



# **REPORT OF THE AUDITOR GENERAL**

**ON**



## **GUYANA'S PREPAREDNESS FOR MARINE OIL SPILL RESPONSE**

**PERFORMANCE AUDIT**



The Auditor General is the external auditor of the public accounts of Guyana, and is responsible for conducting Financial and Compliance and Performance and Value-for-Money Audits with respect to the Consolidated Financial Statements, the accounts of all budget agencies, local government bodies, all bodies and entities in which the State has controlling interest, and the accounts of all projects funded by way of loans or grants by any foreign State or organization.

In conducting Performance and Value-for-Money Audits, the Auditor General examines the extent to which a public entity is applying its resources and carrying out its activities economically, efficiently and effectively with due regard to ensuring effective internal management control.

This report has been prepared in accordance with Part V Section 24 and 28 of the Audit Act 2004. In conducting this Performance Audit, we followed the Code of Ethics and Standards and Guidelines for Performance Auditing of the International Organization of Supreme Audit Institutions (INTOSAI), of which the Audit Office of Guyana is a member.

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**A PERFORMANCE AUDIT**

**GUYANA'S PREPAREDNESS FOR  
MARINE OIL SPILL RESPONSE**



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## EXECUTIVE SUMMARY

### Why we did this audit

Oil exploration, production and other activities entail risks, most notably, the risk of accidental oil spills, which can result in major humanitarian, environmental and socio-economic disasters. Therefore, planning for oil spills ensures that the most appropriate response is made when a spill occurs and is key to minimising the related adverse impacts.

### Key messages

The government has plans and resources to respond to marine oil spills but there are significant legal and operational gaps that could hamper response efforts. This is especially true of larger spills, where risks are greatest. The legal and regulatory framework, which includes the National Oil Spill Contingency Plan, should be reviewed to ensure Government's requirements for oil spill response are well-defined and established to allow for a safe, efficient and effective response in the event of a hazardous oil spill.

### What we found

**Regulations for spill response to protect human health and the environment are not in place.** The government has not made or even identified all the legal changes required by international treaties, including those dating back to the 1990s. Moreover, not all identified legal gaps have been addressed. For example, regulations to control the use of hazardous chemicals and the burning of oil during a spill incident are absent.

**No action was taken to approve draft regulations to protect against oil spills.** Regulations for environmental protection and pollution control from petroleum activities in an offshore area were not finalised, five years after being drafted. The proposed regulations include requirements for emergency response procedures to be taken by operators during an oil spill incident.

**An oil spill response plan is in place, but it has operational and resourcing gaps.** The government did not conduct an assessment to identify all the risks that may arise, to be covered by the plan. Where risks were identified, there are gaps that could hamper spill response. The Civil Defence Commission has stated that the resources readily available are appropriate for responding only to small and medium size spills.

### Way forward

The Audit Office has made recommendations to highlight actions aimed at ensuring that Government is adequately prepared to respond to oil spill incidents in a safe, efficient and effective manner to minimise the associated adverse effects. Government should put systems in place to ensure the recommendations made are implemented as soon as possible.

## **Introduction**

1. This report presents the results of a performance audit on the Government of Guyana's preparedness through the responsible agencies to deal with oil spills at sea. At the time of undertaking this audit, during the period January 2019 to June 2020, the responsibility for the preparedness for marine oil spill response fell under two agencies: the Ministry of the Presidency, and the Civil Defence Commission. The Ministry of the Presidency was responsible for managing the Oil and Gas Sector while the Civil Defence Commission was responsible for disaster management in Guyana.

## **Background**

2. The Oil and Gas industry is new to Guyana. Under the current Production Sharing Agreement regimes, exploratory activities commenced in 2008 and in May 2015, a group of three international oil companies announced the discovery of high-quality oil-bearing sandstone reservoirs, approximately 120 miles offshore Guyana. The first exploration well, the Liza-1, was safely drilled in May 2015 and production started in December 2019. In January 2020, the first million barrels of oil were extracted and shipped to be refined.

### *Oil Spill Causes and Impacts*

3. Oil exploration, production, processing, storage, offloading and transporting activities come with inherent risks which, according to statistics, can result in oil spills. Oil spill causes and circumstances vary, however, the majority are the result of shipping accidents, equipment failure and explosions at well sites. Oil spills contaminate the waters and depending on the characteristics of the oil spilt and circumstances of the incident, can have significant adverse impacts on the environment and human well-being. Adverse impacts include damage to critical habitats for protected marine species, changes in the ecological community, disruption of commercial and recreational activities, and health issues in humans such as skin and eye irritation, breathing problems and stress. In addition, cleanup and restoration costs of oil spills can be substantial with known cases of polluters not readily accepting liability resulting in Governments having to bear the immediate costs.

4. Geographically, Guyana is located on the North East Coast of South America and is approximately 1.5 metres below sea level at high tide with a coastline of 459 km in length. Most of the population which includes the indigenous communities, live along the coastline and an oil spill potentially impacting the coastline will affect their livelihoods since these communities depend on natural resources such as fishing, for their livelihoods.

5. Also, Shell Beach which is located on the coastline and is a designated 'protected area', can be affected by oil spills. This area has the largest and most intact mangroves which serve as a natural barrier to reduce flooding in coastal communities by lessening the force of oncoming waves and storm surges. Also, it is the nesting site for four species of sea turtles of which two species are classified as vulnerable, one as endangered and another as critically endangered.

6. Additionally, according to the approved Environmental Impact Assessments (a tool used to assess the significant effects of a project on the environment) for the current projects, a potential oil spill can impact areas outside of Guyana’s Exclusive Economic Zone. Guyana’s Continental and Caribbean neighbours that can be affected include Venezuela, Trinidad and Tobago, Barbados, Grenada, St. Lucia, St. Vincent and the Grenadines, Martinique, Aruba, Bonaire, and Curaçao.

*Importance of Planning for Oil Spills*

7. To reduce the adverse immediate and long-term impacts associated with marine oil spills on the environment, ecosystems, economy, communities and human well-being, prompt, efficient and effective spill response action is fundamental. Based on international requirements and best practices, this can be achieved through the establishment and continuous evaluation of a National Preparedness and Response System.

8. A National Preparedness and Response System is a system of authorities, regulations, plans and capabilities, usually codified in law, created to ensure preparedness for safe, effective and efficient responses to oil spills by private organisations, local or national government. It outlines the structure and organisation, including roles and responsibilities, to be followed by entities engaged in preparing for, or responding to an oil spill incident. It should be aligned with international standards and best practices.

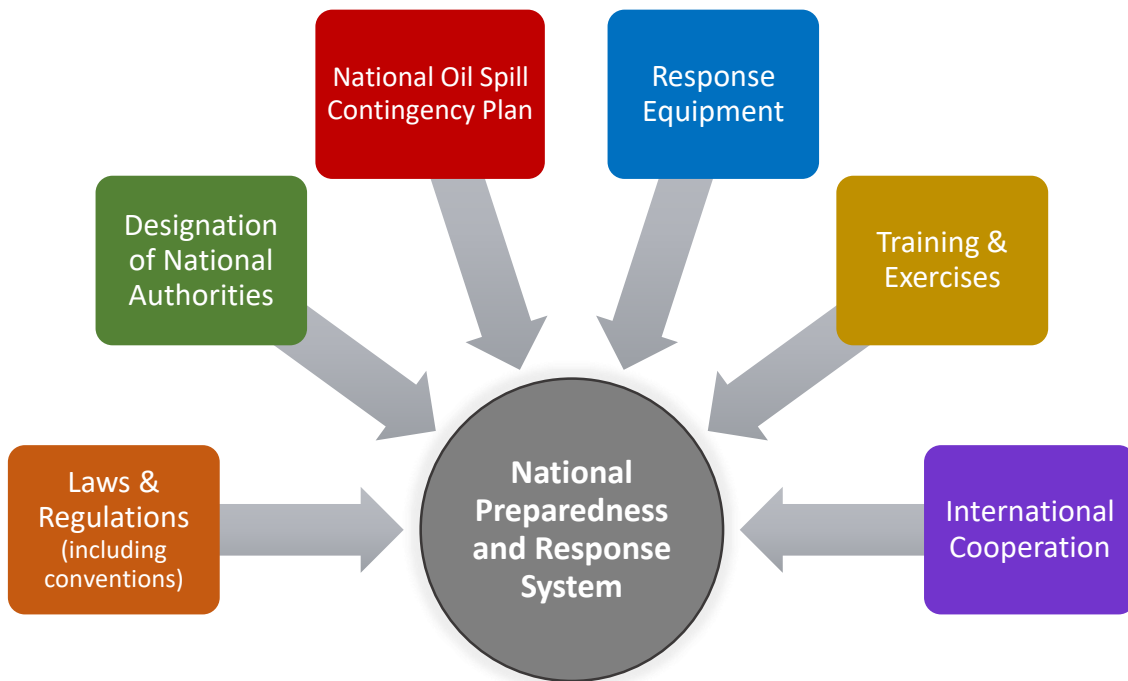


Figure 1 – Main Elements of a National Preparedness and Response System

Source: International Maritime Organisation Manual on Oil Pollution – Section II (2018 Edition)

**Roles and responsibilities**

9. Preparing for and responding to marine oil spill incidents in a safe, efficient, and effective manner requires the relevant skills and resources of several agencies. Figure 2 provides an overview of Guyana’s National Oil Spill Management Structure that was in place at the time of the audit.

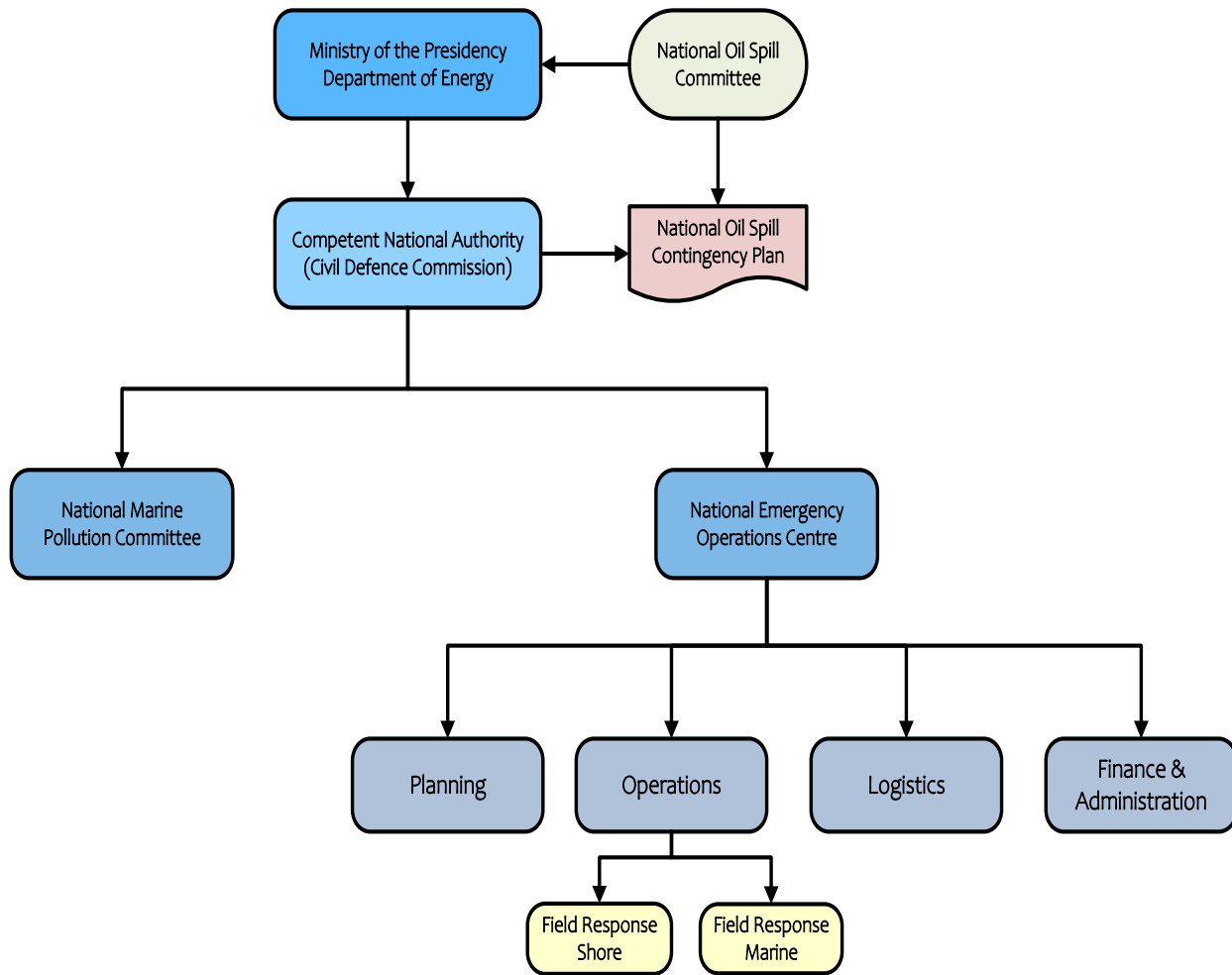


Figure 2 – Guyana’s National Oil Spill Management Structure - 2019  
Source: National Oil Spill Contingency Plan (draft 2019) and National Estimates

10. The Ministry of the Presidency through its Petroleum and Energy Management Programme is responsible for (i) Crafting the institutional arrangement to manage the oil and gas sector, and (ii) reviewing and revising the legislative framework for managing the oil and gas sector. In this regard, the Department of Energy was created on 01 August 2018 to govern and administer the country’s upstream, midstream and downstream oil and gas resources.



11. The National Oil Spill Committee (NOSC) created and implemented the National Oil Spill Contingency Plan (NOSCP) and is responsible for maintaining, enforcing and recommending applicable improvements. The Committee is also responsible for overseeing the development of policy and draft legislation, and for making recommendations on relevant international conventions that will increase the nation's capability to deal with pollution and minimise the incidents of pollution from oil spills in our environment. The NOSC comprises representatives from twenty-five (25) agencies across the public and private sectors.

12. The Civil Defence Commission (CDC) is responsible for the management of national disasters in Guyana, which include oil spills. The CDC spearheaded the development of the NOSCP in collaboration with the NOSC and other agencies. Under the Plan, the CDC is the designated Competent National Authority (also referred to as the Lead Agency), and has overall responsibility for response to oil spill emergencies.

13. The National Marine Pollution Committee provides advice and recommendations on matters related to marine pollution preparedness, response and cooperation. The Committee through the Competent National Authority is in charge of organising in-country national spill response exercises and drills.

14. The National Emergency Operations Centre is the centralised location from which the mobilisation, coordination and control of responses and resources will be carried out in the event of a major incident, emergency or disaster. The Centre will be activated when a medium size spill occurs or when otherwise directed by the Competent National Authority in consultation with other responsible agencies in the event of an oil spill incident.

### **Reasons for undertaking the audit**

15. At the time of planning the audit, stakeholders and the general public expressed concerns regarding the status of marine oil spill contingency planning in Guyana. In particular, they believed that the legal and regulatory framework for the sector was outdated, and a National Oil Spill Response Plan was not in place although, oil exploration and other related activities had commenced offshore approximately five years ago. In addition, environmentalists and other sections of society were not convinced that the environmental impacts of the various projects were properly assessed and that Guyana had the requisite resources to respond promptly, efficiently and effectively to potential oil spill incidents.

16. Considering the above, a decision was taken to conduct a performance audit on the Government of Guyana's preparedness, through the Department of Energy and the Civil Defence Commission, to deal with oil spills at sea.

### **Audit objective**

17. The objective of the audit was to determine whether Government through the responsible agencies, established a National Preparedness and Response System for marine oil spills in accordance with international standards and best practices to ensure preparedness for a safe, effective and efficient response.

### **Audit criteria**

18. Audit criteria are reasonable standards against which management practices, controls and reporting systems can be assessed. The audit criteria and their sources are presented in the “**About the Audit**” section of the report.

### **Report structure**

19. This report consists of the following two chapters, which cover the Lines of Enquiry considered by this audit:

- Chapter 1 – Legal and Regulatory Framework
  - ❖ International and Regional Conventions
  - ❖ National Legislations and Regulations
  
- Chapter 2 – Contingency Planning
  - ❖ National Oil Spill Contingency Plan
  - ❖ International and Regional Cooperation

## ***Chapter 1***

### ***Legal and Regulatory Framework***

**Criterion:** We expected the Government through the Ministry of Foreign Affairs to have ratified or assented to the six (6) international conventions and one (1) regional convention relating to marine oil spill preparedness, response and cooperation, and liability and compensation for oil pollution damage.

#### **International and Regional Conventions**

19. The United Nations has three support systems to assist in regulating marine and maritime activities. These are the International Maritime Organisation, the United Nations Environment Programme and the Division of the Office of Legal Affairs. They provide information, guidance, and legal and technical support. They help countries establish regulatory frameworks for the prevention and control of oil pollution. They also provide legal support on liability and compensation for oil pollution damage. These frameworks include conventions that provide well-established and broadly accepted standards that oil producers and transporters are accustomed to working within, and form the basis for establishing a National System of Preparedness and Response. There are six (6) international conventions and one (1) regional convention relating to marine oil spill preparedness, response and cooperation, and liability and compensation for oil pollution damage.

#### **Relevant treaties were ratified**

20. The international and regional conventions relating to marine oil spill preparedness, response, cooperation, and liability and compensation for oil pollution damage were ratified and assented to, as follows:

<b>№</b>	<b>Title of Convention</b>	<b>Date of Ratification or Accession</b>	<b>Date Entered into Force</b>
<b>International Conventions</b>			
1.	IMO - International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978; Annex 1 – Regulations for the Prevention of Pollution by Oil (MARPOL)	10 December 1997	10 March 1998

№	Title of Convention	Date of Ratification or Accession	Date Entered into Force
<b>International Conventions</b>			
2.	IMO - International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978; Annex 1 – Regulations for the Prevention of Pollution by Oil	10 December 1997	10 March 1998
3.	IMO - International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990	10 December 1997	10 March 1998
4.	IMO - International Convention on Civil Liability for Oil Pollution Damage, 1969	10 December 1997	10 March 1998
5.	IMO - Protocol of 1992 to amend the International Convention on Civil Liability for Oil Pollution Damage, 1969	20 February 2019	20 February 2020
6.	IMO - Protocol of 1992 to amend the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage	20 February 2019	20 February 2020
7.	UN Convention on Law of the Sea, 1982	16 November, 1993	16 November, 1994
<b>Regional Conventions</b>			
1.	UNEP Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (WCR) (CARTEGENA Convention)	14 July 2010	13 August 2010

### **Conclusion**

The Government of Guyana through the Ministry of Foreign Affairs has signed on to the relevant conventions and ratified the related protocols that cover the various aspects of marine pollution. These agreements include specific measures that must be adopted by State Parties to prevent, reduce and control pollution caused by ships and other offshore activities.

**Criterion:** We expected the Government through the Department of Energy, Ministry of the Presidency in collaboration with all relevant stakeholders to have conducted a review of existing laws and regulations to establish the overall requirements for oil spill preparedness and response capability.

### **National Laws and Regulations**

21. National laws and regulations are an essential component of creating a National Preparedness and Response System. Laws covering all relevant sectors should be in place to establish the overall requirements for oil spill preparedness and response capability, and for assigning responsibilities. Accordingly, specific regulations in support of laws should be developed and implemented. The regulations should include clear requirements for compliance and enforcement measures or penalties for non-compliance.

22. In addition, a State has a legal obligation under international law to comply with the requirements of any convention that it has ratified or assented to. Therefore, for these conventions to be applied and enforced, national laws and regulations are necessary for establishing the associated rules. The conventions ratified are not automatically incorporated into national laws hence existing laws should be reviewed to determine whether amendments are necessary or new laws need to be introduced. It should be noted that conventions enter into force three months after the deposit of an instrument of ratification or accession at which time; the implementing law should also take effect.

### **Inadequate legal and regulatory framework to establish response requirements for oil spills**

23. A comprehensive review and gap analysis of the existing legal and regulatory framework to ensure the requirements for spill response preparedness were partially completed. One review was completed in April 2019 by a foreign law firm however, the focus was on the legal framework governing the creation and functioning of government entities in Guyana. Another foreign law firm was contracted in December 2019 to update Guyana's legal framework to ensure alignment with the treaties, however, at the time of audit, the project was not completed.

24. The failure to complete the review of the legal and regulatory framework resulted in some laws remaining deficient and not aligned with industry best practices. For example, there are no specific regulations or test procedures for the approval of dispersants (chemicals). The Environmental Protection Agency Act provides a broad mandate regarding the prevention and control of pollution however; it does not specifically cover offshore petroleum activities. The current regulations made under the Act do not cover the use of dispersants, which is an effective response tool to manage the impacts of major spill incidents. However, this can cause skin, eye, and respiratory irritations in humans from toxic inhalation and the chemicals can harm marine life.

25. Another example is the Guyana Shipping Act 1988. Under this Act, the Maritime Administration Department (MARAD) is the agency mandated with responsibility for the regulation of ships including oil pollution matters in Guyana's territorial sea. However, most of the oil operations are occurring in the Exclusive Economic Zone of Guyana, which is an area beyond the territorial sea. Under the National Oil Spill Contingency Plan, MARAD is designated as the Lead Agency for Marine Spills and is responsible for the monitoring and detection of offshore oil spills. As a result of the limited jurisdiction, MARAD is dependent on the support of other agencies such as the Guyana Defence Force Coast Guard and Air Corps to conduct patrols and report sightings of oil spills.

**No action was taken to approve draft regulations to protect against oil spills**

26. Draft regulations to update the Petroleum (Exploration and Production) Act, 1986 were completed in 2018. The purpose of the regulations was for environmental protection and pollution control from petroleum activities in an offshore area. The proposed regulations would have established some aspects of national requirements for oil spill response such as the emergency response procedures to be taken by operators during an oil spill incident. However, at the time of reporting, the draft regulations were not approved for publication.

**Recommendation:** *The Audit Office recommends that the Government through an identified lead agency make the necessary arrangements as soon as possible, to review the current legal and regulatory framework to (i) identify gaps and ensure alignment with international agreements and best practices and (ii) establish the overall requirements for oil spill preparedness response. In addition, action should be taken to have the draft regulations on environmental protection and pollution control, finalised and implemented.*

**Management's Response:** The Department of Energy no longer exists however, the responsibilities that the Department held were transferred to the Ministry of Natural Resources.

**Conclusion**

A comprehensive review and gap analysis of the existing legal and regulatory framework to establish the national requirements for spill response preparedness, and ensure alignment with relevant agreements signed, was not completed. Also, regulations to protect against oil spills and control pollution were not finalised five years after being drafted.

## Chapter 2

# Contingency Planning for Oil Spills

**Criterion:** We expected the Civil Defence Commission to have implemented a National Oil Spill Contingency Plan that conforms to national laws, regional and international conventions, and best practices to ensure a timely, coordinated and effective response to oil spill incidents.

### National Oil Spill Contingency Plan

27. The development of national preparedness for an oil spill response requires a solid foundation established in a National Contingency Plan (NCP). Based on IMO guidelines and best practices, the essential components of a national contingency plan are shown in the Figure below.

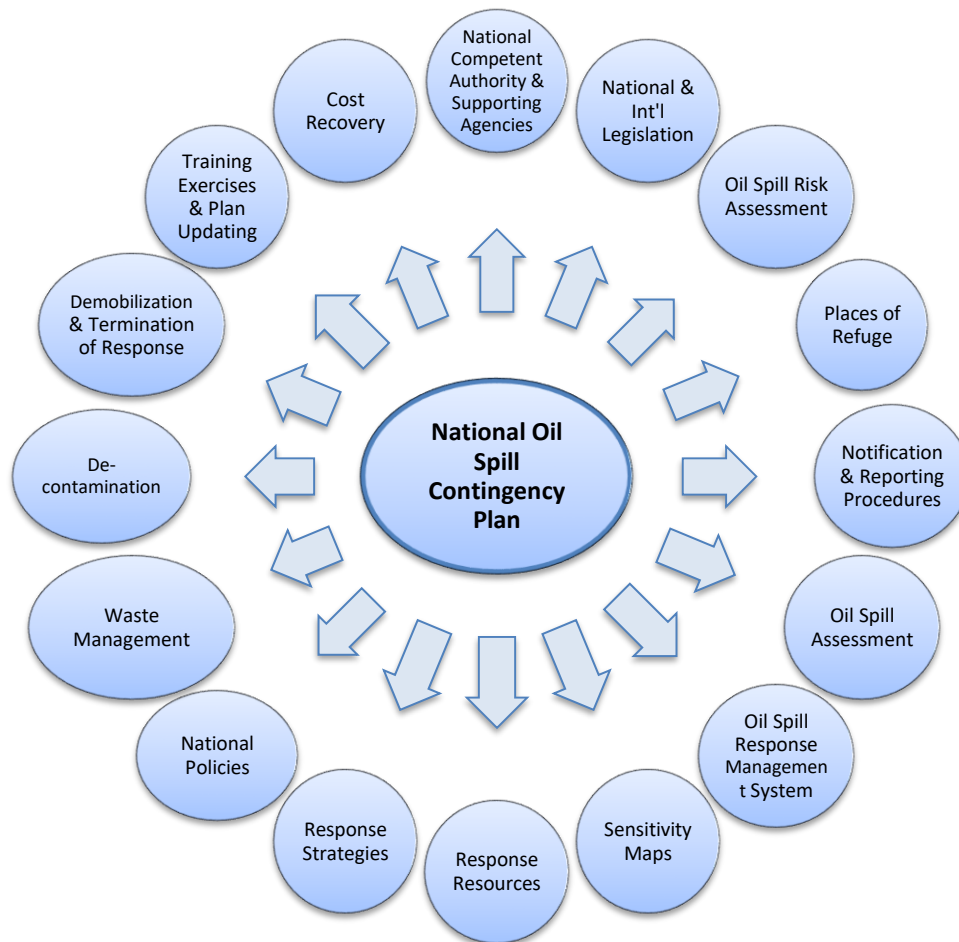


Figure 3 – Essential Components of a National Oil Spill Contingency Plan

Source: International Maritime Organisation Manual on Oil Pollution – Section II (2018 Edition)

28. Guyana's National Oil Spill Contingency Plan was approved in August 2020 and implemented in October 2020. Under the plan, the Civil Defence Commission is designated the Competent National Authority and has overall responsibility for responding to oil spills, and the authority to make and implement decisions to mitigate the impacts of oil spills. The roles and responsibilities of the other Government agencies that will provide support to the Commission are identified and defined. However, not all of the essential components of a national contingency plan in keeping with international guidelines and best practices were addressed. Some of the essential components not addressed are as follows:

**A comprehensive risk assessment to inform contingency planning was not done**

29. Conducting a comprehensive risk assessment of the risk of oil spills is the first step in the development of a National Contingency Plan to ensure plans are developed in the context of the risks they are intended to address. The aim is to identify measures to reduce and manage the risks of spills, and the impacts if a spill does occur. Results of the risk assessment should be summarised and how the results were used to inform the development of the National Oil Spill Contingency Plan and response policies, explained. A comprehensive risk assessment was not conducted by the Civil Defence Commission to inform the development of Guyana's National Contingency Plan. In the absence of this assessment, it could not be determined on what basis the National Plan was developed e.g.

- how hazards associated with offshore facilities and operations were identified, the related threats, the circumstances which may trigger such events, and the potential characteristics of such events,
- how possible oil spill incidents were chosen for response planning,
- how response strategies were formulated, and
- how response tactics and requirements were determined.

**Places of refuge during oil spills to protect human life and the environment were not identified**

30. A 'place of refuge' is a pre-defined site where a ship in need of assistance can be taken to (i) stabilize its condition and reduce the hazards to navigation, and (ii) protect human life and the environment. The development of contingency plans should provide for specific, high-risk spills with potential places of refuge identified and procedures put in place for their implementation. These plans should be tailored to protect sensitive areas from the impacts of possible spills to save time during the critical first few hours of a vessel response. Guyana's National Oil Spill Contingency Plan does not identify potential places of refuge. As such, it could not be determined how decision-makers will respond to vessels in distress and how sensitive areas will be protected during an oil spill.



### **Total response resources for responding to large oil spills not identified**

31. An inventory of stock-taking, available nationally, regionally and internationally, of the existing physical resources and capable human resources to participate in a response operation to an oil pollution incident, should be established. The inventory should be appropriate to the risks assessed and the ranges of environmental operating conditions at possible spill locations. A list of all response resources available for national-level response to an oil spill is still to be compiled by the Civil Defence Commission. The Head of the Civil Defence Commission explained that the response resources readily available are appropriate for responding to small spills but not medium or large oil spills. A list of response resources is referenced in the National Oil Spill Contingency Plan however; it only represents the equipment that is currently available in Guyana. It was explained that negotiations with contractors are ongoing for them to provide response resources including personnel as needed to respond to oil spills. As a result, it could not be determined what overall response resources are available for responding to oil spills of various sizes.

### **A minimum level of pre-positioned response equipment not established**

32. Rapid access to response resources is critical to executing a timely and effective response to oil spills to minimise impacts. Under the OPRC convention, Government is required to establish a minimum level of pre-positioned equipment (whether owned or available through agreements with other countries, industry or private contractors) to facilitate easy and timely deployment in the event of an oil spill. A minimum level of pre-positioned response equipment was not established and in place. Most of the Government-owned equipment including oil containment booms is stored at the Coast Guard Headquarters located at Ruimveldt in Georgetown while privately owned equipment is stored on the West Bank of Demerara.

**Recommendation:** *The Audit Office recommends that the Civil Defence Commission in collaboration with all relevant stakeholders, take the necessary steps to ensure all the required elements in keeping with international guidelines and best practices, are addressed in Guyana's National Contingency Plan to ensure a safe, efficient and effective response in the event of an oil spill.*

### **Management's Response:**

Ref.: Comprehensive Risk Assessment

The NOSCP was indeed developed in the absence of a comprehensive risk assessment. The CDC did indicate in many instances that there is a need to conduct these assessments following the development of the NOSCP. To do so requires an independent consultant who is versed and has specialist skills in risk assessments related to oil spill response and marine and environmental pollution.

In the absence of such assessment, it was still important for a plan to be developed with the understanding that it will be constantly updated to reflect the changes based on new information

and Guidance. The plan proceeded with the advice and guidance of the Regional Marine Pollution Emergency, Information and Training Centre – Caribe (RAC-REMPEITC) and with some technical support from the Association of Oil, Gas and Renewable Energy Companies of Latin America and the Caribbean (ARPEL). In the absence of a risk assessment the country took the advice to proceed with the plan in the event, it was confronted by any spill would at minimum could respond and manage in a coordinated manner. Recently in 2022, an assessment of scenarios was conducted, and the matrix was developed to guide planning and response; this will be included in subsequent revisions of the NOSCP. (See matrix attached)

Ref: Places for Refuge during spills

Places of Refuge have not been entered into the plan. Notwithstanding this, it must be noted that at the time of any spill response the tactics and strategies to be employed will determine how a vessel will be treated which includes position. The ultimate priority at the time of an incident would be to save lives, contain the spill and recover or treat pollutants. Removing the vessel may only be done, in Guyana's context if the vessel is in the channel of any of the main rivers that are being traversed or at the time when full containment and stabilization are achieved. In most spill scenarios vessels remain in the location of the incident since movement and relocation can exacerbate the issue and cause more environmental pollution.

At this time the only authority on the issue of safety zones and anchorage is the MARAD; they will advise based on the dynamics of the incident where vessels can be towed into the safety zone, anchorage locations and safe channels. It must be noted that given the dynamics of our coastline, there are very little options for marine vessel sheltering without increasing the risks to the area. MARAD is in the process of reviewing this issue and will provide appropriate feedback on the plan moving forward.

The issue of sensitive areas being protected has been indicated in the plan (see section 8.8). The plan also requires that responsible parties be actively engaging in protecting sensitive areas and leverage their resources to do so.

Ref: National Level Response Resources and Pre-Position of Equipment

The CDC now has a complete list of resources held by various organisations and agencies across Guyana. The lists include equipment held locally, regionally, and internationally by CGX and Exxon Mobile. It must be noted that a work in progress is to establish the minimum holdings that the country must own and have available at any one time. In addition, there is expressed and urgent need for the technical agencies to have standing agreements with third-party suppliers of equipment and services who may be called upon at short notice should the need arise. Given the complexity of oil spill response and the fact that threats do not only exist with large operators in the EEZ, but there are more concerns regarding potential spills in harbors, on land and inland waterways involving transit vessels and small-scale local operators.

Large-scale operators such as Exxon and CGX have in holding several pieces of equipment that may be utilized should there be an offshore incident. It would be instrumental to also note that there is a Mutual Aid agreement across operators in the EEZ where they have agreed to share and leverage their resources in a combined effort if needed. On call are also international and regional resources depending on the scale and magnitude of the incident. (See list of resources attached)

Regarding the preposition of equipment, the GOG has resources prepositioned at the GDF-CG HQ, GFS HQ and CDC Warehouse Timehri. As indicated, there is an urgent need to develop the list of minimum equipment to be held and prepositioned with the understanding that it ranges from Offshore, Coastline and Inshore rated capabilities. Through the work of the OS Committee, this will be completed with urgency.

In relation to human resources and trained personnel, the CDC coordinated capacity building training for personnel across many local state agencies and organisations. It is recognised that oil spill response is new to Guyana, and it requires time to train persons in various areas to attain competencies needs to drive the plan. Through partnerships with the US Government and other bodies, the CDC has a database of trained personnel who may be called upon to play various roles in OSR. In 2022, a National Oil Spill Response Exercise was held which included the following components: tabletop, communication, command post and field tactical. This exercise facilitated testing of personnel and the NOSCP. The upcoming TW EX23 will facilitate further training opportunities and testing of the national plan at level 3. (See sample list of personnel trained in various areas attached, not exhaustive)

### **Conclusion**

The Civil Defence Commission did not ensure that all key issues were addressed in the National Oil Spill Contingency Plan to ensure a safe, efficient and effective response to oil spills. However, essential components such as the requirement to conduct a comprehensive risk assessment and the total response resources for responding to large oil spills, were not defined.

**Criterion:** We expected the Government through the Ministry of Foreign Affairs in collaboration with the relevant agencies, to have established bi-lateral and/or multi-national agreements with other countries to define how countries will support and cooperate with Guyana for marine oil spill contingency planning and response.

### **Regional and International Cooperation**

33. Oil released into the ocean from a spill can spread very rapidly and may threaten the shorelines of several countries, if not promptly contained. As previously mentioned, the approved Environmental Impact Assessments for the current projects, indicate that a potential oil spill can impact areas outside of Guyana's Exclusive Economic Zone. These areas include Guyana's Continental and Caribbean neighbours such as Venezuela, Trinidad and Tobago, Barbados, Grenada, St. Lucia, St. Vincent and the Grenadines, Martinique, Aruba, Bonaire, and Curaçao.

34. Responding to large spills can be difficult and expensive therefore, cooperation among countries is essential. The International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 requires parties to establish frameworks for international cooperation in responding to marine oil spill incidents to ensure maximum resources are mobilized as quickly as possible to minimise the effects of oil pollution damage. The framework should include operational plans and procedures for the exchange of information, training and exercises, requests for assistance, joint response operations (including equipment and technical support), communications and financial matters.

### **Mechanisms for Guyana to receive support from other countries during oil spills are in place**

35. Guyana and Trinidad and Tobago signed an agreement on 19 September 2018 for the development of the energy and energy-related sectors. The agreement caters for cooperation between the two countries in the development of policies, plans and protocols relating to health, safety and the environment. In addition, Guyana is a member of the Caribbean Disaster Emergency Management Agency (CDEMA), which is a regional inter-governmental agency for disaster management in the Caribbean Community. Under the CDEMA framework, Guyana can receive external response support from the other eighteen Participating States (PSs), and national, regional and international disaster stakeholders. Support that can be provided includes technical assistance, specialised equipment, support personnel and information sharing. Also, personnel from key agencies in Guyana participated in oil spill response exercises with neighbouring countries.

### **Conclusion**

Government has taken the necessary steps to receive assistance from countries in preparing for and responding to oil spill incidents. The Civil Defence Commission along with relevant stakeholders have collaborated with other countries for oil spill response training and exercises.

## **Overall Conclusion**

We concluded that a National Preparedness and Response System to ensure preparedness for a safe, effective and efficient response to oil spills is in place however, regulatory, operational, resourcing and gaps were identified.

Specifically, a comprehensive review and gap analysis of the existing legal and regulatory framework to ensure the requirements for spill response preparedness was partially completed. We also found that the update of Guyana's legal framework to ensure alignment with agreements signed was not completed. In addition, draft regulations for environmental protection & pollution control from petroleum activities offshore were not finalised.

We also identified deficiencies in the national oil spill contingency plan. Some of the essential components in keeping with international guidelines and best practices were not addressed. The deficiencies noted include a comprehensive risk assessment to identify all the risks that may arise during an oil spill, and establish measures to address them, not being completed.

### **About the Audit**

36. The audit sought to determine the extent to which, the Government of Guyana through the responsible agencies, is adequately prepared to respond to oil spills at sea. Towards this end, the legal and regulatory framework, which includes the National Oil Spill Contingency Plan and regional agreements for cooperation were examined to determine whether the overall requirements for oil spill preparedness and response were established and were in keeping with international obligations and best practices.

### **Scope and Approach**

37. The audit covered the period 1 January 2019 to 30 June 2020. However, the status of planning during the period July to December 2020 was taken into account since it could have significantly influenced the conclusions made.

38. The audit did not examine whether the various components of contingency planning and response were tested and evaluated.

### **Audit Methodology**

39. In undertaking this audit, the following methodological approach was used:

- Interviews and discussions with key management personnel of all stakeholders,
- Interviews with experts in the oil and gas industry (benchmarking),
- Reviews and analysis of key documentation, and
- Use of a Subject Matter Expert to provide guidance.

**Audit Criteria and Sources**

40. The audit criteria and sources used in the conduct of the audit are as follows:

<b>AUDIT CRITERIA</b>	<b>SOURCES</b>
<b>International and Regional Conventions</b>	
We expected the Ministry of Foreign Affairs to ratify all applicable international and regional conventions for marine oil spill preparedness, response, liability and compensation.	<ul style="list-style-type: none"> <li>• International Maritime Organization</li> <li>• United Nations Environment Programme</li> </ul>
<b>National Law and Regulations</b>	
We expected the Government through the Department of Energy, Ministry of the Presidency and in collaboration with all relevant stakeholders to have conducted a review of existing laws and regulations to establish the overall requirements for oil spill preparedness and response capability.	<ul style="list-style-type: none"> <li>• International Maritime Organization - Manual on Oil Pollution, Section II – Contingency Planning, 2018 Edition</li> </ul>
<b>Oil Spill Contingency Planning</b>	
We expected the Civil Defence Commission to have implemented a National Oil Spill Contingency Plan that conforms to national, regional and international conventions, laws and best practices to ensure timely, coordinated and effective response to oil spill incidents.	<ul style="list-style-type: none"> <li>• International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990</li> <li>• Manual on Oil Pollution, Section II – Contingency Planning, 2018 Edition</li> </ul>
<b>Regional and International Cooperation</b>	
We expected the Government through the Ministry of Foreign Affairs in collaboration with the relevant agencies, to have established bi-lateral and/or multi-national agreements with other countries to define how countries will support and cooperate with Guyana for marine oil spill contingency planning and response.	<ul style="list-style-type: none"> <li>• International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990</li> <li>• Manual on Oil Pollution, Section II – Contingency Planning, 2018 Edition</li> </ul>

**APPENDIX**

Accession	Accession is the act whereby a state accepts the offer or the opportunity to become a party to a treaty already negotiated and signed by other states. Accession usually occurs after the treaty has entered into force however; it has the same legal effect as ratification.
Baselines of the Territorial Sea	The starting point from which the territorial sea is measured and other maritime zones of jurisdiction such as a state's exclusive economic zone. Normally, a sea baseline follows the low-water line (lowest astronomical tide level) under average meteorological conditions and any combination of astronomical conditions.
Best Practices	Specific procedures that are accepted or prescribed as being correct or most effective. The objective of best practices is to prevent or minimize risks to human health, as well as adverse environmental, social, and economic impacts.
Competent National Authority (also referred to as the Lead Agency)	The authority within the national government that is designated as having overall responsibility for the National Oil Spill Contingency Plan and oil spill incidents.
Convention	A convention also referred to as a treaty, is a formal agreement between states, and is usually an instrument negotiated under an international organisation. It is legally binding under international law, and governs the rights, duties, and obligations of participating states.
Enters into Force	The date upon which a Convention comes into effect, that is, when it becomes binding upon Governments that have ratified it.
Exclusive Economic Zone (EEZ)	The exclusive economic zone comprises the area of the sea beyond and adjacent to the territorial sea, extending to a line every point of which is a distance of 200 nautical miles from the nearest points of the baselines of the territorial sea.
International Maritime Organization	A specialized agency of the United Nations with responsibility for the safety and security of shipping, and the prevention of marine and atmospheric pollution by ships. It is also involved in legal matters, including liability and compensation matters.
Licensee	A legal person, or several such persons, who, under the terms of the Petroleum Act, has a licence to search for, recover, or transport petroleum.
National Focal Point	The National Focal Point refers to the agency designated in the National Oil Spill Contingency Plan that receives and disseminates oil spill information from/to all stakeholders (including directly from other countries' Lead Agencies) during times of an oil spill emergency.



Oil	Oil is any nonpolar chemical substance that is composed primarily of hydrocarbons, and is both hydrophobic (does not mix with water) and lipophilic (mixes with other oils). Oils are usually flammable and surface active.
Oil Blocks	A geographical unit of division used in the petroleum activities on the continental shelf.
Oil Spill	An oil spill is the release of a liquid petroleum hydrocarbon into the environment, especially the marine ecosystem, due to human activity, and is a form of pollution.
Oil Spill Contingency Planning	An oil spill contingency plan is a detailed oil spill response and removal plan that addresses controlling, containing, and recovering an oil discharge in quantities that may be harmful to navigable waters or adjoining shorelines.
Operator	The agent who, on behalf of the licensee, is in charge of the day-to-day management of the petroleum activity.
Production Licence	This licence gives a monopoly to perform investigations, exploration drilling and recovery of petroleum deposits within the geographical area stated in the licence. The licensees become owners of the petroleum that is produced. A production licence may cover one or more blocks or parts of blocks and regulates the rights and obligations of the participant companies with respect to the Government.
Protected Area	Protected Areas also called “conservation areas are locations which receive protection because of their recognized natural, ecological or cultural values.
Protocol	A protocol is one of the ways in which a convention is modified. The amendments by protocols are not binding on all the states that have ratified the original convention
Ratification	Ratification is an act by which a state signifies an agreement to be legally bound by the terms of a particular treaty in a specified time frame. Ratification is followed by an act of signature. The process of ratification involves the state first signing the treaty and then fulfilling its national legislative requirements.
Territorial Sea	A territorial sea, as defined by the 1982 United Nations Convention on the Law of the Sea, is a belt of coastal waters extending at most 12 nautical miles (22 km; 14 mi) from the baseline of a coastal state.
United Nations Environment Programme	The United Nations Environment Programme (UNEP) is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system, and serves as an authoritative advocate for the global environment.



# CIVIL DEFENCE COMMISSION

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15 September, 2022

Mr. Deodat Sharma  
Auditor General  
Audit Office of Guyana  
63 High Street  
Kingston  
Georgetown.



Dear Mr. Sharma,

## **Re: Response to Performance Audit on Guyana's Preparedness for Marine Oil Spills**

The Civil Defence Commission (CDC) has reviewed the report (ref 429/SL:73/1/2022) on the audit conducted with respect to the implementation of the National Oil Spill Contingency Plan (NOSCP) during the period January 2019 to June 2020. The following is the review and responses the CDC hereby provides to bring clarity to some of the stated areas specifically mentioned under Chapter 2.

### **Ref: Comprehensive Risk Assessment**

The NOSCP was indeed developed in the absence of a comprehensive risk assessment. The CDC did indicate in many instances that there is a need to conduct these assessments following the development of the NOSCP. To do so requires an independent consultant who is versed and has specialist skills in risk assessments related to oil spill response and marine and environmental pollution.

In the absence of such assessment, it was still important for a plan to be developed with the understanding that it will be constantly updated to reflect the changes based on new information and Guidance. The plan proceeded with the advice and guidance of the Regional Marine Pollution Emergency, Information and Training Centre – Caribe (RAC-REMPEITC) and with some technical support of Association of Oil, Gas and Renewable Energy Companies of Latin America and the Caribbean (ARPEL). In the absence of a risk assessment the country took the advice to proceed with the plan in the event it was confronted by any spill would at minimum could respond and manage in a coordinated manner. Recently in 2022, an assessment of scenarios was conducted, and the matrix developed to guide planning and response; this will be included in subsequent revisions of the NOSCP. (*see matrix attached*)

Places of Refuge has not been entered into the plan. Notwithstanding this it must be noted that at the time of any spill response the tactics and strategies to be employed will determine how a vessel will be treated which includes position. The ultimate priority at the time of an incident would be to save lives, contain the spill and recover or treat pollutants. Removing the vessel may only be done, in Guyana's context if the vessel is in the channel of any of the main rivers that is being traversed or at the time when full containment and stabilization is achieved. In most spill scenarios vessels remain in the location of the incident since movement and relocation can exacerbate the issue and cause more environmental pollution.

At this time the only authority on the issue of safety zones and anchorage is the MARAD; they will advise based on the dynamics of the incident where vessels can be towed into safety zone, anchorage locations and safe channels. It must be noted that given the dynamics of our coastline, there are very little options for marine vessel sheltering without increasing the risks to the area. MARAD is in the process of reviewing this issue and will provide appropriate feedback on the plan moving forward.

The issue of sensitive areas being protected has been indicated in the plan (see section 8.8). The plan also requires that responsible parties be actively engaging in protecting sensitive areas and to leverage their resources to do so.

### **Ref: National Level response Resources and Pre-Position of Equipment**

The CDC now has a complete list of resources held by various organisations and agencies across Guyana. The lists include equipment held locally, regionally, and internationally by CGX and Exxon Mobile. It must be noted that a work in progress is to establish the minimum holdings that the country must own and have available at any one time. In addition, there is expressed and urgent need for the technical agencies to have standing agreements with third party suppliers of equipment and services who may be called upon at short notice should the need arise. Given the complexity of oil spill response and the fact that threats do not only exist with large operators in the EEZ, but there are more concerns regarding potential spills in harbors, on land and inland waterways involving transit vessels and small scale local operators.

The large-scale operators such as Exxon and CGX have in holding several equipment that may be utilized should there be an offshore incident. It would be instrumental to also note that there is a Mutual Aid agreement across operators in the EEZ where they have agreed to share and leverage their resources in a combined effort if needed. On call are also international and regional resources depending on the scale and magnitude of the incident. (*see list of resources attached*)

Regarding the preposition of equipment, the GOG has resources prepositioned at the GDF-CG HQ, GFS HQ and CDC Warehouse Timehri. As indicated, there is an urgent need to develop the



list of minimum equipment to be held and prepositioned with the understanding that it ranges from Offshore, Coastline and Inshore rated capabilities. Through the work of the OS Committee this will be completed with urgency.

In relation to human resources and trained personnel, the CDC coordinated capacity building training for personnel across many local state agencies and organisations. It is recognised that oil spill response is new to Guyana, and it requires time to train persons in various areas to attain competencies needs to drive the plan. Through partnerships with the US Government and other bodies the CDC has a database of trained personnel who may be called upon to play various roles in OSR. In 2022, a National Oil Spill Response Exercise was held which included the following components: tabletop, communication, command post and field tactical. This exercise facilitated testing of personnel and the NOSCP. The upcoming TW EX23 will facilitate further training opportunities and testing of the national plan at level 3. *(see sample list of personnel trained in various areas attached, not exhaustive)*

The CDC remains committed to the development and enhancement of Guyana's disaster risk management capabilities.

With highest regards,



**NAZRUL HUSSAIN**

Colonel

Director General

