



### National Plans Comparative Matrix

Element	Importance / Significance	Belize	Costa Rica	El Salvador	Honduras	Nicaragua	Panama	Comments
<b>1. Introduction / Preface</b>								
Table of Contents	High	X	X	✓	X	✓	✓	Nicaragua, Panama – Helpful to list complete index (including Annexes) at the beginning of the plan.
Distribution	High	✓	X	X	X	X	✓	Belize – Complete distribution list, including agencies and contact numbers.
Lead Agency	High	✓	X	X	X	X	✓	
Support Agencies	High	✓	X	X	X	X	✓	
Other Organizations	High	✓	X	X	X	X	✓	
Plan Custodian	High	✓	X	✓	✓	✓	X	Belize – Clearly identifies custodian.
Updating & Revisions	High	✓	X	✓	X	✓	✓	General - Should indicate Name of Plan, Date, Page No., Total Pages Belize – Addresses update period and content of revisions. Nicaragua – Clear instructions on format of updates and revisions. Approvals and modifications tracked in Annex. Panama – Good list of criteria to evaluate the plan.
Purpose & Scope	High	✓	✓	✓	✓	✓	✓	Honduras – Objectives are clearly presented.
Statement of Authority	High	✓	✓	✓	X	✓	✓	Belize, Costa Rica, Panama – Clear indication of legal authority.
Geographical Area Covered, Regions	High	✓	✓	✓	✓	✓	✓	Several plans specify bodies of water, latitude, longitude. Panama, El Salvador – Good geographical description of Plan jurisdiction.
Glossary / Definitions / Abbreviations / Units	Medium	✓	✓	✓	X	✓	✓	Panama – Units included may be useful to others. Also includes a good list of definitions and a bibliography. Belize, Costa Rica – Good list of abbreviations.





2. Response Organization								
Lead Agency	High	✓	✓	X	✓	✓	✓	
Team Members	High	✓	X	X	✓	✓	✓	<i>Honduras</i> - Good list and indication of roles and responsibilities for response team.
Roles (including National OSC)	High	✓	✓	✓	✓	✓	✓	All plans identify response roles including an On-Scene Coordinator (OSC).
Responsibilities	Medium	✓	✓	X	✓	✓	✓	<i>El Salvador</i> – Good list of responsibilities for OSC.
Support Agencies	High	✓	✓	✓	✓	✓	✓	<i>Belize, Honduras</i> - Very good description of roles and responsibilities for lead and support agencies.
Technical, Advisory and other roles defined	High	✓	X	X	✓	✓	✓	
Areas of Jurisdiction (e.g., vessels, ports, platforms, SBMs)	High	X	X	✓	X	X	✓	<i>El Salvador</i> – Explicit geographical jurisdictions (by longitude) outlined for Local Plans. <i>Panama</i> – Agency or company responsible for supplying cleanup equipment/crew is determined by location of spill and is outlined within this plan.
Organizational Charts and Links	High	✓	X	X	X	✓	✓	Organizational charts included in some plans – <i>Belize, Nicaragua</i> and <i>Panama</i> .
Other Participating Agencies / Companies	High	✓	X	✓	✓	X	✓	<i>Honduras</i> - Involves private companies in response plan.
Roles	High	✓	X	X	✓	X	✓	
Responsibilities	High	✓	X	X	✓	X	✓	
Relation to Private Industry	Medium	✓	X	✓	✓	✓	✓	
Interagency Agreements	High	X	X	X	X	X	✓	
National Regulations' Administration	High	✓	✓	✓	X	✓	✓	
Supporting Legislation, Laws, Agreements & Guidelines	High	✓	✓	✓	X	✓	✓	<i>Nicaragua</i> - Good coverage of Regulations regarding Emergency Plans, fines, guarantee of insurance and notification of spills. <i>Panama</i> – Clearly lists national and international legislation for spill response in easy to find format (list rather than mixed in with other text).



<b>International Conventions &amp; Agreements Ratified</b>	<b>High</b>	X	X	✓	✓	✓	✓	<i>El Salvador, Nicaragua, Panama – Lists international agreements.</i>
OPRC 90	<b>High</b>	X	X	✓	X	X	✓	
OPRC-HNS Protocol 2000	<b>Medium</b>	X	X	X	X	X	X	
CLC 69 92 Fund 92	<b>High</b>	✓	X	X	X	X	✓	
Marpol 73/78 III IV V VI	<b>High</b>	X	X	X	X	✓	✓	
Linkage to Other National Plans (bi- and multi-lateral)	<b>Medium</b>	✓	X	X	X	X	✓	<i>Belize – National Oil Spill Plan is supported by other national and private organizations' plans.</i>
Cartagena Convention	<b>High</b>	✓	✓	X	✓	✓	✓	
Exchanging Expertise & Information	<b>Medium</b>	✓	X	✓	X	X	X	



3. Preparedness & Policies								
National Response Resources	High	✓	X	✓	✓	✓	✓	
Local and Area Plan Requirements	High	✓	X	✓	X	✓	X	<i>El Salvador, Nicaragua</i> - Very detailed, comprehensive coverage of information and format to be included in local/facility/shipboard plans. <i>El Salvador, Nicaragua</i> - Submission and approval procedures for local/facility plans are covered thoroughly.
Use of Scenarios	Medium	X	X	X	X	X	X	
Risk Assessment	High	✓	X	✓	X	✓	✓	
Trends, Sources, Causes of Spills (vessel traffic, transfer, production, exploration, collision, grounding)	High	✓	X	X	✓	X	✓	<i>Panama</i> - Very good background on risk of spills from ships, pipelines and other sources. <i>El Salvador</i> - Brief but useful table on amounts and frequency of product handled and the volume of tanker traffic.
Areas of High Risk	High	X	X	X	X	X	✓	<i>Panama</i> - Indicates oil handling capacity of several ports and lists areas at risk due to pipeline, fuel storage and fuel transfer activities.
Environmental Data	Medium	X	X	✓	X	X	✓	<i>Panama</i> - Good description of local climatology and oceanography. Describes oil behavior during wet and dry seasons and how oil behavior relates to differences in salinity. <i>El Salvador</i> lists sensitivities in ports and for shorelines according to several categories of concerns. Also includes data on salinity and current.
Oils of Concern	Low	X	X	✓	X	X	✓	<i>El Salvador, Panama</i> - Includes a lot of background information on the properties of oil and its fate and behavior following a spill.
Protection Priorities (coastal areas for protection & cleanup)	High	X	X	✓	X	X	✓	<i>Panama</i> - Detailed list of sensitive and critical areas.
Prevention Programs	High	✓	X	X	X	X	X	<i>Belize</i> - Indicates several steps to prevent spills or mitigate damage. Also includes forms for Facilities and Transportation Hazard Analysis.
Training / Exercises	High	X	X	✓	✓	✓	✓	<i>Nicaragua</i> - Good description of training expectations.
Joint Programs	High	X	X	X	✓	X	X	



<b>Dispersants Policy</b>	<b>High</b>	✓		✓	✓	✓	✓	<i>El Salvador, Honduras, Panama</i> - Dispersants policy well covered. <i>Belize</i> – Contains some useful information, but refers to a different plan (NEPPoS) for details.
List of Approved Dispersants	<b>Medium</b>	X		✓	X	✓	✓	<i>El Salvador, Panama</i> - Dispersants policy includes approved dispersants. <i>Panama</i> – Includes list of suppliers of approved dispersants, collectors and biological additives.
Pre-approved Locations	<b>Medium</b>	X		✓	X	X	X	
Conditions of Use	<b>Low</b>	✓		✓	✓	✓	✓	<i>El Salvador, Honduras, Panama</i> – Good explanation of conditions of use.
<b>In-Situ Burning Policy</b>	<b>Medium</b>	X	X	X	X	X	X	
Applicable Situations	<b>Medium</b>	X	X	X	X	X	X	
Monitoring	<b>Medium</b>	X	X	X	X	X	X	
<b>Environmental Policies</b>	<b>High</b>	X	X	✓	X	X	✓	
<b>Sensitivity Mapping / Trajectory Modeling</b>	<b>High</b>	X	X	✓	X	✓	X	<i>Nicaragua</i> – Includes good list of criteria for determining sensitive areas and zones requiring protection.
Spills of Concern	<b>Medium</b>	X	X	✓	X	X	✓	
Inventory of Shorelines	<b>Low</b>	X	X	✓	X	X	✓	<i>El Salvador</i> - Sensitivity of shorelines and main ports covered well, including biological and socio-economic information. <i>Panama</i> – Lists sensitive and critical areas.
Mangroves, Coral Reefs	<b>High</b>	X	X	✓	X	X	✓	<i>El Salvador</i> – Describes location of significant mangrove swamps and location of rocky reefs.
Parks, amenity beaches, marinas, other recreational facilities	<b>High</b>	X	X	✓	X	X	✓	<i>El Salvador</i> – Describes location of beaches with important tourism value.
Wetlands, other areas of environmental significance	<b>High</b>	X	X	✓	X	X	X	<i>El Salvador</i> – Describes location of the most sensitive coastal environments surrounding the main ports.
Mariculture	<b>High</b>	X	X	X	X	X	X	



Archaeological, cultural sites	High	X	X	X	X	X	✓	
Birds, other wildlife	High	X	X	✓	X	X	X	<i>El Salvador</i> – Describes the ecosystems of four zones (sandy beach, rocky intertidal and sub coastal area, including rocky reefs, mangroves and open sea). Includes flora, fauna and their geographical locations surrounding the countries main ports.
Fisheries	Medium	X	X	✓	X	X	✓	<i>El Salvador</i> – Describes location of fishing zones and species. <i>Panama</i> – Includes fishing zones among list of sensitive areas.
Endangered Species	High	X	X	X	X	X	X	
Water intakes, e.g., industrial, municipal	Medium	X	X	X	X	X	✓	<i>Panama</i> – Includes water treatment plants among list of sensitive areas.
Desalination Plants	Medium	X	X	X	X	X	X	
<b>International Policies</b>	High	✓	X	✓	✓	✓	✓	<i>El Salvador, Honduras, Panama</i> – Plans include some of the following useful items: international cooperation through signed agreements, plan to expedite entry and exit of personnel and equipment, location of airports available for response operation, financial reimbursement, involvement of IMO.
Receiving Spill Response Assistance	Medium	✓	X	✓	✓	✓	✓	<i>Panama</i> – Includes forms to request experts, equipment and materials.
Giving Spill Response Assistance	Medium	X	X	✓	✓	✓	X	



4. Response								
<b>Response Management</b>	<b>High</b>	✓	X	✓	X	✓	✓	<i>Belize</i> - Response management clearly indicated in a logical manner.
Tiered Concept with escalation of incident (1 to 3)	<b>High</b>	✓	✓	X	✓	✓	✓	Most plans cover a tiered approach to response. <i>Belize</i> - Good use of charts to delineate magnitude of spill. Plan has added 2 categories for classifying inland spills.
Regional Responsibilities	<b>Medium</b>	✓	X	✓	X	✓	✓	<i>El Salvador, Honduras, Belize</i> - Lists regional responsibilities.
Organization of Lead Agency	<b>High</b>	✓	X	X	X	✓	✓	
Interagency roles (ICS, Unified Command)	<b>Medium</b>	✓	X	X	X	X	X	<i>Belize</i> - Good list of interagency roles.
Specialist / Contractor Assistance	<b>Medium</b>	✓		X	✓	X	X	<i>Belize</i> - Agreement in place with ESSO to provide equipment, personnel and technical expertise.
Health & Safety	<b>High</b>	✓	X	X	X	✓	✓	<i>Nicaragua</i> - Health and Safety issues are addressed in general terms.
Net Environmental Benefit Analysis	<b>Medium</b>	X	X	✓	X	X	X	<i>El Salvador</i> - Information provided for ecosystems surrounding three main ports.
Logistics, Administration	<b>Medium</b>	✓	X	✓	X	✓	X	<i>Nicaragua</i> - Covers access to emergency funds well.
<b>Response Operations</b>	<b>High</b>	✓	X	✓	✓	X	X	
Spill Assessment (slicks and impacts)	<b>Medium</b>	X	X	✓	X	X	✓	<i>El Salvador, Panama</i> - Calculations to determine the volume of oil in a slick. <i>El Salvador</i> - Useful guide for the relation between appearance, thickness and volume of floating oil.
Response Strategies (mechanical, dispersants, burning)	<b>High</b>	✓	X	X	X	X	✓	<i>Belize</i> - Has assembled very good spill response information. <i>El Salvador</i> - Includes some background information on response equipment.
Actions to Mitigate & Control Spills (including mobilization)	<b>High</b>	X	X	X	X	X	✓	
Shoreline Cleanup (see "Shoreline Protection & Treatment" below)	<b>High</b>	X	X	X	✓	X	✓	
Spill Surveillance and Monitoring (vessels, aircraft, remote sensing)	<b>Medium</b>	X	X	✓	✓	X	X	<i>El Salvador</i> - Useful information on slick surveillance.



Salvage (vessels, salver)	Medium	X	X	X	X	X	✓	
Ongoing Monitoring of Cleanup	Medium	X	X	X	X	X	✓	
<b>Response Centre</b>	<b>High</b>	X	X	✓	X	X	✓	
Communications	High	X	X	✓	✓	X	✓	
Meeting Rooms	Low	X	X	X	X	X	✓	
Library/References	Low	X		X	X	X	X	
Computer Links	Low	X	X	X	X	X	X	
<b>Equipment Inventories</b>	<b>High</b>	✓		X	✓	✓	✓	<i>Nicaragua</i> - Comprehensive, innovative format for equipment list according to categories (but with no specific equipment included).
Agency Capabilities, Staging Areas, Control Points	Medium	X		X	X	X	✓	<i>Panama</i> - Comprehensive list of equipment inventory for participating companies and government agencies. <i>Panama</i> - Includes list of suppliers of approved dispersants and biological additives.
<b>Shoreline Protection &amp; Treatment</b> ( <i>assessment and cleanup</i> )	<b>High</b>	X	X	X	✓	X	✓	<i>Honduras</i> - Covers authorities responsible for tar ball removal, cleanup standards and workforce.
Workforce	Medium	X	X	X	✓	X	✓	
Debris	Medium	X	X	X	X	X	✓	
Oil Removal	Medium	X	X	X	✓	X	✓	
Cleanup Standards	Low	X	X	X	✓	X	X	
<b>Storage &amp; Disposal</b>	<b>High</b>	✓		X	X	✓	✓	
Transportation	Medium	X	X	X	X	X	✓	
Sites for Interim Storage, Final Disposal and Decontamination	Medium	X	X	X	X	✓	X	<i>Nicaragua</i> - Outlines criteria for selecting and establishing temporary storage sites. <i>Panama</i> - Addresses decontamination of equipment.



<b>Restoration &amp; Post-Spill Monitoring</b>	<b>Medium</b>	✓	X	X	✓	X	✓	<i>Belize</i> – Provides main points of a recovery plan. <i>Honduras</i> – Addresses restoration of affected areas and monitoring of sensitive areas.
Lead Agency with Support Organizations	<b>Low</b>	✓	X	X	✓	X	✓	
Further Study of Cleanup	<b>Medium</b>	✓	X	X	✓	X	✓	





5. Reporting, Communication, Legal & Financial Matters								
<b>Reporting &amp; Alerting Systems</b>	<b>High</b>	✓	X	✓	✓	✓	✓	
Notification & Reporting Requirements	<b>High</b>	✓	X	✓	X	✓	✓	<i>Belize, Nicaragua</i> - Clear reporting requirements.
Report Form (spill details, environment, reporting - POLREPs)	<b>High</b>	✓	X	✓	✓	✓	X	<i>Belize, Honduras</i> - Comprehensive report form.
Notification Charts and System	<b>High</b>	✓	X	✓	X	✓	✓	<i>Belize</i> - Provides charts to show notification and verification procedure.
Means of Communication	<b>Medium</b>	X	X	X	X	✓	✓	
Post-incident Review	<b>High</b>	X	X	X	✓	✓	✓	<i>Belize</i> - Provides brief example of post incident review in case history.
<b>Communications</b>	<b>High</b>	X		✓	✓	✓	✓	<i>El Salvador</i> depicts communications network in charts and tables.
Systems between Response Centre & Vessels, Aircraft	<b>Low</b>	X		X	X	X	X	
Repeater Stations, frequencies, radios, telephones, fax, e-mail, web	<b>Medium</b>	X		✓	X	✓	X	
<b>Contacts</b>	<b>High</b>	✓	X	X	✓	X	✓	<i>Belize</i> - Good list of internal and external contacts.
Internal	<b>High</b>	✓	X	X	X	X	✓	
External	<b>High</b>	✓		X	✓	X	✓	<i>Honduras</i> - Short, but useful, listing of international spill response companies/consultants.
<b>Public Information</b>	<b>High</b>	✓	X	✓	✓	X	✓	<i>Belize</i> includes plan for public communications.
Designated Public Affairs/Media Advisor	<b>High</b>	✓	X	✓	✓	X	✓	Four National Plans address public affairs. For example, in <i>Honduras</i> the Marine Incident Command will issue official press notices written in consultation with the Institute of Tourism. <i>Belize</i> - Includes sample of press release.
Community Liaison	<b>High</b>	X	X	✓	X	X	✓	



<b>Financial Commitment/ Claims / Record Keeping</b>	<b>High</b>	✓	X	✓	✓	X	X	<i>Belize</i> – Clear instruction for documentation of incident.
Sample Worksheets	<b>Medium</b>	X	X	X	X	X	X	<i>Belize</i> - Includes samples of notifications to polluter.
Reimbursement to Fishermen, Property Owners, etc.	<b>Medium</b>	X		✓	✓	X	X	
Commitment to Regional Centre or Secretariat	<b>Low</b>	X	X	X	X	X	X	
<b>Legal Matters</b>	<b>High</b>	✓	X	✓	✓	X	✓	<i>Belize</i> - Covers legal aspects very well. <i>Panama</i> - Thorough description of legal investigation. <i>Honduras</i> – Addresses illegal discharges.
Samples/Evidence	<b>Medium</b>	✓		X	X	X	✓	<i>Belize</i> - Good information on sampling and handling of samples.
Taking Statements	<b>Low</b>	✓	X	X	X	X	✓	
Mechanisms for settling disputes and claims	<b>High</b>	✓	X	✓	✓	X	✓	<i>El Salvador, Honduras, Nicaragua</i> - Provides plan or policy for intervention. <i>El Salvador</i> – Covers international compensation schemes, including P&I Cubs and treaties. Also provides good outline of steps to take for compensation of damages.
Notes	<b>Low</b>	✓	X	X	X	✓	✓	
<b>Other Factors</b>		✓	X	✓	X	✓	✓	
Formatting	<b>High</b>	X	X	✓	X	✓	X	<i>Honduras</i> - Plan based on Caribbean template. Consistency among plans included in regional agreements would increase compatibility. <i>Nicaragua, El Salvador</i> - Thorough description of format to be used in Local/Facility Plans.
Use of charts, tables, checklists, graphics	<b>High</b>	✓	X	✓	X	✓	✓	<i>Belize, Nicaragua</i> - Good use of tables, organizational charts, flow charts.
<p><b>* Importance / Significance:</b>  <i>High:</i> A necessary requirement to include detailed information in the National Plan.  <i>Medium:</i> A necessary requirement that can be supported by statements or preferred detailed text / examples.  <i>Low:</i> Not a necessary inclusion for the National Plan but should be considered if the element is applicable.</p>								



## 4. INDIVIDUAL NATIONAL PLANS REVIEWS



## Review of Belize National Plan



(Working draft No.2 of National Plan dated 26 January 2004)

1. Introduction / Preface	
<b>Table of Contents</b>	<ul style="list-style-type: none"> <li>• Not yet completed.</li> </ul>
<b>Distribution</b> Lead Agency Support Agencies Other Organizations	<ul style="list-style-type: none"> <li>• A Distribution (draft copy of plan) including list of agencies with contact data is given.</li> <li>• Plan is part of National Hazard Management Plan.</li> <li>• Volume 3d is the National Oil Spill Plan (i) NEPPPOS (ii) Response</li> </ul>
<b>Plan Custodian</b> Updating & Revisions	<ul style="list-style-type: none"> <li>• Department of the Environment in consultation with NEMO Secretariat Government of Belize (GOB) identified as Plan Custodian.</li> <li>• Annual updates based on actual incidents, drills and simulation exercises.</li> <li>• Revisions will take into account changes in the hazard/threat and in technology.</li> <li>• NEMO members comprise the Response Group which includes Executive, Operational Committees, District and Special Emergency Committees, Village Councils and private partners.</li> </ul>
<b>Purpose &amp; Scope</b> Statement of Authority Geographical Area Covered, Regions	<ul style="list-style-type: none"> <li>• Purpose and scope is included.</li> <li>• Statement of Authority is included.</li> <li>• Department of the Environment in consultation with NEMO Secretariat Government of Belize (GOB)</li> <li>• Geographical area covered is clearly indicated.</li> </ul>
<b>Glossary / Definitions / Abbreviations / Units</b>	<ul style="list-style-type: none"> <li>• Includes good list of Abbreviations.</li> <li>• No units, but there is a brief (9 item) Glossary of Terms.</li> </ul>



2. Response Organization	
<p><b>Lead Agency</b></p> <p>Team Members</p> <p>Roles (including National OSC)</p> <p>Responsibilities</p>	<ul style="list-style-type: none"> <li>• Provides national and local response structures</li> <li>• Roles and responsibilities included for DOE, NEMO in terms of specific positions, e.g., OSC, Assistant OSC, Environmental Officer, etc.</li> <li>• The Oil Spill Plan is a hazard specific sub-plan of the Belize National Disaster Plan.</li> </ul>
<p><b>Support Agencies</b></p> <p>Technical, Advisory and other roles defined.</p> <p>Areas of Jurisdiction (e.g., vessels, ports, platforms, SBMs)</p> <p>Organizational charts and links</p>	<ul style="list-style-type: none"> <li>• Participating agencies are identified and responsibilities are indicated in a chart.</li> <li>• Support will be procured as required from various government and private resources:                             <ul style="list-style-type: none"> <li>- NEPPOS</li> <li>- Operational Committee Plans</li> <li>- District Emergency Committee Plans.</li> <li>- ESSO Std Oil SA Ltd Oil Spill Pollution Plan</li> <li>- BPA Oil Spill Pollution Plan</li> </ul> </li> <li>• All exploration companies are required to produce an oil spill response plan as a requirement of obtaining their drilling license.</li> </ul>
<p><b>Other Participating Agencies / Companies</b></p> <p>Roles</p> <p>Responsibilities</p> <p>Relation to Private Industry</p> <p>Interagency Agreements</p>	<ul style="list-style-type: none"> <li>• In the event of a spill, the above-noted agencies will be brought into a response.</li> <li>• Roles and responsibilities given.</li> <li>• Oil companies will provide assistance.</li> </ul>
<p><b>National Regulations Administered</b></p> <p>Supporting Legislation, Laws, Agreements &amp; Guidelines</p>	<ul style="list-style-type: none"> <li>• Disaster Preparedness and Response Act 2000, Part 111 Sec 8.</li> <li>• Belize Environmental Protection Act, 1992</li> </ul>
<p><b>International Conventions &amp; Agreements Ratified</b></p> <p>OPRC 90</p> <p>OPRC-HNS Protocol 2000</p> <p>CLC 69 92 Fund 92</p> <p>Marpol 73/78 III IV V VI</p> <p>Linkage to Other National Plans (bi- and multi-lateral)</p> <p>Cartagena Convention</p>	<ul style="list-style-type: none"> <li>• Foreign Assistance Committee Operational Plan</li> <li>• National Mitigation Plan</li> <li>• Cartagena Convention signed.</li> <li>• '92 CLC and Fund signed.</li> <li>• Agreements and Conventions signed not indicated in Plan.</li> <li>• Once activated, the Oil Spill Plan will be supported by:                             <ul style="list-style-type: none"> <li>- NEPPOS</li> <li>- Operational Committee Plans</li> <li>- District Emergency Committee Plans.</li> <li>- ESSO Std Oil SA Ltd Oil Spill Pollution Plan</li> <li>- BPA Oil Spill Pollution Plan</li> </ul> </li> </ul>
<p><b>Exchanging Expertise &amp; Information</b></p>	<ul style="list-style-type: none"> <li>• Request for external assistance are made through the Foreign Affairs Committee/Ministry of Foreign Affairs.</li> <li>• Appendix 2C contains example form.</li> </ul>



<b>3. Preparedness &amp; Policies</b>	
<b>National Response Resources</b>	<ul style="list-style-type: none"> <li>Agencies listed in plan</li> </ul>
<b>Local and Area Plan Requirements</b> Use of Scenarios	<ul style="list-style-type: none"> <li>All exploration companies are required to produce an oil spill response plan as a requirement of obtaining their drilling license.</li> </ul>
<b>Risk Assessment</b>  Trends, Sources, Causes of Spills (vessel traffic, transfer, production, exploration, collision, grounding)  Areas of High Risk  Environmental Data  Oils of Concern  Protection Priorities (coastal areas for protection & cleanup)  Prevention Programs	<ul style="list-style-type: none"> <li>Spills, spill threat are reviewed.</li> <li>Transportation, storage briefly reviewed</li> <li>Forms are provided for guidance in Appendix 6: <ul style="list-style-type: none"> <li>A Facilities Hazard Analysis</li> <li>Transportation Hazard Analysis</li> </ul> </li> <li>A nine point prevention (called "Mitigation") program is outlined led by the National Mitigation Council.</li> <li>Prevention, preparedness and mitigation aspects are detailed in the National Emergency Preparedness Plan for Oil Spills- Belize (NEPPOS), (1995).</li> </ul>
<b>Training / Exercises</b> Joint Programs	<ul style="list-style-type: none"> <li>Neither outline nor requirement is given for training.</li> </ul>
<b>Dispersants policy</b>  List of Approved Dispersants  Pre-approved Locations  Conditions of Use	<ul style="list-style-type: none"> <li>Conditions for using dispersants are indicated along with agency approving use (DOE). Reference is made to the "IMO/UNEP Guidelines on Oil Spill Dispersant Application and Environmental Considerations as well as to NEPPOS (Belize Spill Plan)</li> </ul>
<b>In-Situ Burning Policy</b>  Applicable Situations  Monitoring	<ul style="list-style-type: none"> <li>No burning policy cited.</li> </ul>
<b>Environmental Policies</b>  <b>Sensitivity Mapping /</b>  <b>Trajectory Modeling</b>	<ul style="list-style-type: none"> <li>No indication included of shoreline sensitivities, mapping nor protection and treatment.</li> <li>Workshop held in March 2004 in Curacao reports that significant sensitivity mapping has been done in Belize</li> </ul>
<b>International Policies</b>  Receiving Spill Response Assistance  Giving Spill Response Assistance	<ul style="list-style-type: none"> <li>Request for assistance will be made through the Foreign Affairs Committee/Ministry of Foreign Affairs.</li> <li>Requests for external support will be done through the NEOC according to procedures laid out in the Foreign Assistance Committee Operational Plan.</li> </ul>



4. Response	
<p><b>Response Management</b></p> <p>Tiered Concept with escalation of incident (1 to 3)</p> <p>Regional Responsibilities</p> <p>Organization of Lead Agency</p> <p>Interagency roles (ICS, Unified Command)</p> <p>Specialist /Contractor Assistance</p> <p>Health &amp; Safety</p> <p>Net Environmental Benefit Analysis</p> <p>Logistics, Administration</p>	<ul style="list-style-type: none"> <li>• Describes 3 Tiers of incident according to spill volume.</li> <li>• Inland, land spills are also addressed.</li> <li>• Good use of charts to delineate magnitude of spill.</li> <li>• ICS will be applied – managed by an OSC.</li> <li>• Role of DOE, other agencies is clearly indicated in a very logical manner that addresses concerns that must be dealt with in a large spill.</li> <li>• Lead Gov't agency will be DOE</li> <li>• ESSO S.A. Ltd. will provide equipment, personnel, technical expertise.</li> <li>• Ministry of Works – responsible for organizing and providing equipment, transportation and labor.</li> <li>• The Belize Defense Force – responsible for communications, support for marine spills.</li> <li>• Belize Police Department – responsible for security, crowd and traffic control, investigations, securing evidence, arrests</li> <li>• National Fire Service – responsible for fire fighting</li> <li>• District Emergency Committees – will provide expertise, labor, other assistance as requested.</li> <li>• Belize Ports Authority - will provide communications, vessels, equipment, booms, provision of pilotage</li> <li>• Fisheries Department – will provide information on resources at risk, transportation, technical support</li> <li>• BDF Maritime Unit – will provide boats and assist with deployment of booms etc. for marine and aquatic spills.</li> <li>• Coastal Zone Management Authority &amp; Institute – will provide technical assistance, oceanographic data and information on sensitive areas and habitats and transportation</li> <li>• Belize Logistic Services are available for technical expertise</li> <li>• Ministry of Health – medical care, public health</li> </ul>
<p><b>Response Operations</b></p> <p>Spill Assessment (slicks and impacts)</p> <p>Response Strategies (mechanical, dispersants, burning)</p> <p>Actions to Mitigate &amp; Control Spills (including mobilization)</p> <p>Shoreline Cleanup (see <i>"Shoreline Protection &amp; Treatment"</i> below)</p> <p>Spill Surveillance and Monitoring (vessels, aircraft, remote sensing)</p> <p>Salvage (vessels, salver)</p>	<ul style="list-style-type: none"> <li>• Response strategies are briefly addressed including booming and the use of dispersants.</li> <li>• Provides case history of 5,500 gal. Bunker C spill.</li> </ul>



4. Response	
Ongoing Monitoring of Cleanup	
<b>Response Centre</b> Communications Meeting Rooms Library/References Computer Links	<ul style="list-style-type: none"> <li>No indication given of Response Centre</li> </ul>
<b>Equipment Inventories</b> Agency Capabilities, Staging Areas, Control Points	<ul style="list-style-type: none"> <li>Very brief equipment list included (incomplete? – only three items listed at DOE location)</li> </ul>
<b>Shoreline Protection &amp; Treatment</b> (assessment and cleanup) Workforce Debris Oil Removal Cleanup Standards	<ul style="list-style-type: none"> <li>No indication included of shoreline protection and treatment.</li> </ul>
<b>Storage, Disposal and Decontamination</b> Transportation Sites for Interim Storage & Final Disposal Decontamination	<ul style="list-style-type: none"> <li>Dept. of Environment has supervised disposal by burning in past using Ministry of Works compound.</li> </ul>
<b>Restoration &amp; Post-Spill Monitoring</b> Lead Agency with Support Organizations Further Study of Cleanup	<ul style="list-style-type: none"> <li>A recovery plan is given.</li> <li>Lead Agency: DOE assisted by CZMI and Dept. of Fisheries.</li> <li>Other agencies and their roles are also indicated.</li> <li>A Damage Assessment and Needs Analysis Committee will be established following a Tier II or III spill.</li> </ul>





5. Reporting, Communication, Legal & Financial Matters	
<p><b>Reporting &amp; Alerting Systems</b></p> <p>Notification &amp; Reporting Requirements</p> <p>Report Form (spill details, environment, reporting - POLREPs)</p> <p>Notification Charts and System</p> <p>Means of Communication</p> <p>Post-incident Review</p>	<ul style="list-style-type: none"> <li>• The Plan may be activated by the NEC in discussion with the Director, DOE.</li> <li>• NEMO Secretariat and DOE are notified or other agencies:                             <ul style="list-style-type: none"> <li>- Fisheries Department</li> <li>- Coastal Zone Management Authority and Institute (CZMAI)</li> <li>- Port of Belize Authority (PBA)</li> <li>- nearest Police or Fire station or BDF post</li> </ul> </li> <li>• CARIBPOLREP used</li> <li>• Report of Oil Discharge Forms in Appendix 2A/2B/2C</li> <li>• NEC shall notify the Ministry of Foreign Affairs for any trans-border threat.</li> <li>• Notification chart provided</li> </ul>
<p><b>Communications</b></p> <p>Systems between Response Centre &amp; Vessels, Aircraft</p> <p>Repeater Stations, frequencies, radios, telephones, fax, e-mail, web</p>	<ul style="list-style-type: none"> <li>• No indication of communications in Plan although responsibility is assigned to Education, Information, Communications and Warning Committee and BDF/BPA.</li> </ul>
<p><b>Contacts</b></p> <p>Internal</p> <p>External</p>	<ul style="list-style-type: none"> <li>• There is a list of contacts in the Main Body and Appendix 7.</li> <li>• Name, organization indicated</li> </ul>
<p><b>Public Information</b></p> <p>Designated Public Affairs/Media Advisor</p> <p>Community Liaison</p>	<ul style="list-style-type: none"> <li>• A sample initial press release is shown in Appendix 5.</li> <li>• NEMO Secretariat and the Press Office will organize media releases and conferences as necessary.</li> <li>• If activated, NEOC will manage media and public information.</li> <li>• For emergency situations (evacuations, threat to population) the District Education, Information Communication and Warning Sub-Committee will issue announcements on local media, as approved by the OSC.</li> </ul>
<p><b>Financial Commitment / Claims / Record Keeping</b></p> <p>Sample Worksheets</p> <p>Reimbursement to Fishermen, Property Owners, etc.</p> <p>Commitment to Regional Centre or Secretariat</p>	<ul style="list-style-type: none"> <li>• Appendix 1A - sample of notification to polluter to take responsibility for clean-up.</li> <li>• Appendix 1B – sample notification to polluter that response is unsatisfactory so government has taken lead and will bill polluter.</li> <li>• DEC will document expenditure.</li> <li>• Covers documentation of incident clearly.</li> </ul>



<p><b>Legal Matters</b></p> <p>Samples/Evidence</p> <p>Taking Statements</p> <p>Mechanisms for settling disputes and claims</p> <p>Notes</p>	<ul style="list-style-type: none"> <li>• Sampling for evidence and analysis is indicated.</li> <li>• DOE is responsible for sampling and analysis.</li> <li>• Belize Police Department will take statements, gather and record evidence.</li> <li>• Appendix 4 gives sampling details.</li> <li>• Chronological diaries to be kept by key personnel.</li> <li>• Documentation of incident is responsibility of the OSC.</li> <li>• Damage and Impact report provided by DANAC or DOE.</li> <li>• Ministry of the Attorney General will lead litigation.</li> </ul>
<p><b>Other Factors</b></p> <p>Formatting</p> <p>Use of charts, tables, checklists, graphics</p>	<ul style="list-style-type: none"> <li>• Good use of tables, organizational charts</li> <li>• No graphics of country</li> </ul>

**Additional Elements**

- Very good description of roles and responsibilities for lead and support agencies.
- Response management clearly indicated in a logical manner.
- Information on sampling and handling of samples.
- Covers legal aspects well.
- Good use of tables, organizational charts.



## Review of Costa Rica National Plan

*(Presently Costa Rica does not have a National Plan. However a number of documents were made available that partially supports the concept of a National Plan. This review therefore contains omissions)*

1. Introduction / Preface	
<b>Table of Contents</b>	<ul style="list-style-type: none"> <li>• Index for Annexes only (most Annexes not received)</li> </ul>
<b>Distribution</b> Lead Agency Support Agencies Other Organizations	<ul style="list-style-type: none"> <li>• Not indicated.</li> </ul>
<b>Plan Custodian</b> Updating & Revisions	<ul style="list-style-type: none"> <li>• Not indicated. Official decree (to be made in 2005) to name responsible party for the Plan.</li> <li>• Parties that have agreed to lend/supply equipment are to provide annual updates (in July) or whenever substantial changes occur so that the corresponding Annex within the National Contingency Plan can be updated.</li> </ul>
<b>Purpose &amp; Scope</b> Statement of Authority Geographical Area Covered, Regions	<ul style="list-style-type: none"> <li>• Lists objectives.</li> <li>• Geographical area established by Article 6 of the Political Constitution of 1949.</li> <li>• Authority for oil spills is delegated to the Public Works Ministry and Transport, by Law No. 15451 - MOPT published in Newspaper No.111.</li> </ul>
<b>Glossary / Definitions / Abbreviations / Units</b>	<ul style="list-style-type: none"> <li>• Acronyms given in Annex 1</li> </ul>



2. Response Organization	
<p><b>Lead Agency</b></p> <p>Team Members</p> <p>Roles (including National OSC)</p> <p>Responsibilities</p>	<ul style="list-style-type: none"> <li>• MOPT indicated as Lead Agency.</li> <li>• Lists responsibilities of MOPT.</li> <li>• Listed in Annex 2 (not received).</li> <li>• Responsibilities list in Annex 16 (not received).</li> <li>• MOPT makes recommendations to the President of the National Emergency Commission (PCNE).</li> </ul>
<p><b>Support Agencies</b></p> <p>Technical, Advisory and other roles defined.</p> <p>Areas of Jurisdiction (<i>e.g., vessels, ports, platforms, SBMs</i>)</p> <p>Organizational charts and links</p>	<ul style="list-style-type: none"> <li>• Some support agencies listed, but translation is unclear</li> <li>• Parties included in the National Agreement of Mutual Cooperation (Annex 3): INCOP, JAPDEVA, MOPT, RECOPE, UCR, UNA, MAG, MIEN, INS, Red Cross, Municipalities, Associations of Cesarrouo, Health Ministry</li> <li>• Contributors to plan – Annex 11 (not received)</li> </ul>
<p><b>Other Participating Agencies / Companies</b></p> <p>Roles</p> <p>Responsibilities</p> <p>Relation to Private Industry</p> <p>Interagency Agreements</p>	<ul style="list-style-type: none"> <li>• Not indicated.</li> </ul>
<p><b>National Regulations Administered</b></p> <p>Supporting Legislation, Laws, Agreements &amp; Guidelines</p>	<ul style="list-style-type: none"> <li>• Legal authority under the responsibility of the National Commission created Emergency Law 4374 of August 14, 1969 and its amendment by means of Law No 6830 of Sept 14, 1983</li> <li>• Public Works and Transport Ministry, by Law No. 15451 - MOPT published in Newspaper No.111</li> </ul>
<p><b>International Conventions &amp; Agreements Ratified</b></p> <p>OPRC 90</p> <p>OPRC-HNS Protocol 2000</p> <p>CLC 69 92 Fund 92</p> <p>Marpol 73/78 III IV V VI</p> <p>Linkage to Other National Plans (bi- and multi-lateral)</p> <p>Cartagena Convention</p>	<ul style="list-style-type: none"> <li>• Cartagena Convention signed.</li> <li>• CLC '69 signed. CLC'92 awaiting signature (May 2005).</li> <li>• Agreements and Conventions signed not indicated in Plan.</li> </ul>
<p><b>Exchanging Expertise &amp; Information</b></p>	



3. Preparedness & Policies	
<b>National Response Resources</b>	
<b>Local and Area Plan Requirements</b> Use of Scenarios	<ul style="list-style-type: none"> <li>No indication of local plan requirements.</li> </ul>
<b>Risk Assessment</b> Trends, Sources, Causes of Spills (vessel traffic, transfer, production, exploration, collision, grounding) Areas of High Risk Environmental Data Oils of Concern Protection Priorities (coastal areas for protection & cleanup) Prevention Programs	<ul style="list-style-type: none"> <li>Risk of spills not reviewed.</li> </ul>
<b>Training / Exercises</b> Joint Programs	<ul style="list-style-type: none"> <li>No requirement included for training.</li> </ul>
<b>Dispersants policy</b> List of Approved Dispersants Pre-approved Locations Conditions of Use	<ul style="list-style-type: none"> <li>Types of dispersants listed in Annex 15 (not received).</li> <li>No dispersants policy in place.</li> </ul>
<b>In-Situ Burning Policy</b> Applicable Situations Monitoring	<ul style="list-style-type: none"> <li>Not indicated</li> </ul>
<b>Environmental Policies</b> <b>Sensitivity Mapping /</b> <b>Trajectory Modeling</b>	<ul style="list-style-type: none"> <li>Criteria for coastal sensitivity maps included as Annex 14 (not received)</li> <li>Criteria defining critical coastal zones included as Annex 9 (not received)</li> </ul>
<b>International Policies</b> Receiving Spill Response Assistance Giving Spill Response Assistance	<ul style="list-style-type: none"> <li>Not indicated</li> </ul>



4. Response	
<p><b>Response Management</b></p> <p>Tiered Concept with escalation of incident (1 to 3)</p> <p>Regional Responsibilities</p> <p>Organization of Lead Agency</p> <p>Interagency roles (ICS, Unified Command)</p> <p>Specialist /Contractor Assistance</p> <p>Health &amp; Safety</p> <p>Net Environmental Benefit Analysis</p> <p>Logistics, Administration</p>	<ul style="list-style-type: none"> <li>• Refers to 4 stages of response actions ranging from local to national incidents.</li> <li>• Response actions based on recommendations included in the Annexes (not received).</li> <li>• Procedure given for receiving aid (equipment, transportation, technical).</li> <li>• Listing of contractors and suppliers (Annex 7) – not received</li> </ul>
<p><b>Response Operations</b></p> <p>Spill Assessment (slicks and impacts)</p> <p>Response Strategies (mechanical, dispersants, burning)</p> <p>Actions to Mitigate &amp; Control Spills (including mobilization)</p> <p>Shoreline Cleanup (see “<i>Shoreline Protection &amp; Treatment</i>” below)</p> <p>Spill Surveillance and Monitoring (vessels, aircraft, remote sensing)</p> <p>Salvage (vessels, salver)</p> <p>Ongoing Monitoring of Cleanup</p>	<ul style="list-style-type: none"> <li>• Brief list of factors to be met in order to conclude response efforts.</li> <li>• Ship emergency procedures (Annex 21) – not received</li> </ul>
<p><b>Response Centre</b></p> <p>Communications</p> <p>Meeting Rooms</p> <p>Library/References</p> <p>Computer Links</p>	<ul style="list-style-type: none"> <li>• Library (Annex 17) – not received</li> </ul>
<p><b>Equipment Inventories</b></p> <p>Agency Capabilities, Staging Areas, Control Points</p>	<ul style="list-style-type: none"> <li>• Parties that have agreed to lend/supply equipment are to provide annual updates (in July) or whenever substantial changes occur so that the corresponding Annex within the National Contingency Plan can be updated.</li> <li>• Listing of contractors and suppliers (Annex 7) – not received</li> </ul>
<p><b>Shoreline Protection &amp; Treatment</b> (<i>assessment and cleanup</i>)</p> <p>Workforce</p> <p>Debris</p> <p>Oil Removal</p> <p>Cleanup Standards</p>	<ul style="list-style-type: none"> <li>• Annex 6 deals with shoreline cleanup. Not received.</li> </ul>



<p><b>Storage, Disposal and Decontamination</b></p> <p>Transportation</p> <p>Sites for Interim Storage &amp; Final Disposal</p> <p>Decontamination</p>	<ul style="list-style-type: none"> <li>• Annex 6 (disposal and cleaning of coasts) – not received</li> </ul>
<p><b>Restoration &amp; Post-Spill Monitoring</b></p> <p>Lead Agency with Support Organizations</p> <p>Further Study of Cleanup</p>	<ul style="list-style-type: none"> <li>• Not indicated</li> </ul>



5. Reporting, Communication, Legal & Financial Matters	
<p><b>Reporting &amp; Alerting Systems</b></p> <p>Notification &amp; Reporting Requirements</p> <p>Report Form (spill details, environment, reporting - POLREPs)</p> <p>Notification Charts and System</p> <p>Means of Communication</p> <p>Post-incident Review</p>	<ul style="list-style-type: none"> <li>• Reporting form not included.</li> </ul>
<p><b>Communications</b></p> <p>Systems between Response Centre &amp; Vessels, Aircraft</p> <p>Repeater Stations, frequencies, radios, telephones, fax, e-mail, web</p>	<ul style="list-style-type: none"> <li>• Annex 4 notes communications (not received)</li> </ul>
<p><b>Contacts</b></p> <p>Internal</p> <p>External</p>	<ul style="list-style-type: none"> <li>• Annex 7 lists contractors and suppliers (not received)</li> </ul>
<p><b>Public Information</b></p> <p>Designated Public Affairs/Media Advisor</p> <p>Community Liaison</p>	<ul style="list-style-type: none"> <li>• Not indicated.</li> </ul>
<p><b>Financial Commitment / Claims / Record Keeping</b></p> <p>Sample Worksheets</p> <p>Reimbursement to Fishermen, Property Owners, etc.</p> <p>Commitment to Regional Centre or Secretariat</p>	<ul style="list-style-type: none"> <li>• Insurance and compensation indicated in Annex 20 (not received)</li> </ul>
<p><b>Legal Matters</b></p> <p>Samples/Evidence</p> <p>Taking Statements</p> <p>Mechanisms for settling disputes and claims</p> <p>Notes</p>	<ul style="list-style-type: none"> <li>• Not indicated.</li> <li>• Sampling and identifying source of spill indicated in Annex 13 (not received).</li> <li>• Compensation is indicated but without details given.</li> <li>• Authorized discharges (Annex 18) – not received.</li> </ul>
<p><b>Other Factors</b></p> <p>Formatting</p> <p>Use of charts, tables, checklists, graphics</p>	<ul style="list-style-type: none"> <li>• Early version of Plan received without more recent formatting, other inclusions such as charts, tables and graphics.</li> <li>• Only 5 pages of text received for Plan.</li> </ul>





## Review of El Salvador National Plan



*(Translated plan missing some sections; this summary may be incomplete.)*

1. Introduction / Preface	
<b>Table of Contents</b>	<ul style="list-style-type: none"> <li>• Index</li> </ul>
<b>Distribution</b> Lead Agency Support Agencies Other Organizations	<ul style="list-style-type: none"> <li>• No distribution list included.</li> </ul>
<b>Plan Custodian</b> Updating & Revisions	<ul style="list-style-type: none"> <li>• Control and updating of the National Plan is responsibility of Main Directorate of Marine Transport.</li> <li>• Preparation of Local Plans is under the jurisdiction of each Harbor Master. A copy of all Particular Plans (public and private institutions) within its jurisdiction will be annexed to each Local Plan.</li> </ul>
<b>Purpose &amp; Scope</b> Statement of Authority Geographical Area Covered, Regions	<ul style="list-style-type: none"> <li>• Includes purpose, scope (applies to hydrocarbon contamination to all water and coastal zones and to all public and private facilities that handle hydrocarbons).</li> <li>• Jurisdiction of the Local Plan of the Marine Department the Bay of the Union includes water areas in the Gulf of Fonseca, in which Salvadoran islands are located, to the marine areas of the Eastern Bocana of the Grande River of San Miguel (Long 88° 20 ' 00 " W).</li> <li>• Jurisdiction of the Local Plan of the Marine Department Triumph includes the marine spaces of the Bocana of the Grande River of San Miguel (Long 88° 20 ' 00 " W) to the Bocana of the Lempa River (Long 88° 48 ' 00 ") including bays and corresponding estuaries.</li> <li>• Jurisdiction of the Local Plan of the Marine Department Freedom includes the marine area of the Bocana of the Lempa River (Long 88°48'50 " W), to the Bocana of the Mizata River (Long 89°35'45 " W), including the corresponding bays and estuaries.</li> <li>• Jurisdiction of the Local Plan of the Marine Department of Acajutla includes the area between Punta Mizata (Long 89°35'45 " W) to the mouth of the Paz River (Long 90°08'07 " W), including corresponding bays and estuaries.</li> </ul>
<b>Glossary / Definitions / Abbreviations / Units</b>	<ul style="list-style-type: none"> <li>• 18 basic definitions given relating to OPRC.</li> </ul>



2. Response Organization	
<p><b>Lead Agency</b></p> <p>Team Members</p> <p>Roles (including National OSC)</p> <p>Responsibilities</p>	<ul style="list-style-type: none"> <li>• Roles of On-Scene Coordinator</li> <li>• Determine initial response required:                             <ul style="list-style-type: none"> <li>- Direction and travel time of the pollutant, and areas that may be affected</li> <li>- Response procedures and resources required</li> </ul> </li> <li>• Arrange for compatible operations, including:                             <ul style="list-style-type: none"> <li>- Security</li> <li>- Boundary and affected area monitoring</li> <li>- Fire control</li> <li>- Monitoring the distribution of response team and resources</li> <li>- Air and marine traffic control</li> <li>- Search and rescue</li> <li>- Evacuation of disabled personnel</li> <li>- Provision of aid to personnel, boats and persons in danger</li> <li>- Establishment and operation of aid stations</li> </ul> </li> <li>• Oversee response operations:                             <ul style="list-style-type: none"> <li>- Containment of the contamination</li> <li>- Collection of oil and contaminated material</li> <li>- Disposal</li> <li>- Rehabilitation of the area</li> </ul> </li> <li>• Provide final report including:                             <ul style="list-style-type: none"> <li>- Chronology and evaluation</li> <li>- Recommendations necessary to improve the Plan</li> <li>- Registry of used resources and damaged/lost equipment</li> </ul> </li> </ul>
<p><b>Support Agencies</b></p> <p>Technical, Advisory and other roles defined.</p> <p>Areas of Jurisdiction (<i>e.g., vessels, ports, platforms, SBMs</i>)</p> <p>Organizational Charts and Links</p>	<ul style="list-style-type: none"> <li>• Contributors to the Plan                             <ul style="list-style-type: none"> <li>- Coastal Technology, Salvador, S.A.</li> <li>- Hydroelectric Executive Commission of the River Lempa (CEL)</li> <li>- Independent Harbor Executive Commission (STOCK)</li> <li>- Committee of National Emergencies (COEN)</li> <li>- Hydrocarbon Main Directorate and Mines of the Ministry of Economy</li> <li>- Division of Environment of Civil National Police</li> <li>- Railroads of El Salvador (FENADESAL)</li> <li>- Naval Force</li> <li>- Ministry of Environment and Natural Resources (MARN)</li> <li>- Ministry of Public Health and Social Attendance</li> </ul> </li> <li>• Establish procedure to coordinate resources in the immediate area to control, clean and restore the affected area.</li> <li>• Activation of contingency plans:                             <ul style="list-style-type: none"> <li>- The National Plan will be activated when the action and the means of Local Plans are not sufficient to fight the spill.</li> <li>- Local Plans will be activated when the action and the means of the Particular Plan are not sufficient to fight the spill.</li> </ul> </li> <li>• Local Plans are governed by the limits of jurisdiction of each Marine Department:</li> <li>• The Jurisdiction of the Particular Plans includes the facilities and areas that can be affected by an oil spill.</li> <li>• Links are in the Plan for Facilities, Industry Support</li> </ul>



<p><b>Other Participating Agencies / Companies</b></p> <p>Roles</p> <p>Responsibilities</p> <p>Relation to Private Industry</p> <p>Interagency Agreements</p>	<ul style="list-style-type: none"> <li>● Contributors to the Plan                     <ul style="list-style-type: none"> <li>- Petroleum Refinery Acajutla, S.A.</li> <li>- Texaco Inc. Caribbean</li> <li>- Texaco Lubricant</li> <li>- Tropigas of El Salvador</li> </ul> </li> <li>● Should establish inter-company or inter-institutional agreements to cooperate and facilitate advisory services, technical support and equipment for the prevention and control of hydrocarbon contamination.</li> <li>● Should establish national agreements, validated and certified by the governing organization, to finance and loan resources for joint operations.</li> </ul>
<p><b>National Regulations Administered</b></p> <p>Supporting Legislation, Laws, Agreements &amp; Guidelines</p>	<ul style="list-style-type: none"> <li>● Ships, offshore platforms, seaports and hydrocarbon terminals must have emergency plans.</li> <li>● Plans for ships must follow the Directives established by the International Marine Organization (IMO) and will be written up in English; in the language of work of the captain and the crew; and if feasible, in Spanish. The plan will include at least:                     <ul style="list-style-type: none"> <li>- Notification procedures and list of authorities to notify.</li> <li>- Response measures to be taken by ship's crew in the event of a spill.</li> </ul> </li> <li>● Agreement of Cooperation (Annex 4) to include:                     <ul style="list-style-type: none"> <li>- policies and Enterprise Responsibility of the Cooperator</li> <li>- signed letter of intent to attend to a hydrocarbon spill</li> <li>- Annex</li> </ul> </li> <li>● Annex in Agreement of Cooperation to detail, among other subjects:                     <ul style="list-style-type: none"> <li>- services they can provide themselves</li> <li>- financial dispositions of compensation or I refund</li> <li>- communication procedures</li> <li>- benefits or reclamations to third parties</li> <li>- term in the Agreement</li> <li>- applicable national legislation</li> <li>- inventory of the resources and means</li> </ul> </li> </ul>
<p><b>International Conventions &amp; Agreements Ratified</b></p> <p>OPRC 90</p> <p>OPRC-HNS Protocol 2000</p> <p>CLC 69 92 Fund 92</p> <p>Marpol 73/78 III IV V VI</p> <p>Linkage to Other National Plans (bi- and multi-lateral)</p> <p>Cartagena Convention</p>	<ul style="list-style-type: none"> <li>● OPRC 90, approved November 13, 1996 and ratified December 12, 1996.</li> <li>● CLC '92.</li> </ul>
<p><b>Exchanging Expertise &amp; Information</b></p>	<ul style="list-style-type: none"> <li>● Maximum cooperation between the Naval Administration and the oil, shipping and harbor companies.</li> </ul>



3. Preparedness & Policies	
<b>National Response Resources</b>	<ul style="list-style-type: none"> <li>● Ministers of Public Works, Transport and Housing and Urban Development, Environment and Natural Resources, Agriculture and Cattle Ranch, Interior, Public Health and Social Attendance, National Defense, Economy and Public Security.</li> </ul>
<b>Local and Area Plan Requirements</b>  Use of Scenarios	<ul style="list-style-type: none"> <li>● Lists of emergency resources should include:                             <ul style="list-style-type: none"> <li>- equipment</li> <li>- health and safety equipment</li> <li>- medical assistance</li> <li>- fire fighting assistance</li> <li>- transportation</li> <li>- meal and lodging information</li> </ul> </li> <li>● Bulk of this plan addresses requirements for local/facility plans.</li> <li>● Submission and approval procedures for local/facility plans are covered thoroughly.</li> </ul>
<b>Risk Assessment</b>  Trends, Sources, Causes of Spills (vessel traffic, transfer, production, exploration, collision, grounding)  Areas of High Risk  Environmental Data  Oils of Concern  Protection Priorities (coastal areas for protection & cleanup)  Prevention Programs	<ul style="list-style-type: none"> <li>● Local Plans should include:                             <ul style="list-style-type: none"> <li>- Sources of risk</li> <li>- Hydrocarbon handling facilities</li> <li>- Ships</li> <li>- Pipelines</li> <li>- Marine terminals</li> <li>- Storage tanks and distribution centers</li> </ul> </li> <li>● Provides brief table on amounts and frequency of product handled and the volume of tanker traffic. Further information would be helpful.</li> <li>● Data collection for plans should include zones and activities of particular risk for the ecology, potable water sources, public beaches and recreational and tourist facilities, yacht clubs, wharves, National parks and refuges.</li> <li>● Facilities that represent a fire risk should be listed in plans.</li> <li>● National Plan:                             <ul style="list-style-type: none"> <li>● Provides educational material on hydrocarbon properties, fate and behavior.</li> <li>● Provides information on sensitive areas around Ports and protected areas of coastline.</li> </ul> </li> </ul>
<b>Training / Exercises</b>  Joint Programs	<ul style="list-style-type: none"> <li>● Local Plans must have provision for annual exercise or training program.</li> <li>● Training program must include execution of containment, recovery and area rehabilitation tasks and presentation of a summary report to the Governing Organization.</li> </ul>
<b>Dispersants Policy</b>  List of Approved Dispersants  Pre-approved Locations  Conditions of Use	<ul style="list-style-type: none"> <li>● The use of dispersants COREXIT 9527 and 9500 and of the surface cleaning agents COREXIT 7664 and 9580 is authorized, solely in the following cases:                             <ul style="list-style-type: none"> <li>- Spills in the zone of dock berths of the wharves, during the first 24 hours of the spill.</li> <li>- Spills in the open sea at depths &gt;45 m where the spill will impact mangroves or beaches with high population density (eg. Bar of Santiago, Acajutla, the Cóbano, the Freedom, San Diego, the Zunganera, the cuckoo, the Tunas, Maculis, South zone of the Bay of the Union, communities of the Islands of the Gulf of Fonseca).</li> </ul> </li> <li>● No chemical substances may be applied in areas of rocky reefs or mangroves.</li> </ul>



<p><b>In-Situ Burning Policy</b></p> <p>Applicable Situations</p> <p>Monitoring</p>	<ul style="list-style-type: none"> <li>• No policy indicated.</li> </ul>
<p><b>Environmental Policies</b></p> <p><b>Sensitivity Mapping /</b></p> <p><b>Trajectory Modeling</b></p>	<ul style="list-style-type: none"> <li>• Local Plans should include:</li> <li>• Surface (weather, boat traffic) and sea conditions in the operational area that influence choice of response operations and behavior of oil.</li> <li>• Coastline information that influences the choice of equipment and procedure to use.</li> <li>• National Plan includes:</li> <li>• Speed and direction of marine current in Territorial waters.</li> <li>• Minimum water temperature, average salinity.</li> <li>• Directions (imprecise) to predict movement of slick.</li> <li>• Sensitivity of main ports (Acajutla, Triumph and Cutuco) and surroundings (Appendix 3, Subappendix1), including:             <ul style="list-style-type: none"> <li>- beaches important to tourism</li> <li>- socio-economic factors (fishing, tourism, shipping)</li> <li>- ecosystem (sandy beach, rocky beach and reef, mangroves, open sea)</li> <li>- substrate, flora, fauna</li> </ul> </li> <li>• Sensitivity of the marine coast according to the following elements – slope, dynamics of currents, biological resources, socioeconomic resources, beach types, size of beach substrate, marine ecosystems.</li> <li>• Figure showing current biological and protected areas within country.</li> <li>• The March 2004 workshop in Curacao reports that the entire coastline of El Salvador has been mapped in terms of environmental sensitivities.</li> </ul>
<p><b>International Policies</b></p> <p>Receiving Spill Response Assistance</p> <p>Giving Spill Response Assistance</p>	<ul style="list-style-type: none"> <li>• In accordance with OPRC 90, the Contracting States will cooperate and facilitate advisory services, technical support and equipment at the request of the affected State.</li> <li>• Upon request, International Marine Organization (IMO) will help to determine sources of provisional financing.</li> <li>• The Governing Organization will facilitate the expedition of administrative proceedings in customs, migration and other effects for the entry and exit of the required aid.</li> </ul>



4. Response	
<p><b>Response Management</b></p> <p>Tiered Concept with escalation of incident (1 to 3)</p> <p>Regional Responsibilities</p> <p>Organization of Lead Agency</p> <p>Interagency roles (ICS, Unified Command)</p> <p>Specialist /Contractor Assistance</p> <p>Health &amp; Safety</p> <p>Net Environmental Benefit Analysis</p> <p>Logistics, Administration</p>	<ul style="list-style-type: none"> <li>● Organizational structure of the National Lead Agency:                             <ul style="list-style-type: none"> <li>- Directive level</li> <li>- Advisory level</li> <li>- Operative level</li> </ul> </li> <li>● Lead Agency headed by the Chief of the Main Directorate of Marine Transport and advised by the National Advisory Council.</li> <li>● National responsibilities include:                             <ul style="list-style-type: none"> <li>- Providing technical support</li> <li>- Coordinating resources</li> <li>- Preparing and distributing information</li> <li>- Expediting the international movement of required personnel and materials</li> <li>- Pursuing a legal investigation</li> <li>- Assuming control of the response operation, as required</li> <li>- Authorizing the use of dispersants</li> <li>- Requesting international participation</li> <li>- Remaining informed of technology</li> <li>- Facilitating training programs</li> <li>- Updating plan annually</li> <li>- Inspecting facilities</li> </ul> </li> <li>● National Advisory Counsel consists of representatives of state institutions with environmental, hydrocarbon and technical experience (Plan lists institutions).</li> <li>● Operative level personnel are located at the site to coordinate spill response, as follows:                             <ul style="list-style-type: none"> <li>- Assess spill</li> <li>- Compile and document spill information, response measures and expenses</li> <li>- Ensure appropriate personnel, equipment and response measures are assigned to operation</li> <li>- Keep governing organization informed</li> </ul> </li> <li>● The Governing Organization will assume certain duties during an intervention of a ship-based spill:                             <ul style="list-style-type: none"> <li>- Provide instructions to the proprietor of the ship or to their representative</li> <li>- Reserve the right to use means and resources of the System of National Cooperation</li> <li>- Take measures to resolve conflicts and to gather evidence</li> <li>- Manage the compensation of expenses of the assisting and affected parties</li> </ul> </li> <li>● Local Plan to be administered in 3 stages:                             <ol style="list-style-type: none"> <li>1. Gather human and material resources from the Particular Plans, and from the inter-company and international agreements.</li> <li>2. Arrange for financial resources from the National Cooperation Fund.</li> <li>3. Gather human and material resources from contributing municipal governments.</li> </ol> </li> <li>● Net Environmental Benefit Analysis provided for ecosystems surrounding three main Ports (Appendix 3, Sub appendix 1).</li> </ul>



<p><b>Response Operations</b></p> <p>Spill Assessment (slicks and impacts)</p> <p>Response Strategies (mechanical, dispersants, burning)</p> <p>Actions to Mitigate &amp; Control Spills (including mobilization)</p> <p>Shoreline Cleanup (see “<i>Shoreline Protection &amp; Treatment</i>” below)</p> <p>Spill Surveillance and Monitoring (vessels, aircraft, remote sensing)</p> <p>Salvage (vessels, salver)</p> <p>Ongoing Monitoring of Cleanup</p>	<ul style="list-style-type: none"> <li>● Assess spill behavior by:                             <ul style="list-style-type: none"> <li>- Compilation and analysis of weather data</li> <li>- Exploration and recognition of the affected area in order to determine the potential type, magnitude and risks of contamination</li> <li>- Determination of behavior, given the meteorological and oceanographic conditions</li> </ul> </li> <li>● Monitoring slicks:                             <ul style="list-style-type: none"> <li>- Selection criteria for aircraft</li> <li>- Search method</li> <li>- Appearance</li> <li>- Factors used to visually estimate volume of spilled material, including sample air reconnaissance and calculations</li> </ul> </li> </ul>
<p><b>Response Centre</b></p> <p>Communications</p> <p>Meeting Rooms</p> <p>Library/References</p> <p>Computer Links</p>	<ul style="list-style-type: none"> <li>● Communications center, established by the Governing Organization, facilitates the exchange of information and instructions and the distribution of the official version of the incident.</li> </ul>
<p><b>Equipment Inventories</b></p> <p>Agency Capabilities, Staging Areas, Control Points</p>	<ul style="list-style-type: none"> <li>● Local plans should include:                             <ul style="list-style-type: none"> <li>- Resource registry of all resources available for use, indicating their location and state of operation.</li> <li>- Practical instructions on the handling and maintenance of the equipment.</li> <li>- Instructions for re-supply of materials and personnel.</li> <li>- Up-to-date information on spill response technology.</li> </ul> </li> <li>● National Plan describes features of response equipment.</li> </ul>
<p><b>Shoreline Protection &amp; Treatment</b> (<i>assessment and cleanup</i>)</p> <p>Workforce</p> <p>Debris</p> <p>Oil Removal</p> <p>Cleanup Standards</p>	<ul style="list-style-type: none"> <li>● No information indicated although detailed sensitivity information is presented.</li> </ul>
<p><b>Storage, Disposal and Decontamination</b></p> <p>Transportation</p> <p>Sites for Interim Storage &amp; Final Disposal</p> <p>Decontamination</p>	<ul style="list-style-type: none"> <li>● Local plans should include registry of services and facilities that can store and/or dispose of waste.</li> </ul>
<p><b>Restoration &amp; Post-Spill Monitoring</b></p> <p>Lead Agency with Support Organizations</p> <p>Further Study of Cleanup</p>	<ul style="list-style-type: none"> <li>● Information not included.</li> </ul>



5. Reporting, Communication, Legal & Financial Matters	
<p><b>Reporting &amp; Alerting Systems</b></p> <p>Notification &amp; Reporting Requirements</p> <p>Report Form (spill details, environment, reporting - POLREPs)</p> <p>Notification Charts and System</p> <p>Means of Communication</p> <p>Post-incident Review</p>	<ul style="list-style-type: none"> <li>• The Governing Organization is responsible for international notification for the purpose of informing countries that may be impacted and to request aid.</li> <li>• Ships Captains and all persons in charge of seaports and hydrocarbon facilities must notify the corresponding authority without delay of all probable or actual hydrocarbon contamination and provide the coordinates.</li> <li>• Form for Communication format and type of information to be included (Annex 3).</li> <li>• Situation report                         <ul style="list-style-type: none"> <li>- first report includes all relevant information</li> <li>- subsequent reports should avoid repetition of facts and unchanged data</li> </ul> </li> </ul>
<p><b>Communications</b></p> <p>Systems between Response Centre &amp; Vessels, Aircraft</p> <p>Repeater Stations, frequencies, radios, telephones, fax, e-mail, web</p>	<ul style="list-style-type: none"> <li>• Portable radios, telefax, cell phones and email will be used.</li> <li>• A main frequency and several alternate frequencies of radio must be established for terrestrial and marine operation areas.</li> </ul>
<p><b>Contacts</b></p> <p>Internal</p> <p>External</p>	<ul style="list-style-type: none"> <li>• Contact list for various government institutions (incomplete, awaiting approval of Plan)</li> </ul>
<p><b>Public Information</b></p> <p>Designated Public Affairs/Media Advisor</p> <p>Community Liaison</p>	<ul style="list-style-type: none"> <li>• Governing Organization will authorize press bulletins prior to their distribution.</li> <li>• A member of the Advisory Superior Council and one of the Council of Local Coordination will be appointed official spokesmen.</li> <li>• The designated spokesmen maintain contact with all relevant sectors (state and municipal representatives, press and affected parties).</li> </ul>
<p><b>Financial Commitment / Claims / Record Keeping</b></p> <p>Sample Worksheets</p> <p>Reimbursement to Fishermen, Property Owners, etc.</p> <p>Commitment to Regional Centre or Secretariat</p>	<ul style="list-style-type: none"> <li>• Format of demand for compensation:                         <ul style="list-style-type: none"> <li>- channeled through competent authorities</li> <li>- carried out in written form and endorsed with the appropriate documentation (receipts of expenses, invoices, etc)</li> <li>- details (listed in Appendix) including chemical analyses of samples</li> </ul> </li> </ul>
<p><b>Legal Matters</b></p> <p>Samples/Evidence</p> <p>Taking Statements</p> <p>Notes</p> <p>Mechanisms for settling disputes and claims</p>	<ul style="list-style-type: none"> <li>• P &amp; I Clubs</li> <li>• Covers intervention by the Governing Organization.</li> </ul>
<p><b>Other Factors</b></p> <p>Formatting</p> <p>Use of charts, tables, checklists, graphics</p>	<ul style="list-style-type: none"> <li>• Format of Local Plans in Annex 5.</li> <li>• Communications flow chart.</li> <li>• Figure of sensitive areas.</li> <li>• Much descriptive narrative.</li> </ul>





### Additional Elements

- Sensitivity of shorelines and main ports covered well, including biological and socio-economic information.
- Plan puts a lot of focus on what should be included in a plan, but does not include all of that information within this plan.
- Plan includes much narrative.



## Review of Honduras National Plan



*(This plan appears to be a draft version based on the template provided by REMPEITC)*

1. Introduction / Preface	
<p><b>Table of Contents</b></p>	<ul style="list-style-type: none"> <li>• Included.</li> </ul>
<p><b>Distribution</b></p> <p>Lead Agency</p> <p>Support Agencies</p> <p>Other Organizations</p>	<ul style="list-style-type: none"> <li>• No Distribution List. Reported in May 2005 that a list will be developed by the Main Directorate of the Merchant Marine.</li> </ul>
<p><b>Plan Custodian</b></p> <p>Updating &amp; Revisions</p>	<ul style="list-style-type: none"> <li>• The Prevention of Contamination Section of the Merchant Marine (the Marine Administration of Honduras) is in charge of the Plan.</li> </ul>
<p><b>Purpose &amp; Scope</b></p> <p>Statement of Authority</p> <p>Geographical Area Covered, Regions</p>	<ul style="list-style-type: none"> <li>• Covers all spills – not just oil.</li> <li>• Gulfs of Fonseca and Honduras noted.</li> <li>• Intention of Plan is to delineate the responsibilities of the operational response for marine emergencies that can cause damage to Honduras, its territorial waters and to the marine ecosystem. It is proposed that Honduras will be divided into four geographic areas of port captains.</li> </ul>
<p><b>Glossary / Definitions / Abbreviations / Units</b></p>	<ul style="list-style-type: none"> <li>• No abbreviations, acronyms defined nor Glossary of Terms</li> </ul>



2. Response Organization	
<p><b>Lead Agency</b></p> <p>Team Members</p> <p>Roles (including National OSC)</p> <p>Responsibilities</p>	<ul style="list-style-type: none"> <li>• The Commander of a Local Incident (Tier 1) is the Harbor Master closest to incident.</li> <li>• The Commander of a Regional Incident (Tier 2) will be the Head of the Section of Prevention of Contamination of the Main Directorate of the Merchant Marine.</li> <li>• The National Commander of Incidents will be the Chief of the Main Directorate of the Merchant Marine or the person designated by this.</li> <li>• Appendix K indicates main areas of responsibility for primary response organization.</li> </ul>
<p><b>Support Agencies</b></p> <p>Technical, Advisory and other roles defined.</p> <p>Areas of Jurisdiction (e.g., vessels, ports, platforms, SBMs)</p> <p>Organizational charts and links</p>	<ul style="list-style-type: none"> <li>• SERNA – provides advice on operations that affect natural resources</li> <li>• SOPTRAVI – controls government equipment, marine, terrestrial and aerial transport, public works and the harbor authority. Provides technical advice and support. Supervises cleaning of coastline and disposal.</li> <li>• Municipalities – controls sewage system, potable water and firemen.</li> <li>• CONATEL - controls the national telecommunications policy</li> <li>• COPECO, DGMM – coordinate other agencies, communications, organize training</li> <li>• Environmental Authority – environmental issues, cleanup of coastline</li> <li>• Harbor Authority - technical and operational support</li> <li>• CESSCO/Biodiversity – provide scientific support and evaluate sensitivity of threatened areas</li> <li>• Naval and Air Forces of Honduras, National Police, Main Directorate of Criminal Investigation - assist in investigation incidents, marine and air surveillance, On-Scene Commander Sea and support personnel, arrest/detention of offending vessel/personnel, prosecuting ship owner/personnel.</li> <li>• Air Force of Honduras and Main Directorate of Civil Aeronautics – monitoring and aerial logistic support</li> <li>• Permanent Committee of Contingency</li> <li>• Office of the judge advocate general of the Atmosphere and Office of the public prosecutor of the Atmosphere – legal aspects</li> <li>• Honduran Institute of Tourism – liaison between OSC and tourist facilities impacted, help to assess priority/sensitivity criteria for response/protection, participate and advise in public relations.</li> <li>• Public Work Secretariat</li> <li>• Transport and House</li> <li>• Body of Firemen – provide personnel and equipment as necessary</li> <li>• Ministry of Health – health matters</li> <li>• Ministry of Finances - financial advice, funds, accounting of costs, evaluation of reclamations and compensation.</li> <li>• Main Directorate of Customs and Immigration - expedite entry of personnel and equipment required for response, deny outward clearance to any vessel, equipment or personnel involved in a pollution incident.</li> </ul>
<p><b>Other Participating Agencies / Companies</b></p>	<ul style="list-style-type: none"> <li>• Oil companies - technical advice and logistical support, temporary storage sites, provide cleanup equipment and dispersants, assist in response, participate in</li> </ul>



<b>2. Response Organization</b>	
Roles Responsibilities Relation to Private Industry Interagency Agreements	training exercise and workshops.
<b>National Regulations Administered</b> Supporting Legislation, Laws, Agreements & Guidelines	
<b>International Conventions &amp; Agreements Ratified</b> OPRC 90 OPRC-HNS Protocol 2000 CLC 69 92 Fund 92 Marpol 73/78 III IV V VI Linkage to Other National Plans (bi- and multi-lateral) Cartagena Convention	<ul style="list-style-type: none"> <li>• CLC '69.</li> <li>• Ratified Marpol 73/78 I, II &amp; V.</li> <li>• Signed Cartagena Convention</li> </ul>
<b>Exchanging Expertise &amp; Information</b>	<ul style="list-style-type: none"> <li>• Suggests exchanging copies of the National Contingency Plans with competent authorities of neighboring countries (Belize, Guatemala, Nicaragua and El Salvador) but nothing established.</li> </ul>



3. Preparedness & Policies	
<b>National Response Resources</b>	<ul style="list-style-type: none"> <li>Listed in Support Agencies above.</li> </ul>
<b>Local and Area Plan Requirements</b> Use of Scenarios	
<b>Risk Assessment</b>  Trends, Sources, Causes of Spills (vessel traffic, transfer, production, exploration, collision, grounding)  Areas of High Risk  Environmental Data  Oils of Concern  Protection Priorities (coastal areas for protection & cleanup)  Prevention Programs	<ul style="list-style-type: none"> <li>Risk of spills from various sources very briefly mentioned.</li> <li>Annex D to show sensitive and high priority areas – Annex D is missing from report.</li> </ul>
<b>Training / Exercises</b>  Joint Programs	<ul style="list-style-type: none"> <li>The Marine Incident Command will coordinate periodic exercises on reporting, alerting and communications systems.</li> <li>Exercise for coastal cleanup and equipment mobilization and deployment will be developed.</li> <li>Oil companies will participate in training programs.</li> </ul>
<b>Illegal Discharges</b>	<ul style="list-style-type: none"> <li>Policy in place</li> </ul>
<b>Dispersants Policy</b>  List of Approved Dispersants  Pre-approved Locations  Conditions of Use	<ul style="list-style-type: none"> <li>Annex J National Dispersant Use Policy administered by the Environmental Authority.</li> <li>Lists conditions of use and appropriate locations.</li> <li>No pre-approved locations.</li> <li>List of approved dispersants to be supplied by Honduran Environmental Authority.</li> </ul>
<b>In-Situ Burning Policy</b>  Applicable Situations  Monitoring	<ul style="list-style-type: none"> <li>No policy in place.</li> </ul>
<b>Environmental Policies</b>  Sensitivity Mapping/  Trajectory Modeling	<ul style="list-style-type: none"> <li>No reference were included to sensitivity mapping in the version of the plan received. Reported that maps are available from NGOs.</li> </ul>
<b>International Policies</b>  Receiving Spill Response Assistance  Giving Spill Response Assistance	<ul style="list-style-type: none"> <li>The airports of Ceiba, San Pedro Sula, Roatán, Utila and Guanaja in the north and Tegucigalpa in the south will be used for unloading and refueling.</li> <li>Special agreements with the Direction of Migration, Health -environmental Direction of Customs and authorities to expedite the process of entrance and exit of resources.</li> </ul>



4. Response	
<p><b>Response Management</b></p> <ul style="list-style-type: none"> <li>Tiered Concept with escalation of incident (1 to 3)</li> <li>Regional Responsibilities</li> <li>Organization of Lead Agency</li> <li>Interagency roles (ICS, Unified Command)</li> <li>Specialist /Contractor Assistance</li> <li>Health &amp; Safety</li> <li>Net Environmental Benefit Analysis</li> <li>Logistics, Administration</li> </ul>	<ul style="list-style-type: none"> <li>• 4 levels of response are noted (4<sup>th</sup> is international).</li> <li>• Annex G lists one source for expert advice.</li> <li>• Annex K lists responsibilities of main organizations.</li> </ul>
<p><b>Response Operations</b></p> <ul style="list-style-type: none"> <li>Spill Assessment (slicks and impacts)</li> <li>Response Strategies (mechanical, dispersants, burning)</li> <li>Actions to Mitigate &amp; Control Spills (including mobilization)</li> <li>Shoreline Cleanup (see “<i>Shoreline Protection &amp; Treatment</i>” below)</li> <li>Spill Surveillance and Monitoring (vessels, aircraft, remote sensing)</li> <li>Salvage (vessels, salver)</li> <li>Ongoing Monitoring of Cleanup</li> </ul>	<ul style="list-style-type: none"> <li>• Monitoring will be done by the Air Force, Naval Force and by the Main directorate of Civil Aeronautics.</li> <li>• Cleaning of tar balls arriving on coast is responsibility of Env. Authority plus other Agencies (Public Works, Secretariat, local municipalities, etc.)</li> <li>• Annex H – very limited coverage on countermeasures.</li> </ul>
<p><b>Response Centre</b></p> <ul style="list-style-type: none"> <li>Communications</li> <li>Meeting Rooms</li> <li>Library/References</li> <li>Computer Links</li> </ul>	<ul style="list-style-type: none"> <li>• Communications is the responsibility of the Command of Marine Incidents</li> <li>• Annex I indicates Communications directives.</li> <li>• Operations Center of the Marine Incident Command will be located as close as possible to the incident taking into consideration nearest cities.</li> <li>• This center will have the necessary personnel and will provide the control and centralized command for the operation.</li> </ul>
<p><b>Equipment Inventories</b></p> <ul style="list-style-type: none"> <li>Agency Capabilities, Staging Areas, Control Points</li> </ul>	<ul style="list-style-type: none"> <li>• List of local resources will be indicated in Annex E according to equipment categories, e.g., trucks, bulldozers, etc. Incomplete</li> <li>• List of external resources in Annex F – three international cleanup resources.</li> </ul>
<p><b>Shoreline Protection &amp; Treatment</b> (assessment and cleanup)</p> <ul style="list-style-type: none"> <li>Workforce</li> <li>Debris</li> <li>Oil Removal</li> <li>Cleanup Standards</li> </ul>	<ul style="list-style-type: none"> <li>• The cleanup team will consist of workers from the Public Works Secretariat, Transport and House and the local municipalities. Appeals may be made for volunteer groups to assist.</li> <li>• Cleaning of tar balls directed by Env. Authority and Health.</li> <li>• Cleanup standards set by Env. Authority and Ministry of Tourism.</li> </ul>



<p><b>Storage, Disposal and Decontamination</b></p> <p>Transportation</p> <p>Sites for Interim Storage &amp; Final Disposal</p> <p>Decontamination</p>	<ul style="list-style-type: none"> <li>• Environmental Authorities and Health oversee disposal of shoreline cleanup materials.</li> <li>• The Public Works Secretariat, Transport and Housing and local municipalities mobilize and equip workers who participate in such operations.</li> </ul>
<p><b>Restoration &amp; Post-Spill Monitoring</b></p> <p>Lead Agency with Support Organizations</p> <p>Further Study of Cleanup</p>	<ul style="list-style-type: none"> <li>• Restoration programs are briefly indicated that follow cleanup.</li> <li>• Environmental Authority and the Honduran Institute of Tourism in consultation with other support institutions determine the extent of these programs.</li> <li>• A monitoring program would be implemented in highly sensitive areas.</li> </ul>



5. Reporting, Communication, Legal & Financial Matters	
<p><b>Reporting &amp; Alerting Systems</b></p> <p>Notification &amp; Reporting Requirements</p> <p>Report Form (spill details, environment, reporting - POLREPs)</p> <p>Notification Charts and System</p> <p>Means of Communication</p> <p>Post-incident Review</p>	<ul style="list-style-type: none"> <li>• POLREP is included in Annexes B (initial report) and C (follow-up report).</li> <li>• Explanation of format is indicated.</li> <li>• No notifications charts included.</li> <li>• Post-incident report would be prepared – a preliminary report to Incident Command within 3 days and a complete report that include information from all institutions within 7 days of finalizing operations.</li> <li>• The Harbor Master is the initial contact for notification of an oil spill. The Harbor Master then notifies the Section of Prevention of Contamination of the Main Directorate of the Merchant Marine, which will then notify all other institutions involved.</li> <li>• Main Directorate of the Merchant Marine activates the Operations Center (Marine Incident Command) which confirms the magnitude of the spill, activates the Contingency Plan and contacts external agencies such as IMO, COCATRAM, and others as appropriate.</li> </ul>
<p><b>Communications</b></p> <p>Systems between Response Centre &amp; Vessels, Aircraft</p> <p>Repeater Stations, frequencies, radios, telephones, fax, e-mail, web</p>	<ul style="list-style-type: none"> <li>• Communications is very generally addressed.</li> <li>• No specific channels, frequencies, etc. are given.</li> </ul>
<p><b>Contacts</b></p> <p>Internal</p> <p>External</p>	<ul style="list-style-type: none"> <li>• Appendix A will list contacts – none indicated.</li> </ul>
<p><b>Public Information</b></p> <p>Designated Public Affairs/Media Advisor</p> <p>Community Liaison</p>	<ul style="list-style-type: none"> <li>• The Marine Incident Command will contract a public relations official when needed.</li> <li>• Official press notices will be written in consultation with the Honduran Institute of Tourism.</li> </ul>
<p><b>Financial Commitment / Claims / Record Keeping</b></p> <p>Sample Worksheets</p> <p>Reimbursement to Fishermen, Property Owners, etc.</p> <p>Commitment to Regional Centre or Secretariat</p>	<ul style="list-style-type: none"> <li>• No samples of claims or worksheets are given</li> <li>• Compensation will be made according to International Conventions.</li> </ul>





<p><b>Legal Matters</b></p> <p>Samples/Evidence</p> <p>Taking Statements</p> <p>Mechanisms for settling disputes and claims</p> <p>Notes</p>	<ul style="list-style-type: none"> <li>• Legal issues including sampling and evidence are not dealt with.</li> <li>• Compensation will be made according to International Conventions.</li> <li>• Marine Incident Command, as well as all Commanders of Incidents will be responsible to ensure that registries of claims are filed.</li> <li>• Intervention: The Marine Incident Command or Harbor Authorities will monitor actions taken by a damaged ship and will evaluate the salvage agreement between the master of the Vessel and the Salvage Company, and will be prepared at all times to intervene where:             <ul style="list-style-type: none"> <li>(a) an accident has happened to the boat</li> <li>(b) oil from the ship will or may cause pollution on a large scale within the Republic of Honduras or waters thereof;</li> <li>(c) action is urgently required to prevent or reduce oil pollution or the risk of oil pollution.</li> </ul> </li> <li>• Policy in place for illegal discharges.</li> </ul>
<p><b>Other Factors</b></p> <p>Formatting</p> <p>Use of charts, tables, checklists, graphics</p>	<ul style="list-style-type: none"> <li>• Extensive use of lists</li> <li>• No organizational charts are included nor graphics.</li> <li>• Plan has been based on Caribbean template.</li> </ul>

**Additional Elements**

- Plan has been based on Caribbean (REMPEITC) template.



## Review of Nicaragua National Plan



1. Introduction / Preface	
<b>Table of Contents</b>	<ul style="list-style-type: none"> <li>• Index included.</li> </ul>
<b>Distribution</b> Lead Agency Support Agencies Other Organizations	<ul style="list-style-type: none"> <li>• No Distribution List included.</li> <li>• Lead Agency: Director General for Aquatic Transport (Ministry of Transport).</li> <li>• Support from several government agencies.</li> <li>• Other organizations are oil companies and NGOs.</li> </ul>
<b>Plan Custodian</b> Updating & Revisions	<ul style="list-style-type: none"> <li>• Modification of a page will include page number and new date (e.g., Page 3/September 2003).</li> <li>• Modifications resulting in extra pages are numbered as followed: Page # bis/Date; Page # bis 1/Date; Page # bis 2/Date. The new numeration must be shown in the Index.</li> <li>• Modifications must be sent to Main Directorate of Marine Transport for approval.</li> <li>• Approvals and Modifications tracked in Annex.</li> </ul>
<b>Purpose &amp; Scope</b> Statement of Authority Geographical Area Covered, Regions	<ul style="list-style-type: none"> <li>• Identifies main authority.</li> <li>• Describes types of operations that must follow plan within Nicaragua (domestic and international trade).</li> <li>• Facility Plan title page must include type of plan, name of port or company, geographic location, basic characteristics and information on its proprietors. Introduction must include Company Environmental Conservation Policy, intention and objectives of the Plan, reach and cover of the Plan.</li> </ul>
<b>Glossary / Definitions / Abbreviations / Units</b>	<ul style="list-style-type: none"> <li>• Includes glossary and good cross-section of definitions.</li> <li>• No units included.</li> <li>• Abbreviations are included below organizational charts. A list of these, located at the glossary, would also be useful.</li> </ul>



2. Response Organization	
<p><b>Lead Agency</b></p> <p>Team Members</p> <p>Roles (including National OSC)</p> <p>Responsibilities</p>	<ul style="list-style-type: none"> <li>• Provides national and local response structures.</li> <li>• Functions and responsibilities of the members are indicated for 12 main positions.</li> </ul>
<p><b>Support Agencies</b></p> <p>Technical, Advisory and other roles defined.</p> <p>Areas of Jurisdiction (<i>e.g., vessels, ports, platforms, SBMs</i>)</p> <p>Organizational charts and links</p>	<ul style="list-style-type: none"> <li>• Support agencies identified in local plans. Support will be summoned as required from various government and private resources.</li> <li>• Identified geographic jurisdictions of adjacent areas around ports.</li> <li>• Functions and responsibilities of technical personnel in charge of the operations and local personnel.</li> <li>• Organizational charts provided for national and local response.</li> </ul>
<p><b>Other Participating Agencies / Companies</b></p> <p>Roles</p> <p>Responsibilities</p> <p>Relation to Private Industry</p> <p>Interagency Agreements</p>	<ul style="list-style-type: none"> <li>• In the event of a spill, the Head of Aquatic Transport is authorized to sign agreement with private companies operating in area.</li> <li>• Policy and procedure for collaboration of organizations and national companies.</li> <li>• Make prior agreements with cleanup contractors.</li> <li>• The National Plan is linked to the "National System Plan for the Attention and Prevention of Natural Disasters" (SINAPRED).</li> </ul>
<p><b>National Regulations Administered</b></p> <p>Supporting Legislation, Laws, Agreements &amp; Guidelines</p>	<ul style="list-style-type: none"> <li>• All ships/exploration operations/ports/harbor facilities/terminals/pipelines that transport/handle hydrocarbons or other potentially dangerous substances must submit emergency plans to the Main directorate of Aquatic Transport. A minimum level of personnel and equipment must be included in the plan prior to approval. Approved plans that are maintained in good condition must be kept on-board ships.</li> <li>• Ships that lack compliance to the above are subject to a fine and are prohibited from sailing.</li> <li>• The operators of exploration operations/ports/harbor facilities/terminals/pipelines that are responsible for polluting water are subject to a fine (Regulation of the PCN). If the pollution resulted from lack of due diligence and put the aquatic environment at risk, the Main directorate of Aquatic Transport will order the suspension of the operations.</li> <li>• National policy regarding responsibility for response measures and cost of cleanup.</li> <li>• Ships that transport more than 2000 tons of potentially dangerous hydrocarbons or injurious substances must present to the Main directorate of Aquatic Transport, or to the Naval Force of the Army of Nicaragua, a copy of the certificates that guarantees insurance of the ship and against failures and contamination. Non-compliance results in prevention of entry into waters of national jurisdiction or prevention of its operation.</li> <li>• Failure to inform the Main directorate of Aquatic Transport or the Naval Force of the Army of Nicaragua of pollution from a ship/exploration operation/port/ harbor facility/terminal/pipeline, or falsification of information, will result in a fine to the person-in-charge (Regulation to the PCN). Co-responsibility clause.</li> <li>• Emergency Plans will have a use of five (5) years and are subject to an annual review that will entail a spill simulation and response exercise.</li> </ul>



<p><b>International Conventions &amp; Agreements Ratified</b></p> <p>OPRC 90</p> <p>OPRC-HNS Protocol 2000</p> <p>CLC 69 92 Fund 92</p> <p>Marpol 73/78 III IV V VI</p> <p>Linkage to Other National Plans (bi- and multi-lateral)</p> <p>Cartagena Convention</p>	<ul style="list-style-type: none"> <li>● Ratified International treaty to Prevent the Contamination by Ships 1973 and their Protocol 1978 (MARPOL 73/78).</li> <li>● Signed Cartagena Convention.</li> <li>● CLC '69.</li> </ul>
<p><b>Exchanging Expertise &amp; Information</b></p>	<ul style="list-style-type: none"> <li>● General provisions for information and technical exchange are indicated.</li> </ul>



3. Preparedness & Policies	
<p><b>National Response Resources</b></p>	<ul style="list-style-type: none"> <li>• Main directorate of Aquatic Transport.</li> <li>• Naval Force of the Army of Nicaragua.</li> <li>• Control Centre of Spills of Contaminants (JECECODECON).</li> <li>• Harbor Master.</li> <li>• Municipal authorities.</li> </ul>
<p><b>Local and Area Plan Requirements</b></p> <p>Use of Scenarios</p>	<ul style="list-style-type: none"> <li>• Very detailed, comprehensive coverage of information to be included in local/facility/ship plan. This is the main emphasis of the National Plan.</li> <li>• All ships/exploration operations/ports/harbor facilities/terminals/pipelines that transport/handle hydrocarbons or other potentially dangerous substances must submit emergency plans to the Main directorate of Aquatic Transport. A minimum level of personnel and equipment must be included in the plan prior to approval.</li> <li>• Comply with the Official System of Response.</li> <li>• Work with other Response Plans (national and regional).</li> <li>• Describe activation of the company's response system.</li> <li>• Declaration or copy of insurance certificates.</li> <li>• Annex 4 – Facility Plan Index – content should be included in all emergency plans.</li> </ul>
<p><b>Risk Assessment</b></p> <p>Trends, Sources, Causes of Spills (vessel traffic, transfer, production, exploration, collision, grounding)</p> <p>Areas of High Risk</p> <p>Environmental Data</p> <p>Oils of Concern</p> <p>Protection Priorities (coastal areas for protection &amp; cleanup)</p> <p>Prevention Programs</p>	<ul style="list-style-type: none"> <li>• Facility Plans should include:                             <ul style="list-style-type: none"> <li>- Spill risk analysis.</li> <li>- Data on the location, segregation and characteristics of the storage areas for hydrocarbon and other potentially dangerous substances.</li> <li>- No specific spill database.</li> <li>- Characteristics of pollutants of concern.</li> <li>- Prevention procedures for fire and security during navigation.</li> <li>- Prevention procedures for contamination from routine operations and from wrecks.</li> <li>- Outline preventive measures that must be taken to avoid contamination during loading and unloading operations.</li> <li>- Outline response measures to be taken for operational spills (eg. hose breakage).</li> <li>- Clearly establish the duties of supervisors and crew members.</li> </ul> </li> <li>• Annex 10 – criteria for the determination of sensitive areas and protection zones, including:                             <ul style="list-style-type: none"> <li>- ecological criteria</li> <li>- socioeconomic and cultural criteria</li> <li>- scientific, educational and historical value criteria</li> <li>- factors that contribute to the vulnerability of the zone</li> </ul> </li> </ul>
<p><b>Training / Exercises</b></p> <p>Joint Programs</p>	<ul style="list-style-type: none"> <li>• Outlines requirements for plans to do monthly, bi-monthly, quarterly (semester?) and annual training.</li> <li>• Emergency Plans are subject to an annual review that will entail a spill simulation and response exercise.</li> <li>• Upon submission of a plan for approval, Technical Personnel conduct an inspection that includes a field exercise to demonstrate operative strategies and resources available to respond to a real emergency.</li> </ul>



<p><b>Dispersants Policy</b></p> <p>List of Approved Dispersants</p> <p>Pre-approved Locations</p> <p>Conditions of Use</p>	<ul style="list-style-type: none"> <li>• Criteria are established in the regulations of the Competent Authority (not included). Approval for use will consider strategies described by the Local plans</li> <li>• Annex 8 gives general indication of requirements for dispersants.</li> <li>• Annex 9 (equipment inventory) requests data on toxicity and effectiveness, and data approval (country, disposition (?), number).</li> <li>• Guidelines and techniques for the implementation of dispersants also included.</li> </ul>
<p><b>In-Situ Burning Policy</b></p> <p>Applicable Situations</p> <p>Monitoring</p>	<ul style="list-style-type: none"> <li>• No in-situ policy included.</li> </ul>
<p><b>Environmental Policies</b></p> <p><b>Sensitivity Mapping/</b></p> <p><b>Trajectory Modeling</b></p>	<ul style="list-style-type: none"> <li>• Sensitivity mapping not addressed except for references to risk assessment requirements for local plans.</li> <li>• Also, criteria are well presented in Annex 10 for identifying critical/sensitive zones that require protection.</li> </ul>
<p><b>International Policies</b></p> <p>Receiving Spill Response Assistance</p> <p>Giving Spill Response Assistance</p>	<ul style="list-style-type: none"> <li>• Policy and procedure for international collaboration.</li> </ul>



4. Response	
<p><b>Response Management</b></p> <ul style="list-style-type: none"> <li>Tiered Concept with escalation of incident (1 to 3)</li> <li>Regional Responsibilities</li> <li>Organization of Lead Agency</li> <li>Interagency roles (ICS, Unified Command)</li> <li>Specialist /Contractor Assistance</li> <li>Health &amp; Safety</li> <li>Net Environmental Benefit Analysis</li> <li>Logistics, Administration</li> </ul>	<ul style="list-style-type: none"> <li>• 3 Tiers of incident (local, national, international).</li> <li>• 3 stages of response are also elaborated on, namely, Evaluation, Alert and Execution. Charts included.</li> <li>• Responsibilities of Regional (National) government agencies.</li> <li>• Responsibilities of Lead Agency, including supervisors and crew.</li> <li>• Plans should establish prior agreements with cleanup contractors.</li> <li>• Personal protection and operative security. Head of the Control Center of Spills of Contaminants (JECECODECON) will distribute directives with respect to the safety measures and use of suitable personal protective equipment for the different component tasks. Annex 11 - Criteria Selection And Use Of Security Equipment.</li> <li>• Facility Plan should implement safety procedures for communities at risk.</li> </ul> <p>Logistics, Administration:</p> <ul style="list-style-type: none"> <li>• Plans should use an established method to obtain and mobilize personnel and equipment.</li> <li>• Plans should address response operation expenses, including transport of materials and personnel, lodging and feeding, rent of materials, hiring of experts and personnel, as well as insurance.</li> <li>• An established emergency account permits rapid action. JECECODECON will request authorization to approve the required expenses. Documentation required for approval in ANNEX 12 (spill details, updates, action required and taken, damage caused, final report).</li> <li>• Recovery of expenses requires daily chronological documentation of facts and strict control of the expenses. Information supplied by the JEO, documented by the JAD and approved by the JECECODECON.</li> <li>• Declaration or copy of insurance coverage required.</li> </ul>



<p><b>Response Operations</b></p> <p>Spill Assessment (slicks and impacts)</p> <p>Response Strategies (mechanical, dispersants, burning)</p> <p>Actions to Mitigate &amp; Control Spills (including mobilization)</p> <p>Shoreline Cleanup (see <i>"Shoreline Protection &amp; Treatment"</i> below)</p> <p>Spill Surveillance and Monitoring (vessels, aircraft, remote sensing)</p> <p>Salvage (vessels, salver)</p> <p>Ongoing Monitoring of Cleanup</p>	<ul style="list-style-type: none"> <li>• Determine resources that can be affected. Lead Government agency will assign technical personnel to assess impacts (slick info, cause, impacts to environment and property, countermeasures required).</li> <li>• Determine response strategies that may be applied to spill scenarios profiled in risk assessment.</li> <li>• Describe the response measures for each level of response.</li> <li>• Mobilization of personnel and equipment by water, air and land within the regional coverage of the Plan. Determine options available to garner equipment through agreements, rent or acquisition.</li> <li>• Provides guidelines / techniques for implementation of dispersants.</li> <li>• Plans should include specific information about the ship and the shipping company and the measures that must be taken in the event of an emergency (grounding, fire/explosion, damage, excessive list, etc.).</li> <li>• Plan should include direction on:             <ul style="list-style-type: none"> <li>• High-priority measures.</li> <li>• Structure and stability of the ship, including contact information for assistance with necessary calculations.</li> <li>• Procedures for transferring the ship's cargo.</li> <li>• Characteristics and location of the components required for towing.</li> <li>• Health and safety issues are also addressed.</li> </ul> </li> </ul>
<p><b>Response Centre</b></p> <p>Communications</p> <p>Meeting Rooms</p> <p>Library/References</p> <p>Computer Links</p>	<ul style="list-style-type: none"> <li>• Not indicated</li> </ul>





<p><b>Equipment Inventories</b></p> <p>Agency Capabilities, Staging Areas, Control Points</p>	<ul style="list-style-type: none"> <li>• Plans must list equipment available (company's own and that available to borrow).</li> <li>• Establish prior agreements with cleanup contractors.</li> <li>• Annex 9 – recommended equipment inventory for organizations and national and foreign companies that will comprise the local plans. Comprehensive, innovative format for equipment list according to categories (but with no specific equipment included), including information on:             <ul style="list-style-type: none"> <li>- type</li> <li>- amount</li> <li>- design</li> <li>- dimensions and weight by unit</li> <li>- complementary additional equipment</li> <li>- time of mobilization</li> <li>- average (?) of required transport</li> <li>- average of transport available</li> <li>- required personnel</li> <li>- cost of acquisition</li> <li>- cost of daily rent.</li> </ul> </li> <li>• Categories for recommended equipment list include:             <ul style="list-style-type: none"> <li>- booms</li> <li>- skimmers</li> <li>- transfer equipment</li> <li>- temporary storage</li> <li>- boats</li> <li>- aircraft</li> <li>- dispersants</li> <li>- spray gear</li> <li>- shoreline treatment</li> <li>- communications</li> </ul> </li> </ul>
<p><b>Shoreline Protection &amp; Treatment</b> <i>(assessment and cleanup)</i></p> <p>Workforce</p> <p>Debris</p> <p>Oil Removal</p> <p>Cleanup Standards</p>	<ul style="list-style-type: none"> <li>• Excellent criteria are presented in Annex 10 for identifying critical and sensitive zones that require protection. Protective countermeasures are not delineated.</li> </ul>
<p><b>Storage, Disposal and Decontamination</b></p> <p>Transportation</p> <p>Sites for Interim Storage &amp; Final Disposal</p> <p>Decontamination</p>	<ul style="list-style-type: none"> <li>• Procedure for the disposal of contaminated materials collected. The Main directorate of Marine Transport determines the procedure to follow for final disposal following consultation with the Harbor Master, municipal authorities, and/or companies involved.</li> <li>• ANNEX 14 – Outlines criteria for selecting and establishing temporary storage sites.</li> </ul>
<p><b>Restoration &amp; Post-Spill Monitoring</b></p> <p>Lead Agency with Support Organizations</p> <p>Further Study of Cleanup</p>	<ul style="list-style-type: none"> <li>• Post-spill reporting is addressed.</li> </ul>



5. Reporting, Communication, Legal & Financial Matters	
<p><b>Reporting &amp; Alerting Systems</b></p> <p>Notification &amp; Reporting Requirements</p> <p>Report Form (spill details, environment, reporting - POLREPs)</p> <p>Notification Charts and System</p> <p>Means of Communication</p> <p>Post-incident Review</p>	<ul style="list-style-type: none"> <li>● Pre-established format of notification that permits evaluation and classification of the emergency.</li> <li>● When a spill occurs or is likely to occur, the person-in-charge of the ship/facility/platform/ terminal/pipeline must notify the Main directorate of Aquatic Transport or Jurisdictional Marine Department as soon as possible. Updates and final report will be forwarded using the communication model outlined in Annex 12.</li> <li>● Annex 13 - Provides information to be included on spill report forms.</li> <li>● The final report should register circumstances and details that arose during the response operation in order to improve planning and operative techniques, and to justify expenses of the operation. This report must be submitted within 15 days of the conclusion of the response.</li> <li>● Ships must notify the next Ribereño State of a spill or probable spill and provide updates at intervals that do not exceed six hours.</li> <li>● Annex 1 and 2 – Notification format for marine incidents. International (?) format, eg. AA (ship), BB (date and hour of the event), CC (position in lat/long), DD (position in nautical miles from known location), etc.</li> </ul>
<p><b>Communications</b></p> <p>Systems between Response Centre &amp; Vessels, Aircraft</p> <p>Repeater Stations, frequencies, radios, telephones, fax, e-mail, web</p>	<ul style="list-style-type: none"> <li>● Radio communications will use established frequencies.</li> <li>● Communications between Coastal Stations will take place through the corresponding Fixed Services.</li> <li>● Communications between the Main directorate of Marine Transport and official organizations and/or involved companies will be through national and international systems available (telephones, fax, VHF, etc.).</li> <li>● Establish system of communications, contacts and information policy.</li> </ul>
<p><b>Contacts</b></p> <p>Internal</p> <p>External</p>	<ul style="list-style-type: none"> <li>● Provide contact information.</li> </ul>
<p><b>Public Information</b></p> <p>Designated Public Affairs/Media Advisor</p> <p>Community Liaison</p>	<ul style="list-style-type: none"> <li>● Provide directions on how information should be distributed to the media.</li> <li>● Chief of Public Relations is identified as a specific role.</li> <li>●</li> </ul>
<p><b>Financial Commitment / Claims / Record Keeping</b></p> <p>Sample Worksheets</p> <p>Reimbursement to Fishermen, Property Owners, etc.</p> <p>Commitment to Regional Centre or Secretariat</p>	<ul style="list-style-type: none"> <li>● The final report should register circumstances and details that arose during the response operation in order to justify expenses.</li> </ul> <p>Expenses for all personnel and equipment should be registered in daily chronological form.</p>



<p><b>Legal Matters</b></p> <p>Samples/Evidence</p> <p>Taking Statements</p> <p>Mechanisms for settling disputes and claims</p> <p>Notes</p>	<ul style="list-style-type: none"> <li>• The final report should register circumstances and details that arose during the response operation.</li> <li>• The Main Directorate of Aquatic Transport presents the invoice to the company, person or organization responsible for the spill.</li> <li>• National Policy addresses intervention.</li> </ul>
<p><b>Other Factors</b></p> <p>Formatting</p> <p>Use of charts, tables, checklists, graphics</p>	<ul style="list-style-type: none"> <li>• Plans should use the following format:             <ul style="list-style-type: none"> <li>- Binder with removable pages and numbered tabs.</li> <li>- Footer with page number and date.</li> <li>- Written in Spanish and easy to use.</li> <li>- Response organization chart.</li> <li>- Illustration of the area covered.</li> <li>- Include signed agreements.</li> <li>- Diagrams and specific details of the ship.</li> </ul> </li> <li>• Uses organizational charts for National and Local response teams and flow charts for response actions.</li> </ul>

**Additional Elements**

- This National Plan emphasizes very detailed, comprehensive coverage of information to be included in local/facility/ship plan. Much of this required information is not included in this plan.



## Review of Panama National Plan



(Rough Draft of Panama Plan dated June 2003 received.)

1. Introduction / Preface	
<b>Table of Contents</b>	<ul style="list-style-type: none"> <li>• Index included.</li> </ul>
<b>Distribution</b> Lead Agency Support Agencies Other Organizations	<ul style="list-style-type: none"> <li>• Naval Administration of Panama identified as Lead Agency.</li> <li>• No distribution included.</li> </ul>
<b>Plan Custodian</b> Updating & Revisions	<ul style="list-style-type: none"> <li>• Plan must be evaluated and updated every 2 to 3 years and after a spill.</li> <li>• Good list of evaluation criteria.</li> </ul>
<b>Purpose &amp; Scope</b> Statement of Authority Geographical Area Covered, Regions	<ul style="list-style-type: none"> <li>• Clearly states legal authority.</li> <li>• National Contingency Plan covers marine contamination in shipping channels, harbor enclosures, and the territorial sea up to 200 nautical miles of the Republic of Panama in the area of the Caribbean and the Panamanian Pacific.</li> <li>• Contamination of the following ports are also covered:                             <ol style="list-style-type: none"> <li>1. Balboa Port - Port of Balboa and the anchorage of Balboa.</li> <li>2. Cristóbal - Port of Cristóbal, areas of tanks of Mont Hope, anchorage of Cristóbal, wharf.</li> <li>3. Folks River, Mine Bay.</li> </ol> </li> <li>• 4. Port Panama - Port of Vacamonte, the port of harbor enclosure of Taboga, and Taboguilla island.</li> </ul>
<b>Glossary / Definitions / Abbreviations / Units</b>	<ul style="list-style-type: none"> <li>• Units of measurement and conversion factors noted in Part D of Annex III.</li> <li>• Slick area calculations are included in Annex III.</li> <li>• Glossary of Terms is given in Annex III.</li> </ul>



2. Response Organization	
<p><b>Lead Agency</b></p> <p>Team Members</p> <p>Roles (including National OSC)</p> <p>Responsibilities</p>	<ul style="list-style-type: none"> <li>• Naval Administration of Panama identified as Lead Agency</li> <li>• Provides responsibilities for Head of Control of National Contamination or Head of Action.</li> <li>• The Command and Control Center will direct the actions, strategies and tactics for response operations and will be located in the offices of the Naval Administration of Panama.</li> </ul>
<p><b>Support Agencies</b></p> <p>Technical, Advisory and other roles defined.</p> <p>Areas of Jurisdiction (<i>e.g., vessels, ports, platforms, SBMs</i>)</p> <p>Organizational charts and links</p>	<ul style="list-style-type: none"> <li>• Various public and private organizations support the Naval Administration in spill response:                             <ul style="list-style-type: none"> <li>- Oil companies - technical support                                     <ul style="list-style-type: none"> <li>▪ PetroTerminal of Panama (PTP)</li> <li>▪ Refinery Panama (RP)</li> <li>▪ Atlantic Pacific SA (APSA)</li> </ul> </li> <li>- Standard Esso Oil (ESSO)</li> <li>- National Authority of Atmosphere - protected and sensitive areas</li> <li>- Ministry of Health - environmental health</li> <li>- Panama Canal Authority (ACP) - security of Canal</li> <li>- Ocean Pollution Control (OPC) – pollution concessionary control</li> <li>- Marine Service and Police - marine security and logistic</li> <li>- SINAPROC - civil defense</li> <li>- Firemen - civil defense and fires</li> <li>- IDAAN - water plants</li> <li>- Electrical companies – energy plants</li> <li>- Ministry of Commerce and Industry</li> </ul> </li> <li>• Chart shows structure of response organizations.</li> <li>• Agency or company responsible for supplying cleanup equipment/crew is determined by location of spill and is outlined within this plan.</li> </ul>
<p><b>Other Participating Agencies / Companies</b></p> <p>Roles</p> <p>Responsibilities</p> <p>Relation to Private Industry</p> <p>Interagency Agreements</p>	<ul style="list-style-type: none"> <li>• Annex III lists spill experts and technicians (not filled out)</li> <li>• Oil companies – provide technical support                             <ul style="list-style-type: none"> <li>• Petro Terminal of Panama (PTP)</li> <li>• Refinery Panama (RP)</li> <li>• Atlantic Pacific SA (APSA)</li> <li>• Esso Standard Oil (ESSO)</li> </ul> </li> </ul>
<p><b>National Regulations Administered</b></p> <p>Supporting Legislation, Laws, Agreements &amp; Guidelines</p>	<ul style="list-style-type: none"> <li>• CLC '92 &amp; Fund '92.</li> <li>• Naval responsibility for spill response created by Law No.7, of 10 February 1998.</li> <li>• Article 311 of the Constitution</li> <li>• Law No.21 of 9 July 1980 in its articles 7, 8, 9, 10 gives the responsibility for the removal, dispersion, or cleaning of any polluting substance to the Naval Administration of Panama</li> <li>• A list of 13 regulations is also included as Part C - Annex C</li> <li>• Convention of the United Nations on the right of the sea, 1982.</li> <li>• Administrative resolution No.80 of 24 July 1984, by which the Commission of Contamination is created.</li> </ul>



<p><b>International Conventions &amp; Agreements Ratified</b></p> <p>OPRC 90</p> <p>OPRC-HNS Protocol 2000</p> <p>CLC 69 92 Fund 92</p> <p>Marpol 73/78 III IV V VI</p> <p>Linkage to Other National Plans (bi- and multi-lateral)</p> <p>Cartagena Convention</p>	<ul style="list-style-type: none"> <li>• CLC '92 &amp; Fund '92.</li> <li>• Complementary protocol in the Agreement on the Regional Cooperation for the combat against the Contamination of the South eastern Pacific by Hydrocarbons and other injurious substances.</li> <li>• Agreement on the Regional Cooperation for Combat against the Contamination of the South eastern Pacific by Hydrocarbons and other injurious substances, in case of emergencies.</li> <li>• Protocol for the protection of the South eastern Pacific against the Contamination originating from terrestrial sources.</li> <li>• Protocol for the protection conservation and administration of marine and coastal areas of the South eastern Pacific.</li> <li>• Project of Protocol on the prohibition of the Trans-boundary Movements of dangerous waste and their elimination in the South eastern Pacific.</li> <li>• Agreement of Cartagena; Protocol on Hydrocarbon spills, in the Region of the Great Caribbean.</li> <li>• Protocol on terrestrial sources of Marine Contamination, in the region of the Great Caribbean.</li> <li>• International Treaty to prevent the Contamination by the ships, Marpol 1973.</li> <li>• Protocol International treaty to prevent the Contamination by the ships Marpol 1978.</li> <li>• Agreement of the Sea.</li> </ul>
<p><b>Exchanging Expertise &amp; Information</b></p>	<ul style="list-style-type: none"> <li>• Provision made for listing technical experts although no names included in plan.</li> </ul>



<b>3. Preparedness &amp; Policies</b>	
<b>National Response Resources</b>	
<b>Local and Area Plan Requirements</b> Use of Scenarios	<ul style="list-style-type: none"> <li>No indication given of specific scenarios; however amounts of spills define categories of incidents.</li> </ul>
<b>Risk Assessment</b> Trends, Sources, Causes of Spills (vessel traffic, transfer, production, exploration, collision, grounding) Areas of High Risk Environmental Data Oils of Concern Protection Priorities (coastal areas for protection & cleanup) Prevention Programs	<ul style="list-style-type: none"> <li>Good background on risk of spills is presented for both coasts in terms of vessel traffic, pipeline, and other related activities.</li> <li>The oil handling capacity of several ports is indicated.</li> <li>Sensitive and critical areas are listed in detail along with associated decrees. Includes areas at risk due to pipelines, fuel storage and fuel transfer within ports.</li> <li>Good description of oil behavior during wet and dry seasons and how oil behavior relates to differences in salinity.</li> </ul>
<b>Training / Exercises</b> Joint Programs	<ul style="list-style-type: none"> <li>Head of Control of National Contamination will carry out exercises periodically to ensure the contingency plan is functional.</li> </ul>
<b>Dispersants policy</b> List of Approved Dispersants Pre-approved Locations Conditions of Use	<ul style="list-style-type: none"> <li>List of approved dispersants included as well as biological additives.</li> <li>Includes list of suppliers of approved dispersants, collectors and biological additives.</li> <li>Authorization for use must be obtained from the Naval Administration of Panama and only in areas with a depth greater than 20 m.</li> </ul>
<b>In-Situ Burning Policy</b> Applicable Situations Monitoring	
<b>Environmental Policies</b> <b>Sensitivity Mapping/</b> <b>Trajectory Modeling</b>	<ul style="list-style-type: none"> <li>Description of the fate and behavior of spills is included.</li> <li>Differences in salinity and in oil behavior are related to wet and dry seasons.</li> <li>Sensitivity maps indicated as being in Annex III – g (not received).</li> <li>Lists protected areas, including fishing zones and water treatment plants.</li> </ul>
<b>International Policies</b> Receiving Spill Response Assistance Giving Spill Response Assistance	<ul style="list-style-type: none"> <li>Form is included to request international expertise and equipment along with criteria to consider.</li> <li>The Office of Migration and the Ministry of External Relations will coordinate the expeditious review and distribution of passports and travel allowances for requested experts.</li> </ul>



4. Response	
<p><b>Response Management</b></p> <ul style="list-style-type: none"> <li>Tiered Concept with escalation of incident (1 to 3)</li> <li>Regional Responsibilities</li> <li>Organization of Lead Agency</li> <li>Interagency roles (ICS, Unified Command)</li> <li>Specialist /Contractor Assistance</li> <li>Health &amp; Safety</li> <li>Net Environmental Benefit Analysis</li> <li>Logistics, Administration</li> </ul>	<ul style="list-style-type: none"> <li>• 3 Tiers of response are described in terms of location, scale and specified amounts (bbls) involved in spills.</li> <li>• Responsibilities of lead agency included.</li> <li>• A Net Environmental Benefit Analysis should be conducted prior to finalizing the response operation.</li> <li>• In 1997, the Naval Administration gave spill response management responsibilities to Ocean Pollution Control (OPC), a private company, as per Resolution. 008-97 and Contract. 2-003-97.</li> </ul>
<p><b>Response Operations</b></p> <ul style="list-style-type: none"> <li>Spill Assessment (slicks and impacts)</li> <li>Response Strategies (mechanical, dispersants, burning)</li> <li>Actions to Mitigate &amp; Control Spills (including mobilization)</li> <li>Shoreline Cleanup (see <i>"Shoreline Protection &amp; Treatment"</i> below)</li> <li>Spill Surveillance and Monitoring (vessels, aircraft, remote sensing)</li> <li>Salvage (vessels, salver)</li> <li>Ongoing Monitoring of Cleanup</li> </ul>	<ul style="list-style-type: none"> <li>• Equipment and materials listed in table.</li> <li>• Slick area calculations are included in Annex III.</li> </ul>
<p><b>Response Centre</b></p> <ul style="list-style-type: none"> <li>Communications</li> <li>Meeting Rooms</li> <li>Library/References</li> <li>Computer Links</li> </ul>	<ul style="list-style-type: none"> <li>• The Command and Control Center will direct the actions, strategies and tactics for response operations and will be located in the offices of the Naval Administration of Panama.</li> </ul>
<p><b>Equipment Inventories</b></p> <ul style="list-style-type: none"> <li>Agency Capabilities, Staging Areas, Control Points</li> </ul>	<ul style="list-style-type: none"> <li>• Public and private companies that offer the support in case of an emergency:                             <ul style="list-style-type: none"> <li>- Naval Administration of Panama AMP Focal Point Ocean</li> <li>- Pollution Concessionary Control (OPC)</li> <li>- Authority of the Panama Canal (ACP)</li> <li>- Petro Terminal of Panama (PTP)</li> <li>- Refinery Panama (RP)</li> <li>- Atlantic Pacific (SA APSA)</li> <li>- Esso Standard oil (ESSO)</li> </ul> </li> <li>• List of equipment provided for 8 public and private companies in main body of plan.</li> </ul>





<p><b>Shoreline Protection &amp; Treatment</b> <i>(assessment and cleanup)</i></p> <p>Workforce</p> <p>Debris</p> <p>Oil Removal</p> <p>Cleanup Standards</p>	<ul style="list-style-type: none"> <li>• Not indicated.</li> </ul>
<p><b>Storage, Disposal and Decontamination</b></p> <p>Transportation</p> <p>Sites for Interim Storage &amp; Final Disposal</p> <p>Cleaning Equipment</p>	<ul style="list-style-type: none"> <li>• The final disposal site for petroleum waste will be a site assigned by the Naval Administration of Panama, the Authority National of the Atmosphere, the Ministry of Health, and the IDAAN that does not affect public health, environment, marine and coastal waters, rivers, lakes, seas and resources.</li> <li>• Addresses decontamination of equipment so as not to pollute clean areas.</li> </ul>
<p><b>Restoration &amp; Post-Spill Monitoring</b></p> <p>Lead Agency with Support Organizations</p> <p>Further Study of Cleanup</p>	<ul style="list-style-type: none"> <li>• Head of Control of National Contamination will coordinate the necessary information for the recovery of the coasts and affected beaches.</li> </ul>



5. Reporting, Communication, Legal & Financial Matters	
<p><b>Reporting &amp; Alerting Systems</b></p> <p>Notification &amp; Reporting Requirements</p> <p>Report Form (spill details, environment, reporting - POLREPs)</p> <p>Notification Charts and System</p> <p>Means of Communication</p> <p>Post-incident Review</p>	<ul style="list-style-type: none"> <li>• All persons in charge of a ship or marine or terrestrial installation must notify the Naval Administration of Panama of the occurrence of all discharges of Polluting Substance from the respective ship or installation, as soon as has knowledge of it.</li> <li>• Head of Control of National Contamination will make the closing report.</li> <li>• Includes list of items to include in "Closing Report".</li> </ul>
<p><b>Communications</b></p> <p>Systems between Response Centre &amp; Vessels, Aircraft</p> <p>Repeater Stations, frequencies, radios, telephones, fax, e-mail, web</p>	<ul style="list-style-type: none"> <li>• Not indicated</li> </ul>
<p><b>Contacts</b></p> <p>Internal</p> <p>External</p>	<ul style="list-style-type: none"> <li>• Annex III – Space provided for list of experts and technicians (not filled out).</li> </ul>
<p><b>Public Information</b></p> <p>Designated Public Affairs/Media Advisor</p> <p>Community Liaison</p>	<ul style="list-style-type: none"> <li>• Public Relations section is included.</li> <li>• Head of Control of National Contamination will give information to the press.</li> </ul>
<p><b>Financial Commitment / Claims / Record Keeping</b></p> <p>Sample Worksheets</p> <p>Reimbursement to Fishermen, Property Owners, etc.</p> <p>Commitment to Regional Centre or Secretariat</p>	<ul style="list-style-type: none"> <li>• Good form included for equipment received and condition upon its return.</li> </ul>



<p><b>Legal Matters</b></p> <p>Samples/Evidence</p> <p>Taking Statements</p> <p>Mechanisms for settling disputes and claims</p> <p>Notes</p>	<ul style="list-style-type: none"> <li>● Procedure for the Contamination Official to conduct spill investigation:                     <ul style="list-style-type: none"> <li>- Site visit to evaluate and assess spill.</li> <li>- Obtain spill samples, 4 photographs from different angles, hydrocarbon analysis.</li> <li>- Approach captain or person in charge of the ship or installation for information on the spill and meet with the representative of the shipping agency, if possible.</li> <li>- Take notes on all spill information and measures taken by the person in charge to stop the spill.</li> <li>- Report to Office for Contamination Control of the Naval Administration of Panama and submit form requesting legal advisor support, as necessary.</li> <li>- Take witness declarations.</li> <li>- Complete documents: page of commitment (obligatory), page of investigation (obligatory), page of information on polluting substances.</li> <li>- Send a Closing Report to the Commission of Control of Contamination, Port Administrator, Department of Contamination Control Archives, Office of Contamination of the respective Port and the Invoicing Office.</li> </ul> </li> <li>● Where the person in charge of the pollution refuses to render declarations, the OCC will notify the Port Administrator who can refuse the ship to sail.</li> <li>● Sanction of a reprimand and fine up to 200.000 Balboas may occur following evaluation by the Commission of Control of Contamination created by means of the Administrative Resolution of 24 July 1984 before the administration of the Naval Administration of Panama.</li> </ul>
<p><b>Other Factors</b></p> <p>Formatting</p> <p>Use of charts, tables, checklists, graphics</p>	<ul style="list-style-type: none"> <li>● Organization charts are used.</li> </ul>

<p><b>Additional Elements</b></p>
<ul style="list-style-type: none"> <li>● Best background information on oil spills of documents reviewed.</li> <li>● Bibliography included that is useful.</li> <li>● Good coverage of legal aspects.</li> </ul>



## 5. COUNTRY BACKGROUND SUMMARIES



Belize	
Oil Production	0 bbl/day
Refining	0 bbl/day
No. of Platforms	
Pipelines	
No. of Terminals	
Tanker Visits	unknown



Conventions	
OPRC 90	X
UNEP	Wider Caribbean
CLC	92
Fund	92

**Spill Legislation/National Plan**

A National Spill Plan (Volume 3d of Hazard –Specific Plans) was prepared that includes emergencies (National Emergency Preparedness Plan for Oil Spills - Belize (NEPPS) 1995) and response (the Belize National Oil Spill Contingency Plan) under the Disaster Preparedness and Response Act 2000, Part III Section 8. It is maintained by the National Emergency Coordinator. Other supporting legislation includes the Belize Environmental Protection Act, 1992.

Agreements
Cartagena Convention

**Oil Spill Equipment**

Small amount of containment and recovery equipment maintained by Esso.

**Regionalization**

Belize is well prepared to enter a regional arrangement for spill response. The Dept. of Environment is the Lead Agency. The National Fire Service, ESSO Standard Oil and Ministry of Works have participated in past spills. Sensitivity mapping has been conducted.

Major movement of oil in Belize is by road tankers with a maximum of 17 000 gallons being transported in any one load. January 2002 to May 2003 Belize imported approx 86 million gallons of fuel for transportation and power generation. Storage of diesel is a potential spill source. There is also unspecified oil exploration activity.

There is an abundance of coral reefs in coastal waters. Belize is not a member of a regional or bilateral agreement other than the Cartagena Convention.



Costa Rica	
Oil Production	0 bbl/day
Refining	1 @ 25,000 bbl/day
No. of Platforms	0
Pipelines	380 km
No. of Terminals	2 - Port Limon, Pacific Coast
Tanker Visits	85 per year



Conventions	
OPRC 90	X
UNEP	Wider Caribbean
CLC	69
Fund	

Spill Legislation/National Plan
Draft National Contingency Plan
Oil spill authority is the Ministry of Public Works and Transport, by Law No. 15451 - MDPT published in Newspaper No.111

Agreements
RECOPE - PDVSA Cartagena Convention

Oil Spill Equipment
RECOPE maintains 600 m of 18 inch boom and one rope mop skimmer at Moin.

### Regionalization

A petroleum terminal at the Port of Moin on the Caribbean, pipeline, seismic activity, tourist industry, and sensitive natural resources along both the Atlantic and Pacific coasts are reasons for Costa Rica to consider regional planning. In particular, the Cahuita coral reef reserve managed by the National Parks Service is a concern. A National Plan and regulations that define JAPDEVA/ MOPT's responsibility to respond to spills have been prepared. There is limited response equipment. Updating the National Plan is recommended as a first step toward regionalization.



El Salvador	
Oil Production	0 bbl/day
Refining	1 @ 44,000 bbl/day
No. of Platforms	0
Pipelines	0 km
No. of Terminals	2 - Acajutla, La Libertad
Tanker Visits	unknown



Conventions	
OPRC 90	✓
UNEP	none
CLC	92
Fund	

Spill Legislation/National Plan
National Contingency Plan ExxonMobil refinery (Acajutla) also has plan.
Competent National Authority/Lead Agency: Executive Commission of the Port Authority (CEPA) and Navy (spills at sea, in ports) Main Directorate of Marine Transport
Centre of Natural Resources assists in response.

Agreements
El Salvador has not signed any bilateral agreements.

Oil Spill Equipment
Vessels can be converted for dispersant spraying. Some equipment may exist at the Exxon refinery in Acajutla.

### Regionalization

El Salvador's location on the coast, with neighbors to the north and south, mean that a regionalization process would result in benefits to the country. A National Plan has been developed. Spill response roles have been assigned to CEPA and the Navy. And the entire coastline has been mapped for environmental sensitivities.

El Salvador is the only Central American country without exposure to the Caribbean. However, the Cartagena Convention might represent response assistance that would result in mutual benefit.



Honduras	
Oil Production	0 bbl/day
Refining	0 bbl/day
No. of Platforms	0
Pipelines	0 km
No. of Terminals	1 – Puerto Cortes
Tanker Visits	unknown



Conventions	
OPRC '90	X
UNEP	Wider Caribbean
CLC	69
Fund	

**Spill Legislation/National Plan**

National Contingency Plan follows Wider Caribbean plan template (draft received).

Competent National Authority: National Merchant Marine.

**Agreements**

Cartagena Convention

**Oil Spill Equipment**

Companies operating coastal refineries may have limited resources.

Neither stocks of dispersants nor spray gear but crop spraying planes are available.

**Regionalization**

Honduras would benefit from regionalization and has signed the Cartagena Convention. A draft National Plan has been prepared based on the REMPEITC template. Sensitivity mapping has also been done for many areas.





Nicaragua	
Oil Production	0 bbl/day
Refining	1 @ 20,000 bbl/day
No. of Platforms	0
Pipelines	50 km
No. of Terminals	2 – Corinto, Puerto Sandino
Tanker Visits	unknown



Conventions	
OPRC 90	X
UNEP	Wider Caribbean
CLC	69
Fund	

Spill Legislation/National Plan
Spill-specific Regulations - unknown
National Contingency Plan (Directorate General of National Aquatic Transport) - draft plan 1997
Competent National Authority (Ministry of Transport)

Agreements
Cartagena Convention

Oil Spill Equipment
Esso, PETRONIC has equipment and dispersants at terminals in Corinto and Sandino Harbors.

### Regionalization

The National Contingency Plan and signing of the Cartagena Convention are good starting points for regionalization. Response equipment is limited to dispersants. Sensitivity of the Gulf of Fonseca has been completed.



Panama	
Oil Production	0 bbl/day
Refining	0 bbl/day
No. of Platforms	0
Pipelines	0 km
No. of Terminals	5 – Bahia de las Minas, Charco Azul, Puerto Amuelles, Chiriqui Grande
Tanker Visits	unknown



Conventions	
OPRC '90	x
UNEP	Wider Caribbean
CLC	92
Fund	92

### Spill Legislation/National Plan

Thirteen regulations exist including:

- Naval responsibility for spill response created by Law No.7, of 10 February 1998.
- Article 311 of the Constitution
- Law No.21 of 9 July 1980 in its articles 7, 8, 9, 10 gives spill response responsibilities to the Naval Administration.

National Plan has been developed.

### Agreements

- Cartagena Convention
- Quito Convention (Colombia, Peru, Chile and Ecuador)
- ROCRAM (Mexico, Cuba, S. America)

### Oil Spill Equipment

- Oil companies – provide technical support
- Petro Terminal of Panama (PTP)
  - Refinery Panama (RP) – Operates as a Terminal
  - Atlantic Pacific SA (APSA)
  - Standard Esso Oil (ESSO)

### Regionalization

- Panama has a National Plan in Place with the Naval Administration identified as the Lead Agency.
- The canal and associated marine traffic result in a higher risk of spills.
- Panama already has three international agreements in place.
- Sensitivity mapping addresses four zones.
- A competent cleanup capability exists.

## ARPEL MEMBERS

### COMPANIES

Administración Nacional de Combustibles Alcohol y Portland (ANCAP) - BP Exploration Company Ltda. - Chevron Corporation - Empresa Colombiana de Petróleos (ECOPETROL) - Empresa Nacional del Petróleo (ENAP) - ExxonMobil - Occidental Exploration And Production Company (OXY) - Petroleum Corporation of Jamaica (PCJ) - Petróleos de Venezuela S.A.(PDVSA) - Petróleos Mexicanos (PEMEX) - Petróleo Brasileiro S.A. (PETROBRAS) - Petróleos del Ecuador (PETROECUADOR) - Petróleos Paraguayos (PETROPAR) - Petróleos del Perú (PETROPERU) - Petroleum Company of Trinidad and Tobago Limited (PETROTRIN) - Refinadora Costarricense de Petróleo S.A. (RECOPE) - RepsolYPF - State Oil Company Suriname N.V. (STAATSOLIE) - Den Norske State Oljeselskap A.S. (Statoil) - Total - Wintershall - Yacimientos Petrolíferos Fiscales Bolivianos (YPFB)

### INSTITUTIONS

Asociación de la Industria Hidrocarburífera del Ecuador (AIHE) - Clean Caribbean & Americas (CCA) - Instituto Argentino del Petróleo y del Gas (IAPG) - Instituto Brasileiro de Petróleo e Gás (IBP) - Instituto Mexicano del Petróleo (IMP)

## ARPEL

### Regional Association of Oil and Natural Gas Companies in Latin America and the Caribbean

Established in 1965, ARPEL is an association of 27 state owned and private oil and gas companies and institutions with operations in Latin America and the Caribbean, which represent more than 90 percent of the Region's upstream and downstream operations. Since 1976, ARPEL holds formal UN-ECOSOC special consultative status.

ARPEL works together with its members –through its various Committees and Working Groups- on issues that contribute to sustainable development in the Region:

- *Economic issues:* regional energy integration, downstream and fuels
- *Environmental issues:* climate change, atmospheric emissions, oil spill contingency plans and best practices in environment and occupational health and safety management.
- *Social issues:* corporate social responsibility, relations with indigenous peoples, gender analysis and transparency

ARPEL develops a proactive attitude on issues of interest to the industry and produces documents representing the views of its members. It also promotes interaction among its members and with governments building alliances and establishing agreements with international organizations with the aim of presenting and developing a regional perspective. To accomplish its objectives, ARPEL organizes regional workshops and symposia to share information and best practices and develops technical documentation for capacity building and information exchange on the issues of interest to its members.



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