

**National Oil Spill
Contingency Plan
For
Barbados**

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I. Purpose

1. This Plan delineates the national preparedness and response system, including both public and private resources, for incidents and emergencies which result or could result in a spillage of oil into the terrestrial or marine environment. The Plan aims to prevent or, where prevention is not possible, mitigate and minimise adverse environmental impacts of oil pollution.

II. Scope

2. The National Oil Spill Contingency Plan establishes organisational and decision-making structures, coordinates the acquisition and deployment of necessary resources, and facilitates the application of available expertise in order to provide an effective response in the event of an oil pollution incident or the threat of an oil pollution incident.

3. The Plan applies to

- (a) Discharges or releases of oil into the marine environment within the exclusive economic zone of Barbados, its adjoining shorelines and the high seas where a threat to Barbados' waters, shore-face, or shelf-bottom exists; and
- (b) Discharges or releases of oil into the terrestrial environment of Barbados, including releases into inland bodies of water.

4. The Plan provides for

- (a) The establishment of national organisations for the planning, management, coordination and implementation of an efficient and effective response to discharges and releases of oil;
- (b) The participation of other persons and agencies, nationally, regionally and internationally, to provide assistance and resources as required in response actions;

- (c) The undertaking of response and removal actions in the event of a discharge or potential discharge of oil, including procedures for the use of dispersants; and
- (d) The compilation of an administrative record for response actions.

III. Responsibility for the Plan

5. The Ministry of Environment and Drainage is the Ministry responsible for the National Oil Spill Contingency Plan and other matters related to oil spill contingency planning.

6. The Environmental Protection Department, as the Lead Agency for the National Oil Spill Contingency Plan, is responsible for the upkeep and maintenance of the National Plan.

IV. Authority

7. The National Oil Spill Contingency Plan was approved by a decision of the Cabinet in January 2013.

8. There is no single item of national legislation which covers the full range of actions and activities to be carried out under the National Plan. The following is a list of Acts which contain provisions relevant to the prevention of and response to discharges and releases of oil.

Act	Relevant Provisions/Objectives
Health Services Act (1969)	<p><i>An Act relating to the promotion and preservation of the health of the inhabitants of Barbados. The Health Services (Nuisances) Regulations 1969 prescribe penalties for “any place, matter, thing, deposit, or accumulation of liquid or solid matter that is... in such a state, or so placed, made or left, as to be insanitary, injurious or dangerous to health or likely to become so” and “any discharge, except in accordance with a permit granted by the Minister or a Medical Officer of Health” of any industrial waste or other noxious matter on to any beach or into the sea or into any river, ravine, watercourse, pond, ditch, drain or other place”. (Section 3 (1) and Section 3 (15))</i></p>
Barbados Territorial Waters Act (1977)	<p>The Act defines the limits of the territorial waters of Barbados. Under the Act, the passage of a foreign ship may be deemed “prejudicial to the peace, good order or security of Barbados” if the ship engages in any act of pollution calculated or likely to cause damage or harm to Barbados, its resources, or its marine environment. Such prejudicial acts constitute an offence under the Act.</p>

Act	Relevant Provisions/Objectives
Marine Boundaries and Jurisdiction Act (1978)	<p><i>An Act to provide for the establishment of marine boundaries and jurisdiction. The Act defines the waters of the exclusive economic zone of Barbados, and vests in the Government of Barbados rights in and jurisdiction over the zone in respect of, inter alia, the preservation and protection of the marine environment and the prevention and control of marine pollution and the conservation, protection or management of the natural living and non-living resources of the sea-bed, sub-soil and superjacent waters.</i></p>
Defence Act (1979)	<p>The Act allows for multi-purpose surveillance in the exclusive economic zone and territorial waters of Barbados.</p>
National Conservation Commission Act (1985)	<p><i>An Act to revise and consolidate the law relating to public parks, beaches and caves and related matters, and to make provision for the conservation of sites and buildings of national interest. The Act provides for the establishment of the National Conservation Commission, with responsibility for, inter alia, controlling, maintaining and developing the beaches of Barbados, securing the observance of sanitary and cleanly conditions at beaches, and other matters relating to the beaches of Barbados, including matters pertaining to beach control.</i></p>

Act	Relevant Provisions/Objectives
Shipping (Oil Pollution) Act (1994)	<i>An Act to make provision concerning oil pollution of navigable waters by ships, to provide for civil liability for oil pollution by ships and to give effect to certain international conventions relating to pollution of the sea.</i>
Coastal Zone Management Act (1998)	<i>An Act to provide for the more effective management of the coastal resources of Barbados, for the conservation and enhancement of those resources and for matters related thereto. The Act provides a comprehensive, statutory basis for coastal zone management and planning in Barbados. It makes provision for the protection of coral and other marine resources, the creation of marine reserves and the identification of critical areas of concern not covered by current legislation.</i>
Marine Pollution Control Act (1998)	<i>An Act to prevent, reduce and control pollution of the marine environment of Barbados from whatever source. The Act prohibits the release of any pollutants into the environment in violation of applicable specified standards, conditions or requirements.</i>

Act	Relevant Provisions/Objectives
Offshore Petroleum Act (2007)	<i>An Act to vest in the Crown the property in petroleum and natural gas in the offshore and to make provision for the search and recovery of Petroleum and for purposes connected with the matters aforesaid. The Act and accompanying regulations establishes, for persons undertaking petroleum operations within Barbados, requirements in respect of notification of, response to, and cleanup of spills of oil or other dangerous substances.</i>

V. Geographical Boundaries

9. The geographical area covered by the National Oil Spill Contingency Plan encompasses the extent of Barbados’ terrestrial territory, all of Barbados’ territorial seas, Barbados’ exclusive economic zone, and the high seas where an oil spill has the potential to impact on Barbados’ waters, shore face or shelf-bottom.

VI. Interfacing Contingency Plans

10. The National Oil Spill Contingency Plan co-exists with other major contingency plans, managed and operated by local and regional organisations, facilities, installations, ships, ports and response agencies, for oil spills, disasters and emergencies, and is intended to complement other relevant plans as part of an overall response action. Relevant interfacing plans include:

- (a) individual contingency plans of the local petroleum industry;
- (b) the local petroleum industry Marine Oil Spill Action Plan;
- (c) the National Disaster Plan;
- (d) the Caribbean Island Oil Pollution Preparedness Response and Co-operation Plan.

VII. Plan Administration

11. The Plan establishes a National Oil Spill Response Committee with responsibility for providing advice on strategic policymaking related to the Plan. The functions of the Response Committee are to:

- (a) Provide strategic oversight and direction for the effectiveness and efficiency of the National Plan;
- (b) Evaluate preparedness for response to an oil spill incident;
- (c) Oversee the ongoing effectiveness of arrangements between key stakeholders for Plan implementation;
- (d) Develop and implement mechanisms, including operational procedures, to ensure that the roles and responsibilities of stakeholders are clearly understood by all stakeholders in the National Plan;
- (e) Provide advice to the Environmental Protection Department and the Ministry of Environment and Drainage on the development and maintenance of co-operative arrangements for oil spill preparedness and response;
- (f) Provide advice on the funding direction for the Plan and on the collection and distribution of funds for the Plan.

12. The National Oil Spill Response Committee comprises senior representation from the:

- (a) Environmental Protection Department
- (b) Barbados Defence Force/Barbados Coast Guard
- (c) Barbados Fire Service
- (d) Barbados National Oil Company Ltd.
- (e) Barbados National Terminal Company Ltd.
- (f) Barbados Port Inc.

- (g) Coastal Zone Management Unit
- (h) Department of Emergency Management
- (i) Energy Division
- (j) International Transport Division
- (k) Local Petroleum Industry Marine Oil Spill Action Plan
- (l) Ministry of Public Works
- (m) National Conservation Commission
- (n) Royal Barbados Police Force.

13. The Director of the Environmental Protection Department is the Chair of the National Oil Spill Response Committee.

14. A directory of the members of the National Oil Spill Response Committee shall be included in this Plan as Appendix A.

15. The National Oil Spill Response Committee should meet at least twice a year.

16. The Chair may establish as necessary within the Response Committee working groups to support the Committee's work by considering the overall operational aspects of the plan, including:

- (a) The provision of training under this Plan;
- (b) Monitoring oil spill response equipment and its maintenance, and making recommendations for acquisition of national response equipment;
- (c) Ensuring sound equipment allocation, compatibility and preparedness;
- (d) Testing the effectiveness of this Plan through the conduct of oil spill response exercises;
- (e) The maintenance of support systems under the National Plan, including risk assessment, sensitivity maps, and oil spill fate and trajectory models;
- (f) Such other functions as may be required from time to time.

17. The Environmental Protection Department's Role as Lead Agency of the National Plan includes:

- (a) Maintaining the National Oil Spill Contingency Plan;
- (b) Maintaining a list of National Response Team members and associated contact information, to be included in this Plan as Appendix B;
- (c) Maintaining a database of the national inventory of available spill response equipment, to be included in this Plan as Appendix C;
- (d) Maintaining a database of trained oil spill response personnel, including national, regional and international personnel, to be included in this Plan as Appendix D;
- (e) Maintaining a national database of oil spill incidents;
- (f) Coordinating National Plan training programmes as recommended and endorsed by the National Oil Spill Response Committee;
- (g) Managing the development and delivery of national equipment acquisition programmes for government-owned equipment;
- (h) Managing funds collected for the purposes of the National Plan and related expenditures and providing financial statements to the National Oil Spill Response Committee;
- (i) Providing secretariat services to the National Oil Spill Response Committee and any associated working groups;
- (j) Dissemination of information on pollution prevention, improved spill response and planning techniques;
- (k) Representing the interests of National Plan stakeholders in regional and international fora.

18. The National Oil Spill Contingency Plan shall be reviewed by the National Oil Spill Response Committee, and revised or updated as necessary, at least once every five years.

VIII. Plan Funding

19. Funding of the National Plan will be overseen by the Chair of the National Oil Spill Response Committee.

IX. Oil Industry Arrangements

20. In general, for incidents at oil terminals or facilities, the relevant oil company or terminal operator has the operational responsibility for taking action, in accordance with the company's internal contingency plan, to respond to an oil spill.

21. The petroleum industry also operates the Marine Oil Spill Action Plan (MOSAP), a mutual assistance plan for marine oil spills. In the event of an incident at an industry facility requiring resources beyond those of the individual responsible company, MOSAP allows for mutual aid to be provided from other industry company resources. Under MOSAP and the National Plan, the party with operational responsibility for taking action is expected to liaise with the Chair of the National Oil Spill Response Committee to agree on and maintain effective spill response. The duty to liaise with the Chair of the National Oil Spill Response Committee as soon as possible should not be deemed prejudicial to the party's obligation to take immediate measures to respond to the discharge or potential discharge.

22. In the event that the necessary response is beyond the resources of the relevant oil company or terminal operator and its mutual aid partners, responsibility for oil spill response action will be transferred to the Barbados National Response Team. Under such circumstances, industry resources will continue to be available for use and deployment by the Barbados National Response Team.

X. Response Policy

23. The aims of spill response carried out under this plan are to:
- (a) Protect and preserve human health, safety and wellbeing; and
 - (b) Minimise and, where possible, prevent adverse environmental impacts.
24. Under this plan “responsible party” or “party responsible” means:
- (a) In the case of a discharge or potential discharge from a vessel, any party owning or operating the vessel;
 - (b) In the case of a discharge or potential discharge from an onshore facility (other than a pipeline), any party owning or operating that facility;
 - (c) In the case of a discharge or potential discharge from an offshore facility (other than a pipeline), the licensee of the area in which the facility is located;
 - (d) In the case of a pipeline, any party owning or operating the pipeline;
 - (e) In the case of an abandoned vessel, onshore facility, offshore facility, or pipeline, the parties who would have been responsible parties immediately prior to the abandonment of the vessel, facility or pipeline;
 - (f) Any other party, not including a party who is rendering aid or advice in incident response, who causes or allows an unauthorised discharge or potential discharge of oil.
25. To the extent feasible, the party responsible for the discharge will bear responsibility for the execution of response measures and for costs incurred as a result of the discharge. In the event of a potential discharge, the party responsible for the vessel or installation involved will bear responsibility for the execution measures and for costs incurred in responding to the potential discharge.

26. Public and private sector agencies will be required to make available equipment and other resources that may contribute to effective spill response.

XI. Risk Assessment

27. Under the National Plan, the National Oil Spill Response Committee shall be responsible for overseeing the execution of a national oil spill risk assessment and the preparation of a resulting national risk profile. The risk assessment is intended to provide the Response Committee and other stakeholders and response agencies with information on the likely risks posed by oil spill incidents, and to inform decision-making about planning and preparedness, based on the combination of the probability and consequences of an incident.

28. Potential risk factors to be considered include hazards to navigation, risks of collision or grounding, sizes and types of vessels and amounts of oil carried, traffic density and environmental factors such as tidal flow, currents, and weather.

29. The risk assessment should report on the level of risk of oil pollution to the marine and terrestrial environment of Barbados, taking into account factors such as:

- (a) Environmental sensitivity;
- (b) Presence of industries (e.g. tourism, fisheries, agriculture) likely to be most adversely affected by an oil spill;
- (c) Frequency, size and shipping patterns of oil tankers and quantities and properties of oil shipped as cargo;
- (d) Frequency, size and shipping patterns of ships carrying oil as bunker fuel and quantities of oil thus transported;
- (e) Location of offshore and onshore production and pipeline facilities and quantities of oil produced and/or transported by pipeline;

- (f) Presence and extent of offshore exploration drilling
- (g) Future trends, including proposed new facilities and projected changes to trading and traffic patterns

30. The results of the national risk assessment will inform the establishment of contingency planning priorities and the allocation of national oil spill response resources.

31. The salient results of the national risk assessment shall be included in this Plan as Appendix E.

32. The national risk assessment is to be updated at least every five years. Updates may also be carried out as determined necessary by the National Oil Spill Response Committee in response to substantial changes in the factors outlined above.

XII. Response Strategies

33. Based on the risk assessment carried out in accordance with Section XI, the National Oil Spill Response Committee shall seek to establish pre-agreed priorities and strategies for

- (a) Viable response to likely oil spill scenarios; and
- (b) Protection of vulnerable areas and resources in the event of an oil spill.

34. Such strategies should take into consideration ecological, recreational, commercial and financial concerns, and should take into account the practical elements associated with their implementation.

35. Response strategies should be developed and established in consultation with relevant stakeholders.

36. Pre-agreed response strategies shall be included in this Plan as Appendix F.

XIII. Sensitivity and Contingency Maps

37. Based on the risk assessment carried out in accordance with Section XI, and the response strategies developed in accordance with Section XII, the National Oil Spill Response Committee shall undertake the preparation of oil spill sensitivity and contingency maps to visually convey information about

- (a) Sensitive resources requiring protection; and
- (b) Practical tactical information for spill response and clean-up.

38. Oil spill sensitivity and contingency maps shall be included in this Plan as Appendix G.

XIV. Categories of Incident and Level of Response

39. The National Oil Spill Contingency Plan is intended for use in response to oil spills or potential discharges of oil of any size on the land or in the waters of Barbados.

40. An *oil spill* is any accident or other circumstance resulting in the discharge of oil to, and subsequent pollution of, the marine or terrestrial environment.

41. A *potential discharge* is any accident or other circumstance threatening to result in the discharge of oil to, and subsequent pollution of, the marine or terrestrial environment.

42. An *oil spill incident* is any oil spill or potential discharge and the subsequent response.

43. For the purposes of this Plan three tiers of response are used to categorise oil spill incidents.

- (a) *Tier 1 spills* are operational type spills, or *minor incidents*, that may occur at or near a specific site of facility as a result of routine activities. Response to Tier 1 spills can be successfully undertaken using the resources of the responsible party

involved, without assistance from others. A Tier 1 spill corresponds roughly to a discharge of less than 1,000 gallons (24 barrels) of oil.

- (b) *Tier 2 spills* are larger spills, or *medium incidents*, where the resources of the responsible party are insufficient to cope with the incident. Further resources from other companies and industries can be mobilised on a mutual assistance basis. A Tier 2 spill corresponds roughly to a discharge of between 1,000 and 20,000 gallons (24 and 476 barrels) of oil.
- (c) *Tier 3 spills* are large spills, or *major incidents*, where substantial further resources are necessary for response, thus requiring the deployment of national resources under national control. Support from regional or international co-operatives stockpiles may also be necessary if the spill is, due to size, cost, location, complexity and/or environmental impact, beyond the capability of national resources. A Tier 3 spill corresponds roughly to a discharge of more than 20,000 gallons (476 barrels) of oil.

44. Upon receipt of notification of an oil spill incident, including actual and potential discharges, the Chair of the National Oil Spill Response Committee shall assess the situation to determine what level of response is warranted. In making this decision the Chair may consult with the Committee and with other stakeholders and advisory parties as he deems necessary. There are no rigid criteria for triggering a Tier 2 or Tier 3 response. Conditions under which the Chair may trigger an advanced level of response include, but are not limited to:

- (a) The risk of significant pollution requiring a salvage operation;
- (b) A spill of oil for which the responsible party does not (after allowing for mutual support arrangements) have the capacity to deploy the necessary response equipment;
- (c) A spill of oil within the area of a port that requires the deployment of national resources under national control, or that requires other action beyond the capacity (after allowing for

- mutual support arrangements) of the relevant port administration authorities to respond;
- (d) A spill of oil for which the responsible party cannot be identified, thus requiring the deployment of national resources under national control;
 - (e) A spill of oil that requires action beyond the capacity of national resources, and for which regional or international support and assistance is required.

XV. Incident Organisation

45. In the event of a Tier 1 or Tier 2 spill, in which nationally owned resources are not required for spill response, the incident command and response team structure shall be that outlined by the responsible party's relevant contingency plan, or by any other mutual assistance plan which may be brought to bear.

46. For Tier 1 and 2 incidents, the National Oil Spill Response Committee shall serve to:

- (a) Provide management, operations, technical and environmental advice and support to the designated incident commander so that effective response action can be formulated and implemented;
- (b) Monitor and evaluate the potential and actual impacts of the spill and of response actions taken;
- (c) Facilitate appropriate resolutions of administrative matters over which the respective member agencies have authority and influence;
- (d) Maintain appropriate records of the incident and response;
- (e) Inform relevant authorities and the public of response actions taken.

47. In the event of a major, Tier 3 incident, as defined in paragraph 43(c), national response shall be coordinated by a designated National Coordinator and implemented by an Incident Commander and supporting Advisors and Officers forming the Barbados National Response Team. For lesser incidents, the Incident Commander shall be responsible for the overall response strategy.

48. The role of the National Coordinator is to ensure that the overall response is sound, effective, and consistent with government operational, policy and communications requirements.

49. The Incident Commander is responsible for

- (a) Recommending response strategies and setting clear objectives for the response effort;
- (b) Reviewing, approving and authorising implementation of response action plans;
- (c) Managing the coordinated response effort and activities;
- (d) Ensuring overall implementation of field activities;
- (e) Ensuring overall efficiency and effectiveness of the response;
- (f) Ensuring overall safety of the response; and
- (g) Keeping the public and stakeholders informed of response activities.

50. National response will be managed via the Barbados National Response Team. The organisational structure of the Response Team is intended to facilitate efficient and effective response to an oil spill incident. The structure of the National Response Team is indicated in Figure 1.

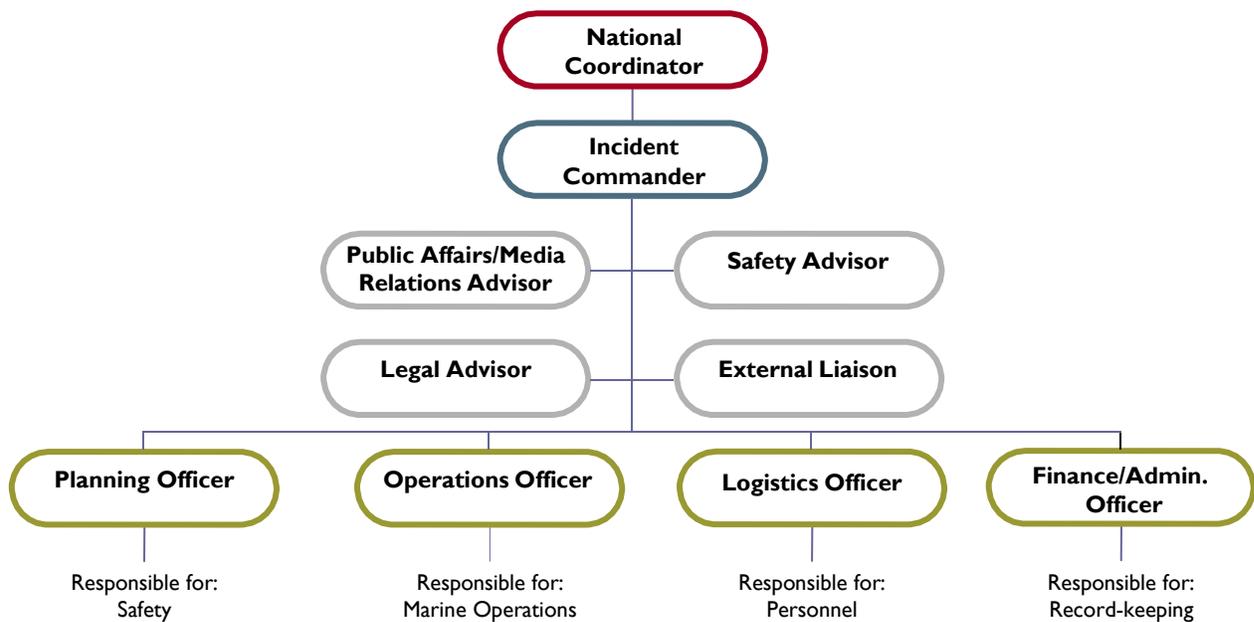


Figure I: National Response Team Organisational Structure

51. The roles of the advisors to the Incident Commander are as follows:
- (a) The Safety Advisor is responsible for reviewing response strategies and response action plans and advising on the associated health and safety implications, as well as for providing specialist health and safety advice and expertise to the Incident Commander;
 - (b) The Public Affairs/Media Relations Advisor is responsible for the development of releases to the news media and the wider community and for obtaining news media information that may be useful for incident planning and response.
 - (c) The Legal Advisor is responsible for providing advice on legal issues related to the implementation of response plans and the use of response technologies, legal issues related to investigation, legal issues related to finance, damages, costs and claims, and on other response-related legal issues.

- (d) The External Liaison is responsible for establishing and maintaining links, communication and coordination between the responsible party, the National Response Team and other response agencies and stakeholders.

52. In the National Response Team structure, tasks necessary for oil spill response are grouped into four major categories of function:

- (a) Planning;
- (b) Operations;
- (c) Logistics; and
- (d) Finance and Administration.

53. These constitute the main elements of the organisational structures and are designated as units in the structure, each headed by a unit officer. The unit officer is responsible for carrying out the relevant tasks and functions. Each unit officer reports to the Incident Commander. Units may, as necessary, be subdivided into working groups staffed by personnel with relevant and appropriate skills and experience to deal with particular tasks and functions.

54. The responsibilities of the various unit officers are as follows:

- (a) The Planning Officer is responsible for the development, with necessary input from environmental, safety and other specialists, of incident action plans to implement agreed response strategies. The Planning Officer is also responsible for the maintenance of incident information services and for the provision of necessary scientific, environmental and safety information. The Planning Officer is responsible for the distribution of this information to the National Response Team and to all response personnel generally.
- (b) The Operations Officer is responsible for all on-scene response operational activities, for ensuring that the requirements of incident action plans are passed on to operational field

personnel, for ensuring that the plans are safely and effectively implemented, and for the supervision of field operations personnel.

- (c) The Logistics Officer is responsible for ensuring that response personnel are provided with adequate resources to enable an efficient and effective response to be mounted. This included the procurement and provision of personnel, equipment and support services for operations in the field and for the management of resources staging areas.
- (d) The Finance and Administration Officer is responsible for all financial, legal, clerical, accounting and recording activities, including the contracting of personnel, equipment and support resources. The Finance and Administration Officer is also responsible for the management of the incident command centre.

55. The number of staff necessary to fill positions in the National Response Team structure will vary according to the size and complexity of the incident and the number of staff available. Not all positions are essential for every operation. Only positions that are required for an adequate and effective response need to be filled, and in lesser incidents, one person may, if appropriate, fill a number of posts.

56. Persons with appropriate experience and skills shall be identified by the National Oil Spill Response Committee so that they can be appointed to the relevant positions in the event of an oil spill incident. The National Response Team should meet at least once per year.

57. In an oil spill incident, it may be necessary for the National Response Team to charter or hire equipment to assist in response operations. When such a need arises, a formal charter or hire agreement should be used. An example of such an agreement shall be provided in this Plan as Appendix H,

and may be amended to the particular circumstances of the given incident.

XVI. Incident Control Arrangements

58. In the event of an oil spill incident requiring a national response or otherwise requiring the activation of the National Response Team under this plan, i.e. a Tier 3 incident, a National Response Centre will be established in a suitable location in close proximity to the incident. The location should have available the necessary resources and facilities for sustained incident management. The National Response Centre will serve to supply:

- (a) The operations quarters for the National Response Team, with physical facilities for coordination, management and control of the response to a spill;
- (b) A continuously manned communications centre for the incident;
- (c) Photocopier, fax and e-mail facilities;
- (d) Current and updated charts for the economic zone/territorial waters and ocean areas adjacent to Barbados;
- (e) Current and updated sensitivity and strategic maps for Barbados' coastal zone;
- (f) Charts and/or other equipment to plot and demonstrate the geographic positions, movement and extent of the oil discharge;
- (g) An updated telephone notification/contact list for members of the National Response Team, National Oil Spill Response Committee, representatives of the responsible party, and other trained oil spill response personnel;
- (h) An updated inventory of oil spill response equipment.

59. Pre-agreed locations for the establishment of a National Response Centre for likely spill scenarios shall be included in this Plan as Appendix I.

XVII. Incident Response

60. In the event of an oil spill the priority objectives for pollution response are to:
- (a) Where possible, prevent pollution and other damage from occurring by preventing, controlling or stopping the discharge of oil;
 - (b) Minimise the extent of any pollution or damage that occurs by monitoring the fate of the oil spill, containing and recovering spilled oil, and protecting environmentally and economically sensitive areas;
 - (c) Mitigate the effects of any pollution or other damage that occurs by formulating and executing appropriate clean-up measures.
61. Priorities for protection in the event of an oil spill incident are:
- (a) Human health and safety;
 - (b) Habitat and natural resources, including rare flora and fauna;
 - (c) Commercial resources;
 - (d) Cultural resources;
 - (e) Amenities.
62. Potential response measures include the following:
- (a) Prevention and source control;
 - (b) Surveillance and tracking;
 - (c) Containment;
 - (d) Recovery;
 - (e) Chemical dispersal; and
 - (f) Shoreline treatment.

XVIII. Phases of Response

63. The actions taken to respond to a discharge or potential discharge of oil may typically be divided into five operational phases:

- (a) Discovery and Notification
- (b) Assessment and Initiation of Action
- (c) Response Actions
- (d) Waste Disposal
- (e) Termination of Response

64. Not all phases will be applicable to all spills.

65. Generally, response to a spill can be illustrated by means of the following diagram.

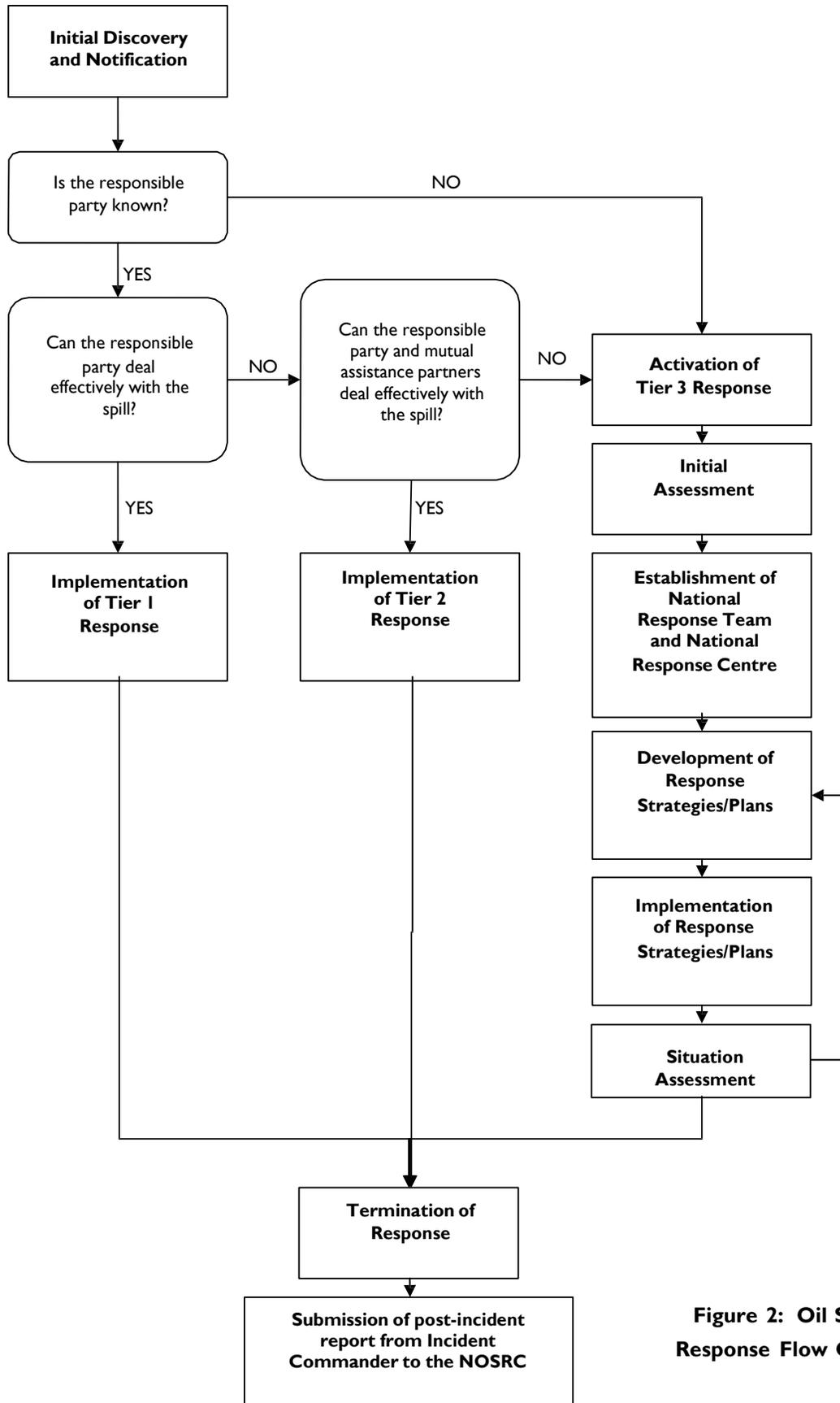


Figure 2: Oil Spill Response Flow Chart

A. Discovery and Notification

66. In the event of a discharge or potential discharge of oil, it is the duty of the responsible party to report the incident to the Chair of the National Oil Spill Response Committee by the quickest possible means.

67. Tier I spills should be reported at the earliest possible opportunity, but no later than five days after occurrence.

68. Tier 2 spills should be reported at the earliest possible opportunity, but no later than 24 hours after occurrence.

69. Tier 3 spills should be reported at the earliest possible opportunity, but no later than 2 hours after occurrence.

70. Reports submitted by the responsible party should contain information about:

- (a) The nature of the incident and the source/cause of the discharge or potential discharge;
- (b) The identity and contact information of the reporting party;
- (c) The identity and contact information of the responsible party;
- (d) The type, size, location and name of vessel or facility involved;
- (e) The type and estimated amount of oil discharged;
- (f) Current state of the incident;
- (g) Measures undertaken to control the discharge of oil.

71. Reports of a discharge or potential discharge may also be received following:

- (a) Discovery following incidental observation by government agencies or the general public;
- (b) Discovery following surveillance by vessel patrols and/or aircraft.

72. Likely recipients of a report of a discharge or potential discharge of oil include the Environmental Protection Department, the Coastal Zone Management Unit, the National Conservation Commission, Barbados Port Inc., the Barbados Coast Guard, or any other organisation on the National Oil Spill Response Committee. The person or organisation receiving the report should seek to obtain, to the extent possible, information about:

- (a) The nature of the incident and the source/cause of the discharge or potential discharge;
- (b) The identity and contact information of the reporting party;
- (c) The identity and contact information of the responsible party;
- (d) The type, size, location and name of vessel or facility involved;
- (e) The type and estimated amount of fuel discharged;
- (f) Current state of the incident;
- (g) Measures undertaken to control the discharge of oil.

73. Following receipt of an oil spill report by any of the above agencies, the Chair of the National Oil Spill Response Committee or his designated deputy or alternate under the Plan should immediately be notified of the incident.

B. Assessment and Initiation of Action

74. The Chair of the National Oil Spill Response Committee, or his designated deputy or alternate under the Plan, shall promptly confirm and assess the information contained in the report and notification and make the necessary decision regarding appropriate investigations and response actions. In assessing the incident the Chair shall consider the information received as it relates to:

- (a) The magnitude and severity of the incident;
- (b) Weather, sea state and tidal conditions;
- (c) Potential impacts of the incident including hazards to life and safety, threats to natural resources, threats to economic

resources, threats to property and amenities;

- (d) The feasibility of containment and/or removal of the spilled oil;
- (e) The effectiveness of response actions, if already being undertaken by the responsible party;
- (f) The need for further assistance and resources, whether national or external.

75. To assist in assessment of the situation, the Chair may seek to obtain further information from the responsible and/or reporting party regarding the spill. In this regard, the Chair may request further information about:

- (a) The precise location of the vessel/installation and proximity to other vessels/installation and/or to sensitive environmental, commercial or cultural resources;
- (b) For vessels, the course and speed of the vessel;
- (c) For vessels, the type and quantity of cargo, stores or bunkers; and
- (d) The structural and mechanical integrity of the vessel/installation.

76. The Chair shall document all relevant information and prepare an Oil Spill Incident Report, using the format that shall be included in this Plan as Appendix J.

77. The Chair will as soon as possible after receipt of a report determine the appropriate level of response and the need to initiate further governmental response actions.

78. For Tier 1 and 2 spills, the role of the National Oil Spill Response Committee will be to:

- (a) maintain records for documentation and reporting purposes,
- (b) monitor the response, including obtaining periodic situation reports from the responsible party, to ensure that removal

- actions are adequately carried out;
- (c) provide advice to the responsible party carrying out the response; and
- (d) put equipment and resources on stand-by as may be deemed necessary.

79. If the responsible party is unknown or otherwise unavailable, or if the responsible party is unable or does not carry out appropriate and adequate removal action, the Chair of the National Oil Spill Response Committee shall initiate necessary response and removal actions, and thereafter recover the cost from the polluter.

80. Tier 1 or 2 responses may at any time be escalated to a higher level if the Chair of the National Oil Spill Response Committee judges that the incident has outstripped the resources and expertise of those carrying out the response.

81. For Tier 3 level spills, requiring deployment of national or regional resources, the Chair of the National Oil Spill Response Committee shall immediately inform the designated National Coordinator under this Plan of the incident. The Chair should issue to the National Coordinator a copy of the relevant Oil Spill Incident Report.

82. The National Coordinator may, upon assessing the situation, decide to

- (a) supplement the response by activating the National Response Team;
- (b) supplement the response by activating regional and international co-operative response agreements;
- (c) stand down a national response.

83. In the event that the National Response Team or other regional/international response team is activated, the National Coordinator is responsible for disseminating the relevant Oil Spill Incident Report to

Team Members and relevant agencies, based on the nature and location of the incident.

84. For a Tier 3 incident the designated Incident Commander is responsible for the preparation and issuance of periodic Oil Spill Situation Reports, using the format to be included in this Plan as Appendix K. Situation Reports should be directed to the National Coordinator, who will disseminate the information to relevant agencies and authorities. Situation Reports are intended to keep all relevant agencies and authorities apprised of significant developments related to the incident. The Reports should contain as much and as thorough information as possible.

85. The National Coordinator shall be responsible for the establishment of a National Response Centre as outlined in Section XVI of this Plan.

86. The Incident Commander shall be responsible for the operational control of the spill response, with support from a National Response Team including such advisors and units as may be deemed necessary by the Incident Commander in consultation with the National Coordinator.

87. For a Tier 3 incident, the Incident Commander is responsible for the preparation of strategic response plans. Strategic plans are intended to address the broad issues relating to the response and should clearly detail the aims and objectives of the overall response. Strategic Plans should be reviewed and approved by the National Coordinator.

88. For a Tier 3 incident, the Incident Commander is also responsible for the preparation of Incident Action Plans. Incident Actions Plans provide details of the operational objectives and activities to be carried out over specified short-term period. Depending on the nature and progress of the response, and Incident Action Plan may cover a period ranging from a few hours to 24 hours or more. Incident Action Plans may also be subject to the approval of the National Coordinator.

C. Response Actions

89. Response actions should be initiated as soon as possible after discovery and notification of an oil spill. These actions may include

- (a) Prevention and source control;
- (b) Surveillance and tracking;
- (c) Containment;
- (d) Recovery;
- (e) Chemical dispersal; and
- (f) Shoreline treatment.

1. Prevention and Source Control

90. If possible, action should be taken to prevent or reduce the discharge of oil from the source. Such actions may include:

- (a) Containment of the oil within its original container;
- (b) Salvaging of the vessel or installation;
- (c) Safe transfer of the oil to secondary containment.

91. If the spill is in open water and does not threaten sensitive areas or resources, the most appropriate response may be to leave the oil to disperse naturally, particularly if the spill is of a relatively light oil such as diesel. In such cases necessary actions will generally involve monitoring the movement and behaviour of the oil slick. Natural dispersion may be assisted/accelerated by mechanical agitation of the slick. Oil that is moving towards a sensitive area or resource should not be left to disperse naturally.

2. Surveillance and Tracking

92. Surveillance and tracking allow the movement and behaviour of an oil spill to be monitored. Winds and currents cause oil on the surface of the water to drift; unless the winds are extremely strong, surface currents will tend to dominate the movement of the slick. Oil slicks may spread over the water to form a thin layer on the water surface. Spilled oil is subject to weathering via evaporation, dispersion, emulsification and other processes.

The behaviour of the oil depends on its physical properties. Continual monitoring of the spill's fate informs decision-making about necessary and appropriate response actions. It may also be possible to predict the behaviour of the oil using computer models and projections.

3. Containment

93. Containment involves the use of some form of barrier to curb the spread of the oil. Containment also serves to concentrate the oil into a thicker layer so that it can be more easily recovered. The most common means of containment for oil spill control is the use of booms. Factors to consider when using containment booms include the type, size, and strength of the boom, as well as the water velocity and prevailing winds and currents. Boom may also be used to protect threatened resources by blocking, deflecting or diverting the movement of oil.

4. Recovery

94. Recovery operations typically take place after oil has been contained. Oil may be recovered by using skimmers, sorbents, pumps and vacuum trucks. In some cases, oil may have to be recovered via manual techniques, using buckets and shovels. Manual recovery of large quantities of viscous oil or oil that is mixed with debris can be aided by the use of mechanical equipment such as back hoes.

5. Chemical Dispersal

95. The use of chemical dispersant may be required in situations where natural dispersal, containment and/or recovery are impractical or ineffective. The use of dispersant in oil spill response must comply with the National Dispersant Use Policy in Appendix L.

6. Shoreline Treatment

96. In the event that spilled oil reaches the shoreline, it may be necessary to implement measures to clean the affected area. Before clean-up measures commence, the situation must be carefully assessed and a suitable clean-up

strategy formulated. In determining the most suitable treatment approach and methods, consideration must be given to the types and quantity of oil spilled and to the length and nature of the affected coastline. The use of inappropriate clean-up techniques can aggravate the damage caused by the oil spill itself.

D. Waste Disposal

97. Oil spill response operations can generate significant quantities of waste including recovered oil, oily debris (oil mixed with sand, wood, plastic, seaweed, etc.), and solid tarballs. The priorities for management of these waste materials are, in order:

- (a) Prevention;
- (b) Minimisation;
- (c) Recovery and Reuse; and
- (d) Disposal.

98. Storage, transportation, treatment and disposal of wastes must be arranged to comply with the requirements of agencies and authorities responsible for waste management and its regulation, including the Ministry of Health, the Environmental Protection Department and the Sanitation Service Authority. These agencies and authorities will provide guidance on the procedures for waste management.

99. The Incident Commander will be responsible for obtaining clearance for the storage, transport, treatment and disposal of oil and oily wastes arising from the oil spill incident and related response.

100. A list of potential waste-management options and pre-approved treatment and disposal sites shall be included in this Plan as Appendix M.

E. Termination of Response

101. An incident response is terminated when it is adjudged that effective completion of the response has been achieved.

102. For Tier 1 and 2 incidents where the response is undertaken by the responsible party the spill response will be terminated by the incident commander designated by the responsible party, contingent upon the approval of the Chair of the National Oil Spill Response Committee. The Chair of the National Oil Spill Response Committee will be responsible for announcing the termination of the response.

103. For Tier 3 incidents, the spill response will be terminated by the incident commander designated under this Plan, with the approval of the National Coordinator. The National Coordinator will be responsible for announcing the termination of the response.

XIX. Oil Spill Response Field Guide

104. The National Oil Spill Response Committee, with the advice and assistance of the National Response Team, shall undertake to develop an oil spill response field guide. This guide should provide a quick, convenient, and concise source of information needed to plan, implement and control an oil spill incident response. The field guide should include guidance on:

- (a) Characteristics and behaviours of different types of oil;
- (b) Predicting the fate of oil spills on water;
- (c) National response priorities and strategies;
- (d) Selection and use of response actions;
- (e) Protection of safety and health during oil spill response
- (f) Record-keeping, reporting and information management;
- (g) Logistics; and
- (h) Communications.

105. The oil spill response field guide shall be included in this Plan as Appendix N.

XX. Health and Safety

106. The protection of human health and safety is a priority in any oil spill response. It is essential to ensure that the response is carried out in such a way as to minimise risks to the health and safety of response personnel and the general public.

107. Response actions should be carried out in compliance with relevant national legislative provisions for worker safety and health.

108. For Tier 1 or 2 incidents where the response is undertaken by the responsible party, the responsible party, via their designated incident commander, is responsible for ensuring that suitable measures are in place to protect the health and safety of response workers and the public.

109. For Tier 3 incidents, the National Coordinator, via the Incident Commander designated under this Plan, is responsible for ensuring that suitable measures are put in place to protect the health and safety of response workers and the public.

XXI. Public Information

110. In an oil spill incident it is important to give timely, accurate and clear information and advice about the nature of the incident and the action being taken to mitigate its adverse effects. Failure to consider the response of the public and the media may negatively affect the overall response to the incident.

111. For Tier 1 and 2 incidents, the Chair of the National Oil Spill Response Committee, in cooperation with the responsible party, should ensure that all appropriate public and private interests are kept informed and their concerns considered throughout the response. The Chair of the National Oil Spill Response Committee is responsible for issuing official government statements on the incident. All government statements or

news releases by agencies participating in the response should be reviewed and cleared by the Chair of the National Oil Spill Response Committee.

112. For Tier 3 incidents, the National Coordinator, in cooperation with the responsible party, should ensure that all appropriate public and private interests are kept informed and their concerns considered throughout the response. The National Coordinator, with the assistance of the designated public affairs/media relations advisor, is responsible for coordinating media relations, issuing official government statements on the incident, and arranging press conferences. All government statements or news releases by agencies participating in the response should be reviewed and cleared by the Incident Commander and the National Coordinator.

XXII. Record-Keeping and Reporting

113. During an oil spill incident it is important for records to be kept of the actions taken, the reasons for the actions, the results of the actions and the resources used.

114. For Tier 1 and 2 incidents the responsible party shall maintain accurate and complete records relating to the incident response, and shall prepare and submit to the Chair of the National Oil Spill Response Committee periodic situation reports. The Chair of the National Oil Spill Response Committee is responsible for maintaining accurate and complete records relating to the use of nationally-owned equipment and resources, as well as to any advice/guidance provided by the Committee to the responsible party.

115. For Tier 3 incidents the designated Finance and Administration officer is responsible for maintaining accurate and complete records relating to the incident response, including records of cost incurred and claims for damages and compensation. The Finance and Administration Officer should be provided with adequate support staff to carry out the necessary work.

116. The Incident Commander is responsible for the preparation and issuance of periodic situation reports.

117. Incident records should show clearly:

- (a) Information received;
- (b) Decision taken;
- (c) Orders given;
- (d) Action taken;
- (e) Personnel involved;
- (f) Resources used;
- (g) Results obtained; and
- (h) Costs incurred.

118. Written records should, where possible and appropriate, be supplemented by relevant photographic documentation. All photographs should be date-stamped and time-stamped.

119. All records should be retained, by the party responsible for making and maintaining them, for a period of six years following the year of their creation. Original copies of all records should be kept in Barbados.

120. For Tier 1 and 2 incidents the responsible party shall submit to the Chair of the National Oil Spill Response Committee a report on the incident and the response operations. This report should summarise:

- (a) The nature and circumstances of the discharge or potential discharge;
- (b) The response actions taken;
- (c) The environmental impacts of the incident.

121. The report should be submitted within 30 days of the termination of response. The Chair shall review the report and submit a response to the responsible party, with relevant comments and recommendations. The Chair may request from the responsible party further, supplemental information as he deems necessary. The Chair may consult with members

of the National Oil Spill Response Committee in reviewing the report and preparing a response.

122. For Tier 3 incidents the National Coordinator with the assistance of the Incident Commanders shall prepare a complete report on the incident and the response operations. This report should include details of:

- (a) The nature and circumstances of the discharge or potential discharge;
- (b) The response actions taken;
- (c) The environmental impacts of the incidents;
- (d) Recommendations for follow-up action.

123. The report should be submitted, within 30 days of termination of the response, to the National Oil Spill Response Committee and other relevant agencies and organisation for review and comment.

XXIII. Enforcement/Prosecution

124. Designated regulatory agencies for legislation containing provisions relevant to the discharge/release of oil may choose to open an investigation of the oil spill incident. This investigation may involve action during the response to obtain evidence for possible use in court. Subsequent to the investigation regulatory agencies may decide to carry out such enforcement action or prosecution as is deemed necessary and appropriate under the Laws of Barbados.

XXIV. Cost Recovery and Compensation

125. For all oil spill incident the costs of response and clean-up are to be met by the party responsible for the discharge or potential discharge.

126. For incidents involving persistent oil carried as cargo by a tanker, compensation for the costs of recovery and clean-up are covered by an

international compensation regime. This regime involves two international Conventions to which Barbados is a party. These are:

- (a) The International Convention on Civil Liability for Oil Pollution Damage, 1992;
- (b) The International Convention on the Establishment of an International Fund for Compensation of Oil Pollution Damage (including the 2003 Supplementary Fund Protocol to that Convention).

127. Both of these Conventions are administered by the International Maritime Organisation. The designated authority for these Conventions in Barbados is the International Transport Division of the Ministry of International Business and International Transport.

128. Action relating to compensation and claims for pollution damage may also be taken within the normal provisions of national law.