# **TABLE OF CONTENTS**

## **CHAPTER 1**

EXE	CUTIVE SUMMARY	PAGE
1.1	Introduction	63-64
	• The Plan	
1.2	<ul> <li>Scope</li> <li>Legislative Authority</li> </ul>	64
1.3	Policy Statement	
	Mechanism for activating the plan	0.00
1.4	Purpose and Objectives of the Plan	65
	Purpose of Plan	
	Objectives of the Plan	
1.5	Procedures	
1.6 1.7	ResponsibilityAssumptions	
1.7	Provision For Revision	
1.0	Treviolent of Neviolen	0,
	CHAPTER 2	
OIL S	SPILL HAZARD ANALYSIS	
2.1	Nature of an oil spill incident	68
2.2	Some Oil Spill Impacts	68-69
	CHAPTER 3	
OPE	RATIONAL ELEMENTS	
3.1	Organization for Oil Spill Management	70-75
	Government Responsibility     Oil Spill Preparedness	
3.2		75-81
3.3	National Oil Spill Response Centers Oil Spill Mitigation	Ω1
3.4	Response Coordination (Operations)	82-90
0	Phase I	02 00
	Phase II	
	Phase III	
	Phase IV	
	<ul><li>Phase V</li><li>Phase VI</li></ul>	
3.5	Priase VI  Reports and Communication	90-93
5.5	Rapid Alert System	
	Warning Message	
	Invocation	

3.6 3.7	<ul> <li>Situation Reports</li> <li>Revocation</li> <li>Post Incidents Report</li> <li>Other Emergency Information Sources</li></ul>	93 94
	CHAPTER 4	
POST	DISASTER ACTIVITIES	
•	Recovery Policy Procedures	95
	CHAPTER 5	
	ANNEXES AND APPENDICES	
•	List of Acronyms and Recognized AbbreviationsGlossary	96 97-98
ANNE	XES AND APPENDICES	
ANNE	v	DACE
AIIIIL	^	PAGE
A1	<b>\( \)</b> When you call	
		99
<b>A</b> 1	When you call	99 100
A1 A2	When you call Reporting Information Requirements Hazmat Spill	99 100 101-102
A1 A2 B	When you call Reporting Information Requirements Hazmat Spill Notification of Oil/Hazardous Materials Discharge Report	99 100 101-102 103
A1 A2 B C	When you call Reporting Information Requirements Hazmat Spill Notification of Oil/Hazardous Materials Discharge Report Public Relations Pollution Incident and Fact Sheet	99 100 101-102 103 104
A1 A2 B C	When you call Reporting Information Requirements Hazmat Spill Notification of Oil/Hazardous Materials Discharge Report Public Relations Pollution Incident and Fact Sheet Reporting Information Requirements – oil spill	99 100 101-102 103 104 105
A1 A2 B C D	When you call Reporting Information Requirements Hazmat Spill Notification of Oil/Hazardous Materials Discharge Report Public Relations Pollution Incident and Fact Sheet Reporting Information Requirements – oil spill Initial Contact/Operational Contact	99 100 101-102 103 104 105
A1 A2 B C D E	When you call	99 100 101-102 103 104 105 106
A1 A2 B C D E F1 F2	When you call———————————————————————————————————	99 100 101-102 103 104 105 106 107
A1 A2 B C D E F1 F2 G	When you call	99 100 101-102 103 104 105 106 107 108-111
A1 A2 B C D E F1 F2 G	When you call———————————————————————————————————	99 100 101-102 103 104 105 106 107 108-111 112-113 114-115

# **APPENDIX**

<b>A</b> 1	Sample-Notice of Government Interest in a Pollution Incident	119
<b>A2</b>	Sample - Notice of Government Assumption of Response Activity	120
В	Regional Reporting System Caribbean Oil Spill Alerting Mechanism Including Hazardous Material Incidents	
С	Guidance for U.S. Coast Guard Assistance for Pollution Response And Training	-122
D	Regional Reporting System/ CARIBPOLREP FORMAT	123-
	125	
E1	Guide for using Chemicals	-126-128
<b>E2</b>	Updated List of Approved Chemicals by EPA used in Pollution Removal Operations	-129-130
<b>E</b> 3	Inventory on Dispersants	-131
J	Documentation	-132

## **EXECUTIVE SUMMARY**

#### 1.1 INTRODUCTION

Jamaica is located at the intersection of a number of sea-lanes via which Petroleum by means of oil tankers is transported from the Middle East to USA, and from Central and South America. Consequently, there is the risk of Jamaica's marine ecosystem and human welfare being threatened by spills resulting from accidents involving these vessels.

## The Plan

In 1978, the Government of Jamaica activated the Port Development Project. One of its provisions was Maritime Pollution Control. This aspect was carried out through the Technical Assistance Programme of the International Maritime Organization (IMO). The IMO representative Capt. Ralph Stevenson drafted an outline of a Contingency Plan based primarily on draft Section 11 of the IMO Contingency Planning Manual.

In 1980, the Jamaica Defence Force Coast Guard drafted a proposed National Oil Spill Pollution Contingency Plan for Jamaica utilizing the IMO outline along with other existing Contingency Plans as models. The Plan was developed with the Coast Guard as the lead agency for any marine pollution incident, primarily because of its capabilities, roles and functions.

In 1982, Nordan International of Norway was contracted to write a new Contingency Plan that resulted in two volumes of an extensive study on some of the physical and biological environment of the coastal zone as well as the logistical and communications system of the country. The Nordan Plan proved to be primarily conceptual, and giving again broad outlines for a Contingency Plan.

In 1983 the Office of Disaster Preparedness was mandated to have a National Marine Pollution Contingency Plan for Jamaica promulgated as soon as possible. This resulted in a Seminar on Pollution Contingency planning directed by Ms. Maureen Mofatt of Transport Canada - Canadian Coast Guard, which was sponsored by the ODPEM and the JDF Coast Guard with relevant Government agencies involved.

This plan is an updated, reviewed version incorporating lessons learnt since 1983. The Plan is a base for ACTION, but its operational status must be

regularly exercised and combined with training for all parties including the private sector companies and field teams which may have to be mobilized in containment/clean up operations.

#### SCOPE

This Plan is effective for the territorial waters of Jamaica, its adjoining shoreline, the Contiguous Zone and Economic Exclusive Zone (E.E.Z.) where the pollution threat to Jamaica's waters, coastline, fish sanctuaries and shelf bottom exists. This Plan is also effective for spills on land and any body of water that may migrate to or flow into the marine waters. It is intended to organize the activities of all the responsible agencies and to provide a command structure and an established method of operations for the forces engaged in dealing with any incident.

## 1.2 **LEGISLATIVE AUTHORITY**

Efforts to mitigate pollution spills shall be within the general framework of this Plan. The National Disaster Committee has authorized this Plan. The Plan will be implemented in the spirit of cooperation fostered by the National Disaster Plan, National Damage Assessment Plan, Regional Pollution Contingency Plans as well as applicable International Conventions, agreements, the Protocol Concerning Cooperation in Combating Oil Spills in the wider Caribbean Region (a Protocol to the Cartagena Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, Cartagena de Indies, Columbia 1983) and the Caribbean Island OPRC Plan 1998.

#### 1.3 **POLICY STATEMENT**

- The appropriate government and private sector agencies will cooperate as fully as possible to respond expeditiously to pollution incidents that affect or threaten to affect Jamaica.
- 2. Necessary steps will be taken to ensure that the SPILLER undertakes counter measures as recommended by the OSC for abatement and removal of the oil from the natural environment.
- Actions taken pursuant to the <u>PLAN</u> shall be consistent with the statutory authorities, operational requirements, and other obligations of each of these agencies.

- 4. Any pollution incident that presents a potential threat to the country and the natural environment shall be reported immediately to the appropriate agency in accordance with the provision of the PLAN.
- The spiller shall be liable for all costs involved in the clean up of the spill and related damages and losses to affected parties, utilizing the "polluter-pays" principle.
- 6. Designated agencies in possession of equipment and other resources that may be useful in a government response to a pollution incident shall make such resources available for response operations, subject to the exigencies in their area. In addition each agency shall have available a mechanism whereby the necessary resources from the public and private sectors may be accessed in order to achieve a successful response operation.
- 7. The decision to determine whether dispersants or other chemicals may be used in response to a pollution incident will be made by the OSC after consultation with the National Environmental Planning Agency (NEPA) and Pharmaceutical and Regulatory Agency (PRA) Ministry of Health. Reference to the short-listed chemical products taken from EPA and itemized in this plan should also be considered (see Appendix E2).
- 8. The Plan shall not prejudice the resolution of any dispute that may arise in respect of liability and compensation for damages resulting from any pollution incident wherever it may occur.

#### MECHANISM FOR ACTIVATING THE PLAN

The Plan will be activated by the National Disaster Committee in consultation with the On-Scene Commander in the event of a pollution incident. When this Plan and its annexes are invoked, <u>special Customs and Immigration clearances</u> will be granted for facilitating the movement of response resources, including personnel and equipment, in accordance with the Policy and Procedures of the National Disaster Plan.

#### 1.4. PURPOSE AND OBJECTIVES OF THE PLAN

## Purpose of the Plan

The purpose of the Plan is to emphasize the need for mitigation measures befor and during oil spill incidents. To provide timely, coordinated, and integrated response action to pollution incidents by agencies of the Government of Jamaica and other related interests and to reduce the impact of land and marine pollution.

## **Objectives of the Plan**

Objectives of this Plan are:

- 1. To develop appropriate measures of preparedness and systems for the discovery and reporting of oil spill incidents;
- To institute immediate countermeasures to restrict the further spread of pollution;
- 3. To protect public welfare and natural resources by minimizing the impact upon the environment and the island's economy;
- 4. To provide adequate resources to respond to spill incidents;
- 5. To assign duties and responsibilities among Jamaican agencies and organizations;
- 6. To establish procedures to be employed in containing, dispersing, recovering and disposing of contaminated materials;
- 7. To prescribe documentation procedures that would facilitate recovery costs;
- 8. To facilitate the application of relevant legislation, and to penalize guilty parties;
- To outline procedures to obtain regional support, and outside assistance. (See copy of Regional Contingency Plan Annex. K. in National Disaster Plan).

#### 1.5. **PROCEDURES**

The plan provides for an On-Scene Commander (OSC) who will initiate and control response activities to manage a spill and for a National Response Team to provide advice and assistance to the OSC. It establishes alerting and notification procedures, command structure, post clean-up requirements and arrangements for assuming the responsibility for the cost of operations.

## 1.6. **RESPONSIBILITY**

The implementation and maintenance of the Plan is the responsibility of the Office of Disaster Preparedness and Emergency Management. The Plan shall consist of representatives of specified government and non-governmental agencies.

#### 1.7 **ASSUMPTIONS**

Development of this plan is based on the following assumptions:

- 1. Jamaica and its' surrounding waters are vulnerable to oil spill incidents.
- 2. All major oil spill incidents in Jamaica would have a negative effect on the marine and terrestrial ecosystem and would ultimately affect the welfare of the population, the economy and tourism.
- 3. The response team, if activated, will readily assist in the management and control of oil spill incidents.
- Designated facilities where resources are identified will be easily available and accessible to assist in the containment and clean up of spilt materials.
- The Response Team will continue managing activities for control of the oil spills until directed otherwise by the National Coordinator (NC).

## 1.8. PROVISION FOR REVISION

- All personnel involved in the emergency response process should be educated and trained on a continuing basis.
- Exercises should be carried out on a regular basis to test the emergency plan.
- Independent observers must be involved and should facilitate objective reviews of any deficiency or defects in the plan.
- The plan should be revised following evaluation of exercises or pollution incidents.
- Improvements in the plan should also be enforced in response to advancing technologies and capabilities.

 Recording of the actions and decisions taken during an accident should be evaluated so that lessons can be learnt.

#### **CHAPTER 2**

## **OIL SPILL HAZARD ANALYSIS**

## 2.1 NATURE OF AN OIL SPILL INCIDENT

Importation of Petroleum has increased over the years as the bauxite companies, the power companies and the oil refineries meet the demand (Table 1). Increased petroleum demand leads to an increase in traffic in Jamaica waters and across the land.

	1995	1996	1997	1998	1999
Petroleum Consumption By Products (Bls)	20,581,694	21,387,670	21,790,541	22,882,360	23,404,990
Petroleum Consumption by Activity (Bls)	20,495,812	21,277,684	21,671,750	22,804,000	23,260,291
Total Petroleum Imports (Bls)	21,154,688	20,943,008	22,473,649	22,818,286	23,197,994

Table 1. Table shows increasing importation of Petroleum into Jamaica from 1995 to 1999.

Source: Bauxite/Alumina Companies Caribbean Cement Company Jamaica Public Service Company Independent Private Power Companies Refinery Statistics Marketing Companies' Sales

## 2.2 **SOME OIL SPILL IMPACTS**

In **February 1981** Jamaica suffered its first major Oil Spill when the Shell Tanker "ERODONA" was grounded while maneuvering at Port Kaiser, which

resulted in the loss of 600 tons (150,000 gals.) of Bunker 'C' fuel oil. This spill affected several miles of coastline, disrupted the fishing industry and caused loss of earnings to the fishermen and the communities along the coast.

In **May 1999**, in Rio Cobre Gorge an eighteen-wheeler petroleum tanker, fully laden with unleaded petrol overturned and skidded along the road, and spilt some of its contents, which ignited. The driver, who was trapped in the truck, was burnt to death. The Rio Cobre River was contaminated from the spill of petrol and materials that were used to extinguish the blaze.

In **March 1999** an oil spill occurred in Bluefields. Approximately 2000 meters of shoreline was affected. JA \$ 120,000 was spent to retain the spilt oil.

In **November 2000** at the Petrojam refinery, 25000 barrels of gasoline caught fire. Estimated loss \$J 45 000000. 00

#### **CHAPTER 3**

## **OPERATIONAL ELEMENTS**

## 3.1 ORGANIZATIONS FOR OIL SPILL MANAGEMENT

- The Office of Disaster Preparedness (ODPEM) (Coordination)
- Attorney General's Department (Support)
- Bauxite Companies (Support)
- Caribbean Maritime Institute (Support)
- Civil Aviation Authority (Support)
- Jamaica Bureau of Standards (Support)
- Jamaica Constabulary Force (Support)
- Jamaica Defence Force Coast Guard (JDFCG) (Primary, marine)
- Jamaica Defence Force (JDF) (Primary, land)
- Jamaica Fire Brigade (Primary)
- Jamaica Public Service (Support)
- Maritime Authority of Jamaica (Support)
- Ministry of Health Environmental Health (Support)
- Ministry of Land and Environment (Support)
- Ministry of National Security and Justice (Secondary)
- Ministry of Transport and Works (Support)
- National Irrigation Commission (Support)
- National Environmental Planning Agency NEPA (Secondary)
- National Water Commission (Support)
- Office of the Prime Minister (Secondary)
- Parish Disaster Committee (Coordinator Parish Level)
- Parks and Markets National Waste Management Authority (Support)
- Petrojam and Oil Marketing Companies (Support)
- Port Authority (Secondary)
- Water Resources Authority (Support)

## **GOVERNMENT RESPONSIBILITY (not necessarily NRT)**

The following government organizations have primary statutory responsibilities and/or resources to respond to marine and land pollution incidents.

# 1. THE OFFICE OF DISASTER PREPAREDNESS AND EMERGENCY MANAGEMENT (ODPEM)

In any major pollution emergency incident the ODPEM is responsible for the overall coordination of the activities.

In the event of a pollution incident, the Director of ODPEM will be responsible for the implementation of the Plan, and is therefore designated the National Coordinator (NC) and also Chairman of the NRT.

## 2. THE JAMAICA DEFENCE FORCE COAST GUARD (JDFCG) [MARINE]

- The JDFCG has the responsibility for the coordination and direction of the National Pollution Control efforts at the scene of an incident in marine waters. In the event of a pollution incident, the Commanding Officer is responsible for the operational coordination to combat the incident, including arrangement for investigation and documentation, and is therefore designated the On-Scene Commander (OSC).
- Assist in investigating incidents and provide patrol craft and On-Scene support personnel as necessary. Arrest/Detention of any offending vessel/personnel, if necessary.

# 3. JAMAICA FIRE BRIGADE (JFB) [LAND]

The JFB has the responsibly for coordination and direction of the National Pollution Control efforts at the scene of an incident on land. Also with the use of the fireboat, provide any additional vessel or any other assistance as designated by the OSC, and to deal with any threat of fire on land from marine spills. Their responsibilities during an incident are the same as JDFCG at sea.

## 4. JAMAICA CONSTABULARY FORCE

The JCF assist the JFB during direction and control of the crowd and traffic at the incident site. Also coordinate and conduct forensic sampling investigations.

# 5. **JAMAICA DEFENCE FORCE (JDF)**

The JDF also assist the JFB during direction and control at the incident site.

#### 6. NATIONAL ENVIRONMENTAL PLANNING AGENCY - NEPA

The NEPA and JFB have the responsibility for investigating pollution incidents, sampling, analyzing and monitoring. The National Damage Assessment Team along with NEPA will also assess damage of the actual or potential impact on the surroundings and will:

- Recommend protection priorities for coastline (to be guided by environmental sensitivity maps)
- Provide policies and regulations relating to the use of chemical treating agents
- Develop maps of ecologically sensitive areas for the purpose of establishing priorities for clean up *(environmental sensitivity maps)*
- Provide surveillance support for monitoring of the pollutant
- NEPA along with the Ministry of Health will recommend and arrange sites or options for the disposal of contaminated materials.
- Recommend clean up methodology related to the sensitivity of the area

#### 7. THE PORT AUTHORITY - HARBOUR MASTER

- The Port Authority has the responsibility for:
- The operations of all Ports and Harbours in Jamaica. This includes the control
  of vessels entering and leaving Jamaica's Ports within Pilotage limits,
- Marine law enforcement,
- Investigation of marine accidents and navigational aids.
- The Harbour Master will report on all incidents involving oil spills or other hazardous substance from vessels in ports and harbours,
- Provide advice and information on dredging operations.
- The authority will make vessels/equipment available on request when needed.
- He will also provide information on vessel stability etc.

#### 8. THE MINISTRY OF HEALTH

The Ministry of Health has the responsibility for:

- Monitoring the environmental health implications of a spill incident including regulating of waste discharge on land and sea.
- The ministry is mandated to carry out monitoring and assessment with regards to control of portable water quality, and will advise on the impact of the pollutant on local water users,
- Use of chemical dispersants.

 Hazardous material disposal, including any other environmental matters that pertain to its area of competence.

#### 9. THE ATTORNEY GENERAL'S DEPARTMENT

The Attorney General's Department has the responsibility for the coordination of legal action in a pollution incident, and will:

- Provide legal counsel to the NC and the OSC on operational matters
- Ensure that necessary evidence is properly documented to protect the operations liability and/or initiate further prosecution action if required
- Liaise with the legal representatives of the polluter regarding compensation and indemnity.
- Provide advice on International Laws and Conventions as they affect the Plan
- Provide advice to victims of pollution damage
- Restrain any offending vessels within Jamaica's territorial waters if necessary.

#### 10. PETROJAM AND OIL COMPANIES

Provide technical advice, logistical support and facilities for temporary storage of any recovered oil, sludge, residue, and debris. They may be requested to put in place anti-pollution equipment, dispersants, as well as containment and cleanup equipment.

## 11. OFFICE OF THE PRIME MINISTER (TOURISM SECTION)

The tourism section of the office of the Prime Minister will:

- Coordinate information submitted to the Jamaica Tourist Board, TPD Co. and other tourist related organisations.
- Prepare and release information to various interest groups, both locally and overseas.
- Provide information on claims resulting from the incident.

#### 12. MINISTRY OF FOREIGN AFFAIRS AND FOREIGN TRADE

The Ministry of Foreign Affairs provides procedures for advising and instructing other government agencies in the speedy release of equipment and other aid-material from overseas donors. This includes facilitating fast communication with overseas aid-donors through our Embassies abroad.

#### 13. MINISTRY OF AGRICULTURE - FISHERIES DIVISION

## The Fisheries Division of the Ministry of Agriculture is responsible for

- The administration of fisheries laws and regulations, and monitoring of off-shore fisheries resources.
- Assisting in collection of complaints, informing the fishermen on dangers and restrict fishing activities when an incident occurs.
- Accepting and coordinating claims from fishermen for loss of income, fouling of nets, cleaning of hulls, engines, cost recovery and investigations for compensation.

#### 14. MINISTRY OF TRANSPORT AND WORKS - MARINE DIVISION

The Marine Division of the MTW is responsible for shipping matters and the implementation of IMO conventions, and regulates the transportation of hazardous materials through ports of Jamaica.

#### 15. CARIBBEAN MARITIME INSTITUTE

- Provide technical assistance in Marine Pollution Response for Oil and Hazmat Spills.
- CMI will assist in Marine Surveys on site.
- Conduct the necessary training for responders at levels 1,2,3, including training of Ship Inspectors.

#### 16. MINISTRY OF FINANCE AND PLANNING

- Financial expenditures from appropriate funds for spill mitigation clean up cost and assist in preparing claims for compensation.
- Provides the initial cost for clean up and recovery
- Receive information on clean up costs etc. from ODPEM

## 17. WATER RESOURCES AUTHORITY [check file for comments]

Assist in on land spills in rivers/ streams by providing data on water flow and velocity etc. The agency protects ground water and also identifies disposal sites for hazardous materials.

#### 18. MARITIME AUTHORITY OF JAMAICA

This agency board and inspect ships that may be responsible for oil spill pollution incidents. They prepare reports and support actions against the ship. MAJ represents the government during any claims in regards to civil liability caused by oil pollution. This report would be submitted to the authority in London, the Inter Oil Pollution Compensation Fund (IOPC) 1992.

# 19. MINISTRY OF LOCAL GOVERNMENT YOUTH AND COMMUNITY DEVELOPMENT

Provide manpower and necessary equipment for beach clean up.

#### 19. PARISH DISASTER COMMITTEE

Coordinate beach clean up efforts and assist OSC as needed in their Parish.

#### 20. MONTEGO BAY MARINE PARK

Assist in clean up operations in the Montego Bay area and will initiate clean up efforts until arrival of JDFCG.

#### 21. MINES AND GEOLOGY DIVISION

Identify (with assistance from NEPA) appropriate disposal sites

## 22. METEOROLOGICAL OFFICE

Provide weather updates.

## 23. JAMAICA BUREAU OF STANDARDS

Establish, maintain, monitor and enforce adequate safety standards in industrial plants. Monitor the maintenance oil spill emergency storage facilities and emergency supplies.

## 1.2 OIL SPILL PREPAREDNESS

The following governmental and non-governmental organizations have responsibilities and/or resources to assist in preparedness for hazardous material disasters.

The agencies will be divided into

Primary agencies

Secondary agencies and

Support agencies, depending on the level of their responsibility for each preparedness activity.

These organisational activities are listed on page 76-80. Discussions on their responsibilities are further highlighted throughout this chapter.

Table 2.	Table 2. OIL SPILL PREPAREDNESS				
<b>ACTIVITIES</b>	PRIMARY	SECONDARY	SUPPORT		
	AGENCIES	AGENCIES	AGENCIES		
Response Readiness Policies and Plans, International Conventions	Office of Disaster Preparedness and Emergency Management  Parish Disaster Committee	National Environmental Planning Agency	Min. of Health  Min. of Land and Environment  Jamaica Constabulary Force  Jamaica Fire Brigade  Jamaica Defence Force (land)  Jamaica Bureau of Standards  Jamaica Defence Force Coast Guard (marine)  Min. of Foreign Affairs and Foreign Trade  Maritime Authority of Jamaica		
Communication: Telecom, media etc. Public Information and Education	Min. of Transport and Works  ODPEM  Parish Disaster  Committee (Parish Level)	Jamaica Constabulary Force	Min. of Health  Jamaica Public Services  Jamaica Fire Brigade  Jamaica Defence Force (land)		

			Jamaica Defence Force Coast G.
TABLE 2 CONT'D	PRIMARY	SECONDARY	SUPPORT
<b>ACTIVITIES</b>	AGENCIES	AGENCIES	AGENCIES
			Force Coast Guard (marine)
			Office of Disaster Preparedness and Emergency Management
Evacuation	Jamaica Fire Brigade  Jamaica Defence Force (land)  Jamaica Defence Force Coast Guard (marine)  Office of Disaster Preparedness and Emergency Management  Parish Disaster Committee  Red Cross	Jamaica Constabulary Force Min. of Labour and Social Security	Civil Aviation Authority
Transportation	Min. of Transport and Works  Jamaica Urban Transport	Jamaica Fire Brigade	Jamaica Public Service Port Authority
	Coorporation		Civil Aviation Authority  Jamaica Constabulary Force

TABLE 2 CONT'D  ACTIVITIES	PRIMARY AGENCIES	SECONDARY AGENCIES	SUPPORT  AGENCIES  Jamaica Defence Force Coast Guard (marine)
Security/ Law Enforcement	Min. of National Security and Justice Jamaica Constabulary Force	Office of the Prime Minister  Jamaica Defence Force  Jamaica Defence Force Coast Guard (marine)  Jamaica Constabulary Force (marine)	
Emergency Care, Health Promotion, Education	Min. of Health  Office of Disaster Preparedness and Emergency Management	Parish Health Red Cross St. John's Ambulance Brigade	Min. of Industry Commerce and Technology  Jamaica Constabulary Force  Jamaica Defence Force  Jamaica Fire Brigade  Jamaica Defence Force Coast Guard (marine)

TABLE 2 CONT'D  ACTIVITIES	PRIMARY AGENCIES	SECONDARY AGENCIES	SUPPORT AGENCIES
Search and Rescue	Jamaica Fire Brigade  Jamaica Defence Force (land)  Jamaica Defence Force Coast Guard (marine)  Civil Aviation Authority  Jamaica Constabulary Force	Parish Disaster Committee	
Fire Management	Jamaica Fire Brigade  National Irrigation Commission	Min. of Transport and Works  National Water Commission  Petroleum Corporation of Jamaica	Jamaica Public Services  Min. of Environment and Housing  Jamaica Constabulary Force  Jamaica Defence Force (land)  Jamaica Defence Force Coast Guard (marine)  Parish Disaster Committee

=			
TABLE 2 CONT'D	PRIMARY	SECONDARY	SUPPORT
<b>ACTIVITIES</b>	AGENCIES	AGENCIES	AGENCIES
Legal Coordination	Attorney's General Department Maritime Authority of Jamaica	Jamaica Constabulary Force	Office of Disaster Preparedness and Emergency Management
Clean-up and Decontamination	Jamaica Fire Brigade	Parks and Markets	Min. Transport and Works
	National Irrigation Commission National Environmental Planning Agency	Jamaica Bureau of Standards	Bauxite Company Petrojam Office of Disaster Preparedness and Emergency Management  Jamaica Defence Force (land)  Parish Disaster Committee  Jamaica Defence Force Coast Guard (marine)

Table 2. Oil Spill Preparedness

## **National Oil Spill Response Centers**

The National Oil Spill Response Centers are designated sites where equipment is available to provide the necessary requirements to fulfill the provisions of the Plan (see Annex G). During an incident the Response Centers would be established as designated facilities. Alternative sites closer to the scene of the incident may be specified instead of the designated sites at the discretion of the NC/OSC.

The National Oil Spill Response Centers are located at:

Cagway, Port Royal Up Park Camp Montego Bay, Wharf Reynolds Pier, Ocho Rios

#### 1.3 OIL SPILL MITIGATION

It is necessary for managers and public authorities to put in place mitigation measures for the petrol installations. This proposal is necessary to reduce disastrous oil spill impacts on the environment and the society.

## Authorities should have general safety objectives:

- Monitoring of petrol installations.
- Ensure adequate reporting to the Response Team and investigation of accidents.
- All employees at the plant should be aware of their roles and responsibilities.
- Management from different petrol installations/companies should take special care during periods of stress, economic slow down and staffing problems affecting the industry.
- Should have appropriate staff to carry out their role and responsibilities in the prevention of accidents.
- Ensure that staff is adequately educated and trained by the company.

#### Existing installations should be inspected and improved if necessary:

- Reducing storage quantities and monitoring total petrol capacity at each facility.
- Removing installations to areas where an accident would have less impact.
- Existing plants should be assessed to determine if they meet the standard codes and guidance and improvements should be carried

out as soon as possible (Standard codes should be obtained from the Petroleum Advisory Commission).

## **Land-use Planning**

- Installation sites should be planned around 'Planning Authority's' land-use planning arrangements in respect to protection of population health and environment in the event of an accident.
- Existing installations should be required to develop a scale plan of the proposed development showing:
  - 1. Locations, quantities of installations and identification of pipelines present on site and outside the boundary fence.
  - 2. Nature of land use in adjacent areas.
  - 3. Local population and areas of local environment significance
  - 4. Potential off-site pollution affects posed by their proposal.

## All information should be completed and submitted to ODPEM.

## 1.4 RESPONSE COORDINATION (OPERATIONS)

- 1. A pollution incident can be broken down into five operational phases.
- **Phase I** Discovery and alarm (awareness stage)
- II Phase II Evaluation and Plan activation (Initial action)
- III Phase III Containment and Countermeasures
- IV Phase IV Clean-up and Disposal, recovery and rehabilitation
- V Phase V- Debriefing, analysis, documentation and cost recovery
  - 2. The OSC will initiate and direct as required phase **11** to **V** of the operations.

## I PHASE I - DISCOVERY AND ALARM

- 1. The discovery of a pollution incident may be made through normal surveillance activities, through observations from a ship, aircraft, fishermen, government agencies, by those who caused the incident or by the alertness and concern of the general public.
- 2. Such reports are to be sent immediately to the JDFCG (marine), JFB (land), ODPEM, or the NEPA to determine the level of response required and whether or not there is a need to invoke the plan.

2. Information details of reports required and radio communications details are set out in Annex E.

## II PHASE II - EVALUATION AND PLAN ACTIVATION

## The National Response Team (NRT)

The **National Response Team (NRT)** shall consist of representatives from the following specified governmental and non-governmental agencies. They will function as advisory teams and will be activated by the NC in the event of a pollution incident in accordance with the Plan and its annexes.

**CHAIRMAN** – Director of ODPEM -is referred to as the National Coordinator (NC) **MEMBERS** - Attorney General's Department- Legal Advice

- Jamaica Fire Brigade (OSC) (land)
- Jamaica Defence Force Coast Guard OSC (marine)
- Jamaica Defence Force
- Maritime Authority of Jamaica
- Ministry of Agriculture Fisheries Division
- Ministry of Environment and Housing (ECD)
- Ministry of Finance and Planning
- Ministry of Foreign Affairs and Foreign Trade
- Ministry of Health
- Ministry of Local Government Youth and Community Development
- Ministry of Tourism and Sports
- Ministry of Transport and Works Marine Div.
- National Environmental Planning Agency
- Office of the Prime Minister (Tourism)
- Parish Disaster Committees/Coordinators
- PETROJAM/Texaco/Esso/Shell/Kaiser/Alcan
- Port Authority of Jamaica Harbour Master

## **Role and Functions of the National Response Team**

- 1. Plan, Prepare and Monitor Response Operations.
- Provide recommendations or assistance to the OSC during pollution incidents.
- 3. Develop and evaluate procedures to promote a coordinated response by all **PUBLIC, PRIVATE** and **REGIONAL** organizations.
- 4. Facilitate the use of all national resources as requested by the OSC.

- 5. Review post incident and exercise reports from OSC for purpose of recommending improvements in the contingency plan.
- 6. Develop and foster national legislation. Study relevant international conventions, taking the necessary measures to prepare them for ratification and implementation as required.
- 7. Relieve OSC in the event of gross mismanagement of oil spill response.

#### **Sub-functions**

- 8. Monitor reports, evaluate the possible impact of reported pollution incidents being fully aware of the OSC actions and plans.
- 9. Recruit other agencies (Industrial-Scientific groups) to play their appropriate part in support action.
- 10. Ensure that the OSC has adequate Public Information resources.
- 11. Ensure and coordinate report.. on incidents to Superior Authority and the Public.
- 12. The NC shall make provisions for periodic meetings of the NRT to discuss mutual problems, and, as appropriate, to conduct exercises relating to the Plan.

## On Scene Coordinator Team (OSC)

The designated OSC is the JDFCG for marine incidents or JFB for land incidents. They are responsible for coordination and direction of marine/land pollution control efforts during an incident. The OSC team shall consist of representatives from the following agencies who will function as a combat Operations Team in the event of a pollution incident. The OSC is made up of two teams the **Command Team** and the **Field Operations Team**.

#### **Command Team** consists of:

Agency		Function	
a. JDFCG	-	OSC (marine)	
b. JFB	-	OSC (land)	
c. NEPA	-	Environmental Impact	
d. ODPEM	-	(Public Information) PR Coordinator	
		Historian/Record keeper	
e. ECD	-	Human Health - Welfare	

f. Public Works Provision and use of equipment

g. JCF Control at scene h. Parish Coordinators **Assist OSC** 

i. Port Authority Harbour Master - Marine law enforcement

## Field Operations Team consists of:

Agency		Function	
a. b.	JDFCG (marine) JDF (land)	Operations Coordinators Operations Coordinators	
C.	Min. of Transport and Works	Equipment Maintenance	
		Manager Administration Coordinator	
		Public Works	
d.	Technical – Marine Surveyor	Maritime Authority of Jamaica/ Caribbean Maritime Institute	

## Role of OSC

The OSC is responsible for the coordination and control of all operational action leading to the mitigation of the effects on the environment of a pollution incident. He/She shall establish prioritized areas for protection.

#### **Functions**

- 1. Assess situations determine all pertinent facts: the nature, amount, location, probable direction, time of travel of the material, resources available/needed and the areas that may be affected.
- 2. Initiate and direct operations e.g. establish clean-up priorities monitor control of expenditure.
- appropriate authority to call upon, and direct deployment. 3. Obtain countermeasures, clean-up, and disposal function.
- 4. Maintain current and accurate flow of information to the NRT as required.
- 5. Participate in operational reviews with a view to improve procedures.
- 6. Prepare and maintain plans for operational readiness.

NOTE: In the event of a pollution incident, the arrival of the first official at the site from an agency with responsibility under this plan shall assume coordination of activities under the Plan until the designated OSC becomes available to take charge of the operation.

## **Command Team**

#### 1. Public Relations Coordinator - ODPEM/JIS

The Public Relations Coordinator, under the general direction of the OSC will:

- establish and direct a news office at or near the operational response center
- maintain liaison with the NC, interested parties including media, government press and concerned industries
- provide the public with timely and accurate reports on the nature of the incident and the steps being taken to cope with the problem
- provide the lead in all matters concerning relations with the public

## **Field Operations Team**

The Field Operations Team is formulated to oversee the deployment of equipment and manpower. In events when the polluter has accepted operational responsibility, the field team will monitor operations during major spills under the general direction of the OSC.

The following are some of the responsibilities of the key personnel serving on the operations team:

## 1. **Operations Coordinator** - JDFCG/JDF/NEPA

The Operations Coordinator will:

- coordinate field activities
- direct work crews ashore/afloat and inland
- provide logistical and resource back-up
- oversee equipment maintenance
- provide field operation reports (SITREPS) to the OSC regularly
- maintain records of progress
- **2. Equipment Maintenance Manager** JDFCG/JDF/Min. Transport and Works

The Equipment Maintenance Manager will:

- maintain all units in a response condition
- advise operations coordinator of any shortages
- maintain continual liaison with support agencies on matters of equipment operations

#### 3. Communications Coordinator – JDFCG/JFB

The Communications Coordinator will:

- coordinate flow of information between the clean-up sites, the Onscene Commander (OSC) and the National Coordinator (NC)
- arrange for the installation of all necessary communications equipment at the Response Centers
- ensure that a competent radio operator is on duty at all times
- ensure that a proper log is maintained of **all** traffic
- **4. Technical Marine Surveyor** MAJ (CMI assist if necessary).
  - conduct damage surveys of all vessels and facilities on behalf of the government
  - provide the OSC with appropriate reports and recommendations following any such survey referred to above, or as a result of any incident regarding the advice of such a surveyor

## 5. Administration Coordinator - Public Works

The Administration Coordinator will be responsible for the financial aspects. Along with the OSC, he/she will:

- negotiate contracts for necessary equipment and manpower
- be responsible for staffing and labour relations
- authorize disbursements for local purchases
- continue to liaise with the NC for the release of necessary funds
- maintain records and documentation, as well as log of all proceedings i.e. meeting, discussions, etc.
- maintain logistical needs
- provide local industrial equipment availability inventory

#### POLLUTER PAYS PRINCIPLE

1. The Polluter is responsible for immediately reporting and initiating all steps necessary to mitigate the effects of the spill on the environment

# and for providing necessary information to the OSC with regards to the incident.

2. If in the opinion of the OSC the clean-up operations are inadequate for the size and scope of the spill, the OSC will assume responsibility for the clean up. This action does not remove the financial liability from the polluter nor does it preclude his/her involvement in subsequent mitigation and clean-up operations. The OSC should ascertain the polluters' intentions with respect to active involvement in the operations as soon as possible following any spill. Where the OSC assumes responsibility for the clean-up operations, this action is to be notified to the polluter by way of a Notice of Assumption of Responsibility. (See Annex D).

## **Initial action for Response Coordination**

- 1. If it is determined by the OSC that the pollution incident will affect Jamaica's coastal waters and sensitive areas or a neighboring state, he/she shall:
  - a. Notify the NC and appropriate agencies of the NRT and OSC team.
  - b. Make a recommendation to the NC on whether to invoke the Plan.
  - c. If from initial reports it appears that the incident could threaten a neighboring state, an immediate report should be made using the communication procedures in Appendix D - CARIBPOLPREP FORMAT
  - d. Formulate plans to deal with the incident
  - e. Initiate Phase III and IV actions as appropriate.
- 3. The specific methods for warning the NRT and OSC Team members and invoking the Plan are contained in annexes E,F1.

#### SPILL SIZE CLASSIFICATION

Minor: A discharge of less than 10,000 gallons Medium: A discharge of 10 000 -100,000 gallons

Major: A discharge of more than 100,000 gallons or discharges, regardless

of size that

- · Occur in or endanger critical areas
- · Substantially threaten public health or welfare
- Generate wide public attention

#### III PHASE III - CONTAINMENT AND COUNTERMEASURES

- 1. Containment is any measure, whether physical or chemical which is taken to control or restrict the spread of a pollutant.
- 2. Countermeasures to enforce those activities, other than containment would be implemented to reduce the impact and the effect of a pollutant on the welfare of the public.
- 3. The employment of Chemical Dispersants/Oil Herders is subject to Appendix E1 and E2.
- 4. See Resource List (Annexes G,H,I1 and I2).
- 5. Decisions as to priority of protection and containment of facilities and coastline will be aided/guided by NEPA and coastal sensitivity maps.

## IV PHASE IV - CLEAN UP AND DISPOSAL

- This phase includes actions directed towards reducing the impact of the pollution in sensitive areas, and monitoring activities employed to determine the scope and effectiveness of the actions taken. It includes the removal of the pollutant in the affected area using available resources. (Guided by ESI maps).
- Oil and contaminated materials recovered will be disposed of by controlled incineration. Specified sites for landfills would be invoked to avoid risk of ground water contamination. Clearing procedures directed by JGFCG and JFB would be enforced so as to preclude any continuing environmental damage.

# V PHASE V - DOCUMENTATION AND COST RECOVERY

- Maintain properly documented logs in order to successfully evaluate pollution incidents. The logs will serve to substantiate for any claims to be made by government for reimbursement arising from expenditures incurred from assessment, containment, disposal, and rehabilitation to environment.
- 2. Documentation of incidents should include: the initial incident report; chronological log; (clean-up expenditures) daily work report; pollutor's report; investigative report; post incident report. (See Annex A1 to C for requirements of each report).

## VI PHASE V1 - DEACTIVATION OF PLAN

Will be by consultation of OSC with the NC on evaluation of the situation status based on recommendations of the OSC that operations be scaled down, consistent with current or future actions to be taken.

#### 3.5. REPORTS AND COMMUNICATIONS

#### RAPID ALERTING SYSTEM

- a. Any potential pollution threat to Jamaica's marine environment and coastline must be reported to the OSC without delay.
- b. The JDFCG/JFB (OSC) will notify the ODPEM who will then notify all members of the National Response Team and the On-Scene Commanders Team upon receipt of an incident report and its evaluation.

## C. WARNING MESSAGE

While it may take some assessment to decide whether or not to invoke the plan, a warning that the plan may be invoked should be given. This warning will not activate the plan. It will however, permit immediate preparation for the possibility of its invocation as per format.

DTG - Date and Time Group

FROM - Sender

TO - Action Address

INFO - Information Addresses

UNCLAS - Unclassified

CODE - Oil Spill or Chemical Spill - (POLREP -

OIL/CHEMICAL)

- a. Geographic position
- b. Any other details
- c. Acknowledge

**NOTE:** Such a message will normally be originated by either the OSC or NRT Chairman and must always be acknowledged by the action addressee.

#### d. **Invocation**

This Plan will normally be activated by message, from the National Disaster Coordinator. Telephonic invocation must follow this message.

**NOTE:** If a warning message was not issued, the information that would have been contained in that message would automatically be added to the invocation message.

DTG - Date and Time Group

FROM - Sender

TO - Action Addressee

INFO - Information Addressees

UNCLAS - Unclassified

CODE - Oil Spill or Chemical Spill - (POLREP-OIL/CHEMICAL)

Contingency Plan invoked at (Time)

OSC - Name

NRT - Co-chairman (Name)

HQ - established at (Location and telephone number)

**NOTE:** In the acknowledgment message to the above, the receiving party shall report the name of the designated OSC and the designated OSC'S expected time of arrival (ETA) at the locality of the head quarters (HQ) established by the original message of the invocation.

## e. SITUATION REPORTS (SITREPS)

Up-to-date information on response to the oil spill incidents is essential to the effective management. Frequent information is necessary to ensure that parties involved have a full and timely appreciation of the incidents and of actions taken and progress made during the response.

DTG - Date and Time Group

FROM - Sender

TO - Action Addressee

INFO - Information Addressees

UNCLAS - Unclassified

CODE - (POLREP OIL/CHEMICAL) SITREP (Report number)

Pollution Incident (Identify the case)

- a. Situation
- b. Actions taken
- c. Future plans/further assistance required
- d. Case status (Pends/Closed)

#### Situation

Should provide the full details on the pollution incident, including location what happened, type and quantity of material, who is involved, extent of coverage and threatened, areas success of control efforts, prognosis and any other predicted movement pertinent data.

#### **Actions Taken**

The actions taken section should include a summary of all actions taken by the responsible party, local forces, government agencies and others.

## **Further Assistance Required**

Any additional assistance required from the NRT by the OSC pertaining to the response shall be included in this section.

#### f. REVOCATION

A recommendation to revoke the Plan would be made by joint agreement of the OSC and the NC. The revocation must clearly establish the date and time of its cessation.

DTG - Date and Time Group

FROM - Sender

TO - Action Addressee

INFO - Information Addressees

UNCLAS - Unclassified

CODE - Oil Spill or Chemical Spill - (POLREP) - OIL /Chemical)

Contingency Plan revoked at (Date, time at which

operations will cease).

## g. Post Incidents Reports

The NRT may request the OSC to submit reports and to prepare operational debriefing for the NRT, on the incident, the action taken, and any observations or recommendations that need to be made.

#### **Future Plan**

The Future Plan section should include all future action planned, by Responsible Party, Local Forces, any other agencies involved.

#### **Case Studies**

The Case Status section should indicate "Case Closed", "Case Pends", or "Participation Terminated" as appropriate.

## 3.6 OTHER EMERGENCY INFORMATION SOURCES

TECHNICAL ASSISTANCE AND INDUSTRIAL RESPONSE TEAMS

**ICENS AND CHEMICAL DEPARTMENT - UWI** 

**CHEMICAL COMPANIES** 

**PUBLICATIONS** 

HAZMAT EMERGENCY RESPONSE GUIDEBOOK

**EMERGENCY HANDLING OF HAZARDOUS MATERIALS** 

**GOVERNMENT CHEMIST** 

**CONCAWE -** A Field Guide to Coastal Oil Spill Control and Clean-up Techniques

**GOVERNMENT CHEMIST** 

When a spill occurs, the public must be provided with timely and accurate information on the nature of the incident and the steps that are being taken to cope with the problem.

This policy is followed to obtain understanding from the public, to ensure cooperation from all interested parties and to reduce the possibility of the spread of concern or alarm through misinformation.

#### On-scene News Office

When the Plan is invoked, the NC make the appropriate arrangements to assign a professional Public Information/Relation Coordinator who will establish and direct a News Office as close to the scene of the incident as possible, and shall maintain liaison with the news media, government press offices, concerned industries, the NC and other interested parties.

#### **Permission for Media Announcements**

Authority for a public or media announcement during a spill incident can only be given by the OSC or the NC of the NRT in accordance with the stated Policy and guidelines laid down in the National Disaster Plan.

#### **CHAPTER 4**

## **POST DISASTER ACTIVITIES**

## RECOVERY POLICY PROCEDURES

- 1. The management of an installation should be responsible for ensuring the prompt investigations of all incidents.
- 2. Investigations of major accidents should be conducted by a group of experts other than those responsible for inspection of installations and enforcement of the control framework.
- 3. Where "human error" is involved, the cause should be investigated to determine exactly what elements contributed to that error.
- 4. A system needs to be established for maintaining accident statistics for carrying out analysis and for disseminating relevant information derived from the analysis.
- 5. Authorities must enforce follow-up to completion of the clean up operations to the managers of the Installation Plants or to the OSC if assumed responsibility.
- Those who were responsible for the pollution should carry out long-term monitoring of the affected sites. Monitoring could either be sampling of the waters in the surrounding areas in relation to the accident site or observations/examinations of the affected areas.

### **CHAPTER 5**

### **ANNEXES/APPENDIX**

### LIST OF ACRONYMS AND RECOGNISED ABBREVIATIONS

**CRRRT-** Caribbean Region Regional Response Team

**ECD** - Environmental Control Division

**E.E.Z.** - Economic Exclusion Zone

**EPA** - Environmental Protection Agency

**ETA -** Expected time of Arrival

**HAZMAT** - Hazardous Materials.

**HM** - Harbour Master

**HQ** - Head Quarters

**IMO** - International Maritime Organisation

**JDFCG** - Jamaica Defence Force Coast Guard

**JFB** - Jamaica Fire Brigade

JIS - Jamaica Information Service

JMI - Jamaica Maritime Institute

**MAJ** - Maritime Authority of Jamaica

**MPUT** - Min. Public Utilities and Transport

MTW - Min. of Transport and Works

NC - National Coordinator

**NEPA** - National Environmental Planning Agency

NRT - National Response Team

**ODPEM** - Office of Disaster Preparedness and Emergency Management

**OSC** - On-Scene Commander

**PRA** - Pharmaceutical and Regulatory Agency-Ministry of Health

**PREP -** National Preparedness for Response Exercise Programme

**UNEP -** United Nations Environmental Protection

### **GLOSSARY**

**Contiguous Zone** - This is the Zone Contiguous to the Territorial Sea, which extends twelve (12)miles seaward from the outer limit of the Territorial Sea, in accordance with Article 33 of the Convention on the Law of the Sea - UNCLOS III.

**Discharge -** Includes, but is not limited to any spilling, leaking, pumping, pouring, emitting, emptying or dumping.

**Dispersants** – A liquid or gas used to disperse small particles in a medium.

**Ecology** – The branch of biology concerned with the relations of organisms to one another and to their physical surroundings.

**Ecosystem** - A biological community of interacting organisms and their physical environment.

**Environment** - The surroundings or conditions in which person, animal or plant lives or operates.

**Facility** - Means (a) any site area, building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or treatment works) well, pit, pond, lagoon, ditch, storage containers, motor vehicles, trains, aircrafts or vessels. Or (b) where a hazardous substance has been deposited, stored, disposed of or placed or otherwise come to be located.

**Hazardous Materials** - Refers generally to Hazardous Substances, petroleum, Natural Gas, Synthetic Gas, Acute Toxic Chemicals and other Toxic Chemicals.

**Hazardous Substance** - Any substance which could cause deleterious effects such as harm to living resources, hazards to human health and safety, hindrances to marine activities (including fishing) impairment of the quality of water or reduction of amenities.

**Oil** - Oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with water other than dredged oil.

**On-scene Commander (OSC)** - Means the official appointed and charged with coordination and direction of the national pollution control efforts at the scene of an oil spill or incident.

**Pollution** – Containment of air, water, land, or other natural resources that will or is likely to create a public nuisance and cause health and environment harm.

**Pollution Incident -** A spill or the imminent threat of a spill of oil from any source into the natural environment of such a magnitude that requires emergency action or

other immediate response for the purpose of minimizing its effects or eliminating the threat.

**Response** - The operation mounted to clean up a spill of oil to minimize the consequences and prevent further spillage.

Spiller/Polluter - Company responsible for the liquid that is spilling or been spilt.

**Welfare** – The health happiness and fortunes of a person or group not limited to, the natural environment, fish, shellfish, wildlife, public and private property, shorelines and beaches.

### WHEN YOU CALL

The JDFCG/JFB Communications Center needs all the information you can give them about a spill. If possible, you should be ready to report:

- a. Your name
- b. Name of responsible party
- c. Mailing address of responsible party
- d. Telephone number where you can be reached
- e. Date and time of spill
- f. Location of spill
- g. Name of material spilled
- h. Source of the spill
- i. Cause of the spill
- j. Amount discharged
- k. Amount in water
- I. Weather conditions
- m. Continuing danger to life or environment
- n. Railcar number, truck number or vessel name
- o. Name of carrier
- p. Name of manufacturer or shipper
- q. Consignee
- r. Number and type of injuries
- s. Amount of damage
- t. Description of cleanup plans
- u. Agencies that have been notified

### REPORTING INFORMATION REQUIREMENTS HAZMAT SPILL

- a. Name of person reporting
- b. Date and time of release
- c. Nature (leak, explosion, spill, fire, derailment, etc.)
- d. Location and source
- e. Number of dead or injured: where taken
- f. Cause of Injury (inhalation, contact)
- g. Name of material (s) released: if known
- h. Shipper/Manufacturer identification
- i. Container type (truck, rail, car, pipeline, drum)
- j. Placard/label information
- k. Characteristics of material (colour, smell, physical effects)
- I. Present physical state of materials (gas, liquid, solid)
- m. Amount of material released/duration of release
- n. Is significant amount of materials entering the atmosphere, nearby water, storm, drains, or soil.
- o. Direction, height, colour, odour, of any vapour clouds or plumes
- p. Weather condition on scene (wind speed/direction)
- q. Local terrain conditions
- r. Personnel on scene

# NOTIFICATION OF OIL/HAZARDOUS MATERIALS DISCHARGE REPORT

1. Tin	MEVIAVIA	DATE
	PERSON REPORTING/TITLE TEL.NO.(	
	ORGANIZATION	
	ADDRESS	
3. PA	LOCATION(NEAREST CITY, COU ARISH)	INTRY AND
4.	EVACUATION REQUIRED: (if yes, how may victims, area affelocation and miles.)	
4.	TIME/DATE OF INCIDENT(SPILL)	
5.	BODY OF WATER AFFECTED	
6.	PERSONNEL AT THE SCENE: (OSC)	
7.	SHIPPER/MANUFACTURER INDENTIFICATION:	
	CONTAINER TYPE:	
	VESSEL AND BARGE/RAILCAR IDENTIFICATION NO:	
	PLACARD/LABEL INFORMATION:	
8.	MATERIAL	
9.	QUANTITY DISCHARGE	
	. QUANTITY IN WATER/SLICK SIZE AND COLOR	
11	. DIRECTION OF MOVEMENT, WIND SPD/DIR OR CURREN	T FORCE (MPH)

12.	OTHER AGENCIES NOTIFIED BY CALLER
13.	NOTES: (Government and Community assistance at the scene)
14.	ACTIONS TAKEN BY OSC/ALTERNATES:

### **PUBLIC RELATIONS POLLUTION INCIDENT FACT SHEET**

Media, the general public or others affected or interested in an Oil/Hazmat Spill, will normally request the following information as soon as possible. The first man on the scene and/or the on-scene commander should fill out this sheet or be aware of the data so soon as possible.

Name of installation or carrier etc. involved			
Time of the accident, date etc.			
Location of the spill			
Type of product spilled			
Action being taken to combat spill			
Who is involved in the program			
Amount spilled (IF CLEARLY ESTABLISHED			
Cause (IF DETERMINED)			
Duration of cleanup (IF KNOWN)			

### REPORTING INFORMATION REQUIREMENTS - OIL SPILL

This form should be completed as far as possible to ensure that responsible agencies take immediate, effective action.

Name of Ship, Airport, Agency or Person Reporting (or involved)	
Date and Time of Incident or Observation	-
Source of Spill (if Known)	
f a vessel is the source:	
Name of vessel	
Port of Registry	
Type of vessel and size	_
Location of Incident	
Quantity Discharged	
Identity of Substance (if Known)	-
Wind and Sea conditions	
Owner of Substance (if chartered vessel)	-
Salvage Arrangements (if any proposed)	
Slick Size and colour	
Spill due to (if Known)	
Collision	
Grounding	
Other (i.e. leak, spilled container)	

### INITIAL CONTACT

Director General
Office of Disaster Preparedness
12 Camp Road
Kingston 4
Jamaica

Tel No. 809-928-5111/4 Fax No. 809-928-5503

Hours of Ops. - 0830 - 1700 hrs. Call Sign - ODPEM Base

Frequencies - 6998.5 Kz. - Int. Red Cross

Ch. 16 VHF Int. Distress (Marine)
 7.850 MHz Eastern Carib. Emergency
 31666.00 Kz USB Met Office Radar Station

### OPERATIONAL CONTACT

Commanding Officer JDF Coast Guard HMJS Cagway Port Royal Kingston 1 Jamaica

Tel. No. 809-924-8873/5 Fax No. 809-924-8340

Hours of Ops - 24 hrs Call Sign - 6YX

Frequencies - 2182 Kz Marine Int. Distress

- Ch. 16 Marine VHF Int. Distress

- 2738 Kz - Fisheries

- (ELT) 121.5 Mz VHF AM 243.0 Mz (CDERA) Aircraft

Distress

- 7453.5 at scheduled Times (PCDPPP)

- Jamaica, Belize, Turks & Caicos 14.415 MHz

- Any HF Frequency Required

## INDUSTRY OIL/HAZMAT CONTACT LIST

COMPANY	COORDINATOR	OFFICE	DIRECT	CELL
PETROJAM	Leon Jarret	923-8611		
(J'ca Petroleum Terminal, West)	Roy Adams	u	979-8488	995 0147
ESSO	Mr. Andrew Graham Mr. C. Rampershad	923 2030-3	923 6489	"
SHELL	Mr. Winston Omsby Mr. Nick Shorthose	928 7230-1 928 7301-9	938-7687 928 7316	990 3539 997 1053
TEXACO	Mr. Barry Biggs Mr. David Sterling	9297850-7	9297856-7	"
WEST INDIES ALLUMINA AND KIRK VINE WORKS (formally Alcan)	Ms. Grace Foster-Reed Mr. Clive Miller	962 3141-6 962 3141-6	961 7144 961-7162	"
JAMALCO	Mr. George Morgan	986 2561 ex	ct. 4321	"
KAISER	Mr. Jacob McClean	973 2251	516 0268	"

## PARISH COORDINATORS CONTACT LIST

PARISH	COORDINATORS	OFFICE PHONE	FAX NO.	HOME PHONE
KINGSTON & ST.ANDREW	Issac Nugent	967-3329	967-3329	988-1547
ST.CATHERINE	Mrs. E. Mundell	984-3111-2	984-2528	
CLARENDON	Nether Lyttle	986-2216 986-2234	986-9583	780-0403 986-0851
MANCHESTER	Merdella Pryce O'Gilvie	962-2279	962-0611	
ST. ELIZABETH	Ms. Yvonne Morrison	634-0768 965-2256	965-2776	966-6483
WESTMORELAND	Hilma Tate	955-2655 955-2798	955-2797	955-2671
HANOVER	Ms. Margaret Samuels	956-2305 956-2236	956-2958	956-2598
ST. JAMES	Mrs. Olga Faye Headley	952-5500-2	952-4066	953-2175
TRELAWNY	Ms. Verna Small	954-3228 954-4838	954-5592	
ST. ANN	Mr. Alvin Clarke	972-2615-6	972-2617	972-1701
ST. MARY	Mrs Pauline Williams	994-2178 994-2212 994-2648	994-2372	992-5098
PORTLAND	Fay Neufville	993-2656 993-2765	993-3188	993-5307
ST. THOMAS	Ms. Millicent Blake	982-9449	982-2513	734-3599

Oil Spill Clean-up equipment is housed in four (4) locations:

- 1. Cagway, Port Royal
- 2. Up Park Camp
- 3. Montego Bay Wharf
- 4. Reynolds Pier Ocho Rios

# 1. CAGWAY, PORT ROYAL

ITEM DESCRIPTION	QUANTIT Y	MATERIAL RATES AND TIME
Actifresh Rubber Gloves	17prs	
Actifresh Rubber Gloves	1	
Actifresh Rubber Gloves	N/A	
Briggs and Stratton Pump (7HP)	1	
Containment Chamber	16 (1 n/w)	
Danforth Anchor (15lb)	1	
Danforth Anchor (22lb)	6	
Danforth Anchor (40lb)	6	
Fairyman Diesel Pump	1	
GT 185 Screw Tyre Skimmer and Control Unit	1	
Hydraulic Hose 3" (set)	6	
MataSorb M-75 Sorbent Rolls (3/8" thick)	N/A	
MataSorb M-75 Sorbent Square Sheet Pads (3/8" thick)	50	
ITEM DESCRIPTION	QUANTIT	MATERIAL

	У	RATES TIME	AND
MI 30 Disc Skimmer with pump/ control unit	6 (2 n/w)	TIME	
Patterson Gear Motor	1		
PETROFAX Dispersant	1 Drum		
Salvage Pump (3")	1		
Selwood Spate 75C Salvage Pump	5 (n/w)		
Shovels	66		
Spades	12		
Stone Rakes	13		
Turner Turn Co. Pump (6HP)	1		
Water Boots (knee length)	8 prs		
WS Darley Co. Salvage Pump (2")	1		

# 2. Up Park Camp

ITEM DESCRIPTION	QUANTIT Y	MATERIAL RATES
		AND TIME
MataSorb M-75 Sorbent Square Sheet Pads (3/8" thick)	335	
MataSorb M-75 Sorbent Rolls (3/8" thick)	46	

# 3. Montego Bay Wharf

ITEM DESCRIPTION	QUANTIT	MATERIAL
	У	RATES
		AND TIME
Actifresh Rubber Gloves	78prs	
Bale of Nylon Rope	1	
Boom (large) 21" (8 segments per length, segment length,4')	3 lengths	
Boom (large) 36" (8 segments per length, segment length,4')	17 lengths	
Connection cord (power supply cord)	2	
Containment Chamber	8	
Evinrude Boat Engine (9HP)	2	
FLEXI Boom Connector (big, metal, yellow)	1	
Gas tank with line for out port boat engine	1	
GT 185 Screw Trye Skimmer and Control Unit	1	
Life Jacket	11	
Shovels	88	
Spades	30	
Stone Rakes	15(2 n/w)	

# 4. Reynolds Pier Ocho Rios

ITEM DESCRIPTION	QUANTIT Y	MATERIAL RATES
		AND TIME
Aluminium Utility 12' Boat with 4 oars	2	
Boom (large) 21" (8 segment per length, segment length 4")	9lengths (est.)	
Boom (large) 36" (8 segment per length, segment length 4")	12 lengths	
Containment Chamber	1	
Hydraulic Hose (set)	2	
MataSorb M-75 Sorbent Rolls (3/8" thick)	N/A	
MataSorb M-75 Sorbent Square Sheet Pads (3/8" thick)	N/A	
Selwood Spate 75C Salvage Pump	2(n/w)	

# JDF COAST GUARD OIL SPILL EQUIPMENT TIME AND MATERIAL RATES

Equipment	Material Rates (\$JA)	Time
Containment Booms 18" and 36"	11per foot	per day
DANFORTH ANCHORS ( 22 lbs)	200	per day
Cleaning of Booms 18" and 36"	21	per foot
DANFORTH ANCHORS ( 40 lbs)	240	per day
MI-30 Oil Skimmer with Power Pack	760	per day
GT-185 Oil Skimmer with Power Pack	1000	per hour
SLURP SKIMMER	540	per day
LOOKHEED CLEAN SWEEP SKIMMER		
M. J. D0000	700	
Mod. R2002	720	per hour
DUMD CDATE 75 DIADUDACM Type (21)	1,000	nor dov
PUMP - SPATE 75 DIAPHRAGM Type (3")	1800	per day
12ft. Aluminium Boat with 10hp. Outboard	400	per hour
121. Adminium boat with romp. Outboard	100	per nour
Portable Container Tanks 1000 gals	1238	each day

Power Work Boat 40'	3000	per hour
LIFE JACKETS	160	nor day
LIFE JACKETS	160	per day
16ft. Whaler 180hp. Outboard	660	per hour
0 115 15 (01)	1110	
Centrifugal Pump (2")	1440	per day
Equipment	Material Rates (\$ JA)	Time
PLASTIC GARBAGE BAGS	Current Replacment Cost	
Dispersant Spray Booms	810	per day
RUBBER APRONS	Replacement Cost	
Miss Hassa	450	a a a alass
Misc. Hoses	450	per day
WATER BOOTS	Replacement Cost	
	·	
82' Patrol Vsl.	5500	per hour
RUBBER GLOVES	Ponlacement Cost	
RUBBER GLOVES	Replacement Cost	
STEAM WASHING UNIT	1800	per hour
SORBENT PADS	Replacement Cost	
SHOVELS	200	per day
		la cara
RAKES	220	per day
DODEC 4/2 NIVI ON	Danisaamant Caat	
ROPES 1/2 NYLON	Replacement Cost	
106' Patrol Vessel	6000	per hour
115' Patrol Vessel	8500	per hour
Motor Cars	200	per hour
Truck	350	per hour

200	per hour
120	per hour
100	per hour
	120

**APPENDIX I1** 

## GOVERNMENT RATE SCHEDULE

Rate of pay per hour effective 1.2.2000 to 31.1.2001 (6%)

Categories	Grade III	Grade II	Grade I
Bulldozers		937.43	
Burner		685.13	-
Carpenter/Joiner	557.77		+
Chainman	551.11	512.29	
Checker		523.49	1
Compressor, Power Plant &		613.13	
Air Track Operators		0.10.10	
Cranes-Crawler & Trucks		901.51	1141.44
Overhead		685.13	
Tower		901.51	1141.44
Dumpers to 1 1/2 Cubic Yard		533.6	
Electricians	557.77	695.7	841.17
Excavators & Backhoe		901.51	1141.44
Front End Loaders		937.43	
Gateman		512.29	
Grader Operator		901.51	
Greaser/Oiler		524.19	
Hoist Operator		532.59	
Janitor		477.54	
Labourer		477.54	
Labourer using Paving Breaker		588.64	
rock drill and other pneumatic			
and vibrator tools			

Low Boy Operator		923.2	
Maintenance Man (Field Service,		781.23	
minor repairs)			
Mason		648.9	
Mixer Operator		532.51	
to 21/14		587.55	
over 21/14			
Categories	Grade III	Grade II	Grade I
Piling hand/Hammerman		625.11	
Piling Winch Operator		841.17	
Pipe layer		532.51	
Plant Mechanic (Mechinist)	600.92	781.23	889.46
Plant Mechanic (Overhaul)	545.96	745.15	853.23
Plumber	557.77	685.13	841.17
Pump Attendant		600.92	
Ramming Machine Operator		587.56	
Roller Operator		634.44	
Roller		661.1	
Rubber-tired tractor Operator		599.92	
Sand blaster		648.9	
Scaffolder	532.59	557.77	745.15
Self-propelled scraper operator		937.43	
Sideman		586.39	
Steel bending/cutting Machine		745.15	
operator			
Steel Erector/Rigger	648.9	697.18	781.23
Track Welder		685.13	
Trailer Attendant		524.19	
Trench Machine Operator		875.15	
Trucks		616.4	
Welder		804.87	
Winchman		532.59	
Watchman - per week of 6 shifts not exceeding 15			

hours per shift. Work in excess of a 15 hour shift will attract overtime. 1st year - \$2964.46 per week

2nd year - \$ 3142.33 per week

### **INDUSTRY - RESOURCE INVENTORY LIST**

### KAISER BAUXITE

- Oil Containment Boom 600'
- Oil Containment Absorbent Boom 600'
- Absorbent Pads 36 square inch (14 packages)
- GT 185 skimmer system

### **PETROJAM**

- 1. Dispersant Spray Equipment
- 2. 1000 ft Containment Boom
- 3. 1 x Weir Type skimmer
- 4. 1 x Utility Boat
- 5. 1 x Work Boat
- 6. 1 x 400 gal Tank (oil recovery)
- 7. COREXIT 9527 33 Drums
- 8. 7664-18 Drums

**NOTE:** ODPEM has a copy of data and drawings on Tankage at Petrojam Limited (located in the Oil Spill General File, Registry Division).

### SHELL COMPANY (W.I) LIMITED

Item	Pack Size	# Pack
Oil Skimmer Unit		1
Oil Booms (for corralling)	50 ft. per length	45 lengths
Sorbent Pads	19" x 17" x 100 per bag	77 bags

Sorbent Booms	7" Dia. x 8 ft. long	13 lengths
Sorbent Mops (Pom-Pom"	10 Mops per bag	5.5 bags
type plastic)		

## ESSO STANDARD OIL, S.A. LIMITED

ITEM	QUANTITY	SIZE/CAPACITY	LOCATION
Boat	1	20 ft.	Montego Bay
Outboard Motor	1	100 HP	Montego Bay
Boat Trailer	1		Montego Bay
Life Jackets	7		Montego Bay
Booms	1000 ft.	2'x100'	Montego Bay
Trash Pump	1		Montego Bay
Skimmer	1	Vikoma 12K	Montego Bay
Life Jackets	30		Kingston
Booms	1000 ft.	2'x100'	Kingston
Skimmer	1	Vikoma 12K	Kingston

### ALCAN JAMAICA COMPANY - PORT ESQUIVEL

NO.	EQUIPMENT	MAKE/MODEL	SIZE/CAP	LOCATION
COND.				
1000 Feet	Pol-E-Boom	A 1-6-18R (oil containment boom with shotgun connectors)	_	Port
1 (500L)	Aqua-Petro Tank	-	-	Port
1	Pilot Boat (can be used for positioning booms etc.)	-	-	Port

### WASTE DISPOSAL SITES

### OIL SPILL DEBRIS DISPOSAL RECOMMENDATIONS

Recognizing the operational need for agreed-upon priorities for the disposal of oil spill debris, the following recommendations, based largely upon studies supported by the EPA Office of Research and Development are offered.

- 1. Sound technology for the disposal of oily wastes <u>does</u> exist today.
- 2. The recommended disposition of oily wastes (in order of priority) is:
  - (a) reclaim as much oil from the waste, and use directly as much of the oily waste itself, as possible; and
  - (b) where air pollution standards can be met, thermally oxidize (i.e. burn, incinerate, pyrolyze, etc.) the remaining oily debris; or
  - (c) where debris size permits, land cultivate (i.e. aerobic microbially decompose)the remaining oily debris; or
  - (d) employ <u>very</u> long term anaerobic storage (e.g. sanitary landfill or direct burial), together with adequate groundwater quality monitoring. Since fine grained soils (e.g. clays and silts) have more surface area per unit weight and more sorptive capacity than coarse grained soils (e.g. sand and gravel), long term storage sites should be located, wherever possible, on fine grained soil. Where poor soil conditions may result in hydro-geologic connection to groundwater, leachate collection and treatment should be employed.
- 3. The groundwater must not be polluted either by the material disposed of or by its decomposition products.
- 4. Vegetation for direct or indirect human consumption should <u>not</u> be grown on a land cultivated site or a sanitary landfill or a burial site, unless it can be proven that no health risk will result.

# SAMPLE - NOTICE OF GOVERNMENT INTEREST IN A POLLUTION INCIDENT

Gentlemen:

This is to inform you that a pollution incident for which you may be financially responsible has occurred or threatens to occur at (vessel/facility) at (location/body of water). Under Jamaica Laws, the Government has interest in this incident and may take appropriate action to minimize damages which is threatened or which may be caused by this incident.

The discharge of oil or a hazardous substance is a violation of the <u>Clean Sea Act 1979</u> as amended. Under this act the owner or operator of the source is required to undertake removal actions. Where he refuses to take adequate removal action, he may be held financially responsible for action taken by the Government to remove and adequately mitigate the effects of the pollutant. Removal is considered effective where it is done in accordance with Government statutes and regulations and the criteria of the "National Pollution Contingency Plan for Jamaica". The adequacy of such removal actions will be determined by the JDF Coast Guard On-Scene Commander. The On-Scene Commander is

So long as adequate actions are being taken in this matter, Government action will be limited to monitoring the progress of your actions and provisions of guidance as necessary.

If it is determined that you are not taking prompt and appropriate actions to clean up, contain, and remove the pollutant (s), Government response may be initiated. You may then be held responsible for all actual costs incurred by the Government as set forth in Section 7 of the Clean Sea Act, as amended. Should you require further information concerning this matter please contact:

(Name, Address and Telephone Number of OSC).

Sincerely, (OSC or representative)

Received and acknowledged

(Name of Addressee)

Date and Time

### **SAMPLE - NOTICE OF GOVERNMENT ASSUMPTION OF RESPONSE ACTIVITY**

#### Gentlemen:

My letter of (date) notified you of Government interest in an actual or potential pollution incident at (Vessel/Facility) at (Location/body of Water) for which you are presently considered financially responsible.

You are hereby given notice that your actions to abate this threat and to remove the pollutant (s), and to mitigate (its/their) effects have been evaluated as unsatisfactory by the JDF Coast Guard On-Scene Commander,

(NAME)	)
--------	---

Effective (date/time), the Coast Guard will conduct all response activities under the authority of OSC. Removal will be effected in accordance with the National Pollution Contingency Plan of Jamaica and Government regulations. You may then be billed for all actual costs incurred by the Government, as set forth.

Should you require further information concerning this matter you should contact: (Name, Address and Telephone Number of OSC)

Sincerely,

(OSC or representative)

Received and acknowledged

(Name of Addressee), (Date/Time)

# REGIONAL REPORTING SYSTEM CARIBBEAN OIL SPILL ALERTING MECHANISM INCLUDING HAZARDOUS MATERIAL INCIDENTS

The Greater Antilles Section Operations Center is San Juan, Puerto Rico, provides the communication link in the collection and dissemination of information concerning oil and hazardous material incidents occurring in the Caribbean Basin.

The Greater Antilles Operations Center address, telephone and telex numbers are:

Commander
Greater Antilles Section
Operations Center
P.O. Box 5-2029
San Juan, Puerto Rico 00903-2029

Telephone: (809) 722-2943

Telex: 365228

### **ACTION**

- On receipt of a Caribbean Pollution Report (CARIBPOLREP) concerning an oil or hazardous material incident in the Caribbean Basin: will ensure it is readdressed and re-transmitted to the addressees in the CARIBPOLREP
- Conduct bi-annual tests of the Caribbean Oil and Hazardous Material Spill Alerting Mechanism. A written report will be sent on completion of the Test Transmission. Included in the report will be the most recent listing of "National Authorities" and "National On-scene Coordinators".

# GUIDANCE FOR U.S. COAST GUARD ASSISTANCE FOR POLLUTION RESPONSE AND TRAINING

### <u>GENERAL</u>

All request for assistance must be made formally, through the U.S. Embassy (U.S. Military Liaison Officer) in Kingston, and the Request should contain at least the following information:

- a) A full description of the situation necessitating the request.
- b) The type of assistance being requested.
- c) What commercial resources, if any, are responding and why such resources are considered inadequate.
- d) What international or transnational organization are assisting, if any, such as the International Maritime Organization (IMO), International Tanker Owners Voluntary Pollution Fund (ITOPF), etc.
- e) The estimated duration that U.S. assistance will be needed.
- f) Assurances that the requesting government will reimburse the United States Government for all, or a specified portion, of the costs associated with the assistance provided.

### **REGIONAL REPORTING SYSTEM**

### CARIBPOLREP FORMAT

FROM: (State or territory requesting the alert)

TO: Commander, Greater Antilles Section, US Coast Guard, San

Juan, Puerto Rico

CARIBPOLREP number (sequential number of report)

(Brief title of the incident including source or potential source,

location and time of incident)

Situation (provide full details of the incident as known)

Action taken (describe the action taken initially, or since last

report, in response to the discharge or threat)

Future plan (describe the action contemplated in response to

the discharge or threat)

Assistance Requested (identify assistance desired by

particular State)

Alert (a) identify State to whom the alert is to be readdressed,

(b) advise flag State following message quote - unquote

Status of situation (case pending or case closed)

### NOTE:

Automatic Distribution to following outside agencies:

- a. Clean Caribbean Co-operative. Petrojam
- b. USCG Atlantic Strike Team USMLO
- c. USAID/USMLO

### SPECIMEN CARIBPOLREP

FROM: Barbados

TO: Commander, Greater Antilles Section, US Coast Guard, San

Juan, Puerto Rico.

CARIBPOLREP NR1 Fire Tank Vessel Neversink (flag) 13-20 N, 50-00 W approximately 010300 GMT.

### Situation:

- a. 010400 GMT Neversink reported to Bridgetown, Barbados experiencing fire in engine-room, vessel disable and adrift. Cargo 700,000 barrels crude oil (origin unknown).
- b. Presently no repeat no discharge.
- c. Weather: Wind from NE 25-30 kts Seas NNE 10-12 ft Overcast in rain. Forecast unchanged.

### Actions Taken:

- a. Barbados Oil Spill Contingency Plan activated.
- b. Alerted Martinique, St. Lucia, St. Vincent, and Grenada.

#### Future Plans:

- a. Dispatch aircraft to investigate when weather suitable.
- b. Maintain close liaison with Neversink to determine developments.
- Keep appropriate State informed.

### Assistance Requested:

- a. Request National Authority, San Juan, alert repeat alert CLEAN CARIBBEAN CO-OPERATIVE, USCG ALTANTIC STRIKE TEAM, USAID.
- b. Request US Coast Guard place emergency pumping system on standby.

### Alerts:

a. Re-address this message to:

Antigua, Guadeloupe, Dominica, Martinique, St. Lucia, St. Vincent, Grenada, Tobago, Trinidad, Venezuela, San Juan, Puerto to Rico and USA.

b. Advise Flag State following Quote Tank vessel Neversink reports engine-room fire at 010300 GMT, location 13-20 N, 50-00 W, 700,000 barrels plus bunkeroil on board. Presently no discharge. Request name and contact points of owners unquote.

Case pends.

### GUIDE FOR USING CHEMICALS DISPERSANTS

- 1. "Dispersants- Are composed of detergent-like surfactants in low toxicity solvents, which are used to break the oil slick into small particles, which then disperse into the water where they are further broken down by natural processes [CRRRT,PREP –Dispersants in oil spill response, (pollution response workshop 1999)]. The active ingredient in the surfactants reduces the oil/water interface, while the solvent reduces the viscosity of the dispersant mixture and helps the surfactant to penetrate the oil".
- 2. "Biological Agent- Are used to enhance the biodegradation process of the oil."

<u>Marine-Based Oil Spills</u> – Given an oil spill incident in the marine environment the countermeasures employed could include a combination of the following:

- Mechanical cleanup methods (such as containment booms, skimmers, adsorbent pads, low and high pressure water hose flushing for certain shorelines, vessel assisted flooding of an oil contained (via boom) area and recovery vacuuming).
- 2. Non-mechanical methods (such as manual removal /cleaning, vegetation cutting / removal, debris removal, in-situ burning, natural removal, shoreline cleanup, biological agents and dispersants).

The decision to employ the non-mechanical cleanup method using chemical dispersants is dependent in the following factors:

- High viscosity oils like No. 6 Fuel Oil Bunker C (typical of the kind of oil used and spilled in Jamaica) is not likely to dissolve easily and is difficult or impossible to disperse.
- 2. The availability of the dispersant spray system applicator designed to provide correct droplet size and dosage (typical dispersants to oil volume ratio is 1:20) to the oil affected area is, as far we are aware, unavailable. Additionally the means of transport the dispersant spray system via planes; boats etc. will also be needed.
- 3. The allowable time to apply the dispersant. The dispersant must be used before full evaporation and emulsification of the oil occurs. If this happens the heavier viscous fractions left behind may not be dispersible. Thus, timeframe for effective use is short.
- 4. When the oil is treated with dispersants, it initially disperses within approximately the upper 30 feet (9 meters) of the water column. This introduction of a chemical with a measurable toxicity kills some species. Other species will recover and live due to their mobility. Thus, dispersant

use is typically reserved for deeper waters to ensure sufficient dilution and to prevent impacts on bottom – dwelling organisms.

<u>Land Based Oil Spills – Land based oil spills are usually handled by non-mechanical manual methods with without the use of any pollution removal chemicals.</u>

### Information above received from NEPA

- The employment of chemical dispersants/oil herders and other materials is subject to the "IMO/UNEP GUIDELINES ON OIL SPILL DISPERSANT APPLICATION AND ENVIRONMENTAL CONSIDERATIONS" which includes the following key factors:
  - a. The distance of the pollutant from shore or threatened resources.
  - b. The depth of the water column under the pollutant (which must be sufficient to provide adequate mixing)
  - c. The type of pollution involved e.g. oils higher grades are rapidly dispersed whereas heavy oils and emulsified oils may not be dispersible with currently available dispersants
  - d. The sensitivity or value of the shoreline, or area being threatened
  - e. Advice from NEPA on the biological sensitivity of the water column in which the dispersant is to take place
  - f. The availability of adequate amounts of the proper formulations of dispersants, the equipment and affectivity.

### **NOTE**

- 1. If it is considered that pollutant will not threaten a coast, or a sensitive area, DO NOT disperse but carefully monitor its movements.
- 2. The use of chemical dispersant should always be last resort depending on weather and position of the pollutant after consultation with the appropriate authority.
- The OSC shall monitor dispersant operations and conduct periodic dispersant effectiveness field tests to ensure that the operation is cost effective.

4. The approved chemical dispersants (list) approved by IMO, USCG and the EPA (USA) are to be used as a guide in procuring dispersants.

The decision will be made by NEPA and ECD in consultation with the OSC.

# UPDATED LIST OF APPROVED CHEMICALS BY EPA USED IN POLLUTION REMOVAL OPERATION

NAME OF PRODUCT	<b>FUNCTION</b>
AMEROID OIL SPILL DISPERSANT LT	DISPERSANT
ATLANTIC/PACIFIC OIL DISPERSANT	DISPERSANT
COLD CLEAN	DISPERSANT
CONCO DISPERSANT K	DISPERSANT
COREXIT 7664	DISPERSANT
COREXIT 9527	DISPERSANT
COREXIT 8667	DISPERSANT
COREXIT OC - 5	COLLECTOR/ BEACH CLEANER
SEA MASTER, NS - 555	DISPERSANT
SLICK - WAY	DISPERSANT
NOSCUM	BIOLOGICAL ADDITIVE
PETRODEG 100	BIOLOGICAL ADDITIVE
PETRODEG 200	BIOLOGICAL ADDITIVE
SHELL LTX	DISPERSANT
SHELL DISPERSANT CONCENTRATE	DISPERSANT
SHELL OIL HERDER	COLLECTOR
BTO ALL - PRO	DISPERSANT

KEM-MARINE 66 DISPERSANT

## NOTE:

Include Chemical Data Sheet on each type of dispersants for damages, fire, application, chemical breakdown etc.

## **INVENTORY ON DISPERSANTS**

COMPANY	DISPERSANT	QUANTITY	COMMENTS
1. SHELL	Nil		
2. PCJ) (PETROJAM	Corexit 9527	33x55 Gal Drum	
	Corexit 7664	18x55 Gal Drum	
3.KAISER	Poly Complex	4 Drums	
			DISPE RSAN T

#### **DOCUMENTATION-SUMMARY**

### 1. <u>Initial Pollution Incident Report</u>

Report the initial specifics of a spill e.g. time, location, materials and quantity spilled, spiller, source of spill, Public Health Hazards, Agencies contacted comments, etc.

### 2. Chronological Log

Maintains a minute-by-minute account of spill response activities e.g. emergency response activation of contaminated areas, etc.

### 3. Daily Work Reports

Clean up expenditures - documenting all resources used at each work site to include names of workers, start and stop time, number of loads to dump, etc.

### 4. Spiller's Report

Spiller's version of the spill incident including time cause of spill, material and quantity spilled, location, clean-up actions taken, etc.

### 5. Investigative Report

Foundation of civil action against spiller of violator, report includes who, what, when, why, how, witness statement photographs, etc. oil sample analysis report.

### 6. Final Pollution Incident Report

Summarizes the total event including cost of incident critique of the event, damage assessment, expenditures, liability and recommendations regarding amendment or revision of National Plan and Sub-Regional Contingency Plan.