



Global Initiative for West, Central and Southern Africa

Mission Report
National Oil Spill Contingency Plan Workshop



Accra, Ghana
03 – 05 May 2011

Hosted by Ghana Environmental Protection Agency (EPA)



NOTE

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Executive Summary

Date: 3-5 May 2011; Accra, Ghana

Type: National Workshop

Organised by:

- Environmental Protection Agency; Ghana
- International Maritime Organization (IMO)
- International Petroleum Industry Environmental Conservation Association (IPIECA)

Number of delegates: 58 delegates

Workshop Objectives

The aim of this workshop was to raise the awareness of the revised National Oil Spill Contingency Plan through the execution of a tabletop exercise. Specific objectives were to:

- Familiarise delegates with the contents and use of the revised National Oil Spill Contingency Plan; so it can be fully operational in case of emergency;
- Ensure that all stakeholders are familiar with their roles and responsibilities as members of the National Incident Management Team;
- Gain an understanding of the interface between the oil industry and the regulator during the management of a Tier 3 oil pollution incident; and
- Promote discussions and the sharing of knowledge between the facilitators and the delegates.

Workshop Summary

The primary objective of the workshop was to test the National Oil Spill Contingency Plan through the execution of a tabletop exercise. The representation from both the public and private sectors enabled the delegates to have productive discussions and gain a better understanding of issues to be considered in the event of a major oil pollution incident. The delegates produced an Action Plan comprising of priority items for the implementation of the National Oil Spill Contingency Plan (NOSCP), which would strengthen Ghana's national response capability.

This workshop clearly demonstrated the interest and motivation of all parties to work together to improve the capacity of Ghana to deal with oil pollution incidents and to minimise its impact on local communities and the economy.

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Introduction

Global Initiative for West, Central and Southern Africa (GIWACAF)

The Global Initiative for West and Central Africa (GI WACAF) is a partnership between the International Maritime Organisation (IMO) and the International Petroleum Industry Environment Conservation Association (IPIECA) to enhance the capacity of countries to prepare for and respond to marine oil spills. A key innovative feature is the emphasis on the promotion of public/private partnerships to ensure an effective oil spill response making use of existing industry expertise and resources.

The mission is to strengthen the national oil spill response capability in twenty two West and Central African countries through the establishment of a local partnership between the oil industry and the authorities in charge of oil spill preparedness and response at national level.

This program is jointly funded by the International Maritime Organization (IMO) and eight Oil Companies members (BP, Chevron, ENI, ExxonMobil, Marathon, PERENCO, Shell and TOTAL) through the International Petroleum Environment Conservation Association (IPIECA).

The scope is to organise workshops, training courses, seminars and deployment exercises with the national authorities in charge of oil spill response, in partnership with local oil industry business units.

The GI WACAF project is based on an effective management system comprising of six goals of preparedness and key performance indicators to enhance the capacity of countries to prepare for and respond to marine oil spills.

These goals cover the requirements of the OPRC 90 Convention:

Goal 1: Legislation: Promote the ratification of the relevant international Conventions;

Goal 2: Contingency plan: Develop National Contingency Plans for all the countries of the region;

Goal 3: Designation of authority: Obtain clarity on roles and responsibilities of all stakeholders;

Goal 4: Regional agreements: Promote the exchange of information and the provision of mutual assistance for oil spill incidents;

Goal 5: Training: Ensure that training and exercises are delivered in the participating countries on a regular basis; and

Goal 6: National capabilities: Support participating countries in developing their own national response system.

Ghana National Preparedness

Ghana is party to a number of international Conventions aimed at minimising the effects / impacts of shipping and the oil and gas industry on the environment. Ghana as a Contracting Party to the United Nations Convention on the Law of the Sea (UNCLOS) has an obligation to protect and preserve the marine environment.

Ghana is also an active member of the United Nations specialized agency charged with responsibility for all maritime matters (i.e. International Maritime Organisation), and has participated in the development and implementation of the IMO Conventions that specifically address pollution from ships.

Ghana acceded to the International Convention on Oil Pollution Preparedness and Response Cooperation, 1990 (OPRC 90) in June 2010. Ghana as a Contracting Party to the Convention; is obliged to fulfil the following requirements:

- Have a National Contingency Plan in place;
- Designate a competent national authority and operational contact points responsible for oil pollution preparedness and response;
- Establish a stockpile of oil spill combating equipment; conduct oil spill response exercises and develop detailed plans for dealing with spill incidents, including notification and mobilisation procedures;
- Ships, offshore units, sea ports and oil handling facilities are required to carry Oil Pollution Emergency Plans, which must be co-ordinated with national systems for responding to oil pollution incidents. In the case of ships, this is the same plan that is required under (MARPOL 73/78); and
- Cooperate and provide advisory services, technical support and resources, if requested to other parties in the event of oil pollution incidents.

The Ministry of Environment, Science and Technology, by Act 490 of 1994, has been designated the responsible Ministry for the protection of the environment and, as such, is responsible to the Government for the NOSCP.

The National Oil Spill Contingency Plan has been in operation since 1986; however, it has been revised on a number of occasions, most recently in November 2009.

Objectives of the Workshop

The objectives of this workshop were to raise the awareness of the revised National Oil Spill Contingency Plan through the execution of a tabletop exercise. Specific objectives were to:

- Familiarise delegates with the contents and use of the revised National Oil Spill Contingency Plan; so it can be fully operational in case of emergency;
- Ensure that all stakeholders are familiar with their roles and responsibilities as members of the National Incident Management Team;
- Gain an understanding of the interface between the oil industry and the regulator during the management of a Tier 3 oil pollution incident; and
- Promote discussions and the sharing of knowledge between the facilitators and the delegates.

Workshop Programme

The workshop comprised of presentations and syndicate groups where delegates worked together and exchanged ideas on specific issues. A tabletop exercise was executed to test the National Oil Spill Contingency Plan and to encourage delegates to put into practice the knowledge that they have gained from the presentations.

Most of the presentations were in relation to the level of oil spill preparedness in Ghana. More specifically, the topics presented included the following:

- Overview of the GI WACAF Project;
- Overview of the revised National Oil Spill Contingency Plan;
- Public / Private Sector Partnership;
- An overview of the Oil Industry Oil Spill Preparedness Activities; and
- Oil Spill Response Strategies: the issues.

The detailed programme of the workshop can be found in Annex 2.

Location, Dates, Roles and Delegates

The workshop was organised by the Environmental Protection Agency with technical and financial support provided by the IMO and IPIECA under the auspices of the GIWACAF Project.

The experts in charge of the workshop were:

- Gail Nxumalo; GIWACAF Consultant
- Romain Chancerel; GIWACAF Project Manager
- Kojo Agbenor-Efunam; EPA Ghana

The following individuals provided support during the tabletop exercise:

- Joe Small; Director; EPE Ghana Limited
- Ray Ramsay; Emergency Management Advisor; Tullow Ghana Limited

The workshop was held at the Coconut Grove Regency Conference Centre in Accra, Ghana. A total number of 58 delegates representing various government departments; the local oil industry, academic institutions and environmental NGOs participated in the workshop.

A full list of all delegates, their parent organisations and their contact details can be found in Annex 3.

Opening Ceremony

The Welcome Address was given by Mr. Daniel Amlalo, Acting Executive Director, Ghana Environmental Protection Agency, Ministry of Environment, Science and Technology. Mr Amlalo reminded delegates of the consequences of the Deepwater Horizon incident in the Gulf of Mexico, and reiterated that Ghana should not be complacent, particularly in the light of the emergence of the oil and gas sector in the country. He concluded by saying that a collective effort by both government and industry is required to improve the national response system.

The Welcome Address can be found in Annex 4.

The IMO/ IPIECA Opening Speech was delivered by Mr. Romain Chancerel; GIWACAF Project Manager. Mr Chancerel referred to the logistical challenges faced by the authorities during the

Deepwater Horizon incident. He emphasised the need for West and Central Africa to be equipped with a functional regional instrument for the cooperation amongst countries, which will facilitate customs and immigration procedures in case of emergencies. He concluded by saying that it is crucial for delegates to gain a full understanding of the NOSCP and encouraged authorities to the regularly run workshops to sustain and increase the level of preparedness in Ghana.

The Opening Speech can be found in Annex 5.

Summary of Presentations

Below is a summary of the presentations that were delivered during the workshop.

An Overview of the GIWACAF Project – Progress to date

Mr Romain Chancerel; GIWACAF Project Manager; IMO/IPIECA

Mr Chancerel presented an overview of the GIWACAF project and the progress made to date since its launch in 2006. The outcome and findings of earlier regional, sub-regional and national activities already implemented were explained. He also provided an update on the regional meeting related to the revision of the Abidjan Convention and its Emergency Protocol. A regional dispersant workshop, aimed at training delegates in the development of national dispersant policies will be held in Ghana in June 2011.

Overview of the Ghana National Oil Spill Contingency Plan (NOSCP)

Mr Kojo Agbenor-Efunam, Senior Programme Officer ; EPA

Mr Agbenor-Efunam presented an overview of the recently updated NOSCP. The roles and responsibilities of various stakeholders (i.e. Ghana Navy, EPA, GMA, etc.) were clearly outlined. The reporting requirements were explained and it was pointed out that the Navy Operations Room is the designated National Reporting Centre for reporting all incidents, including incidents from passing vessels. The EPA will be notified through the National reporting Centre. However, it should be noted that oil companies are required to report pollution incidents to the EPA. Neighbouring countries have a duty to report incidents threatening Ghana's coastline to the National Reporting Centre under the requirements of the Emergency Protocol to the Abidjan Convention.

Ghana adopted the tiered response approach and the NOSCP clearly states that Tier 1 resources will be held by industry. In addition, the NOSCP identifies the establishment and operation of three regional stockpiles for Tier 2/3 response equipment, which can be utilised for larger incidents or where additional resources are required. The locations of these stockpiles remains to be identified, but are expected to be in the western, eastern and central regions the coast of Ghana.

Following consultation with the various stakeholders it was determined for planning and operational purposes that Ghana should have in place a national equipment stockpile capable of dealing with incidents of up to 25 000 tonnes.

Private companies under the guidance of the EPA would deal with large quantities of oily waste that could potentially be generated following a major oil pollution incident.

The presentation of the NOSCP was followed by an overview of Ghana's Coastal Sensitivity Maps, which supplement the NOSCP. Mr Agbenor-Efunam mentioned that the Macondo well blowout incident raised the awareness of the potential impacts on the environmental and socio-economic resources. Ghana has 550 kilometres of coastline of which 19 kilometres have a very high sensitivity and the Ningo-Prampram coastal stretch has the highest sensitivity to marine pollution.

Ghana Ports and Harbours Authorities Oil Spill Preparedness

Mr James Benjamin Gaisie; Estate & Environment Manager; Ghana Ports and Harbours Authority

Mr Gaisie presented an overview of the oil spill preparedness activities undertaken by the Ghana Ports and Harbours Authority. An Oil Spill Contingency Plan (OSCP) in place, which interfaces with the GPHA Emergency Response Plan. The OSCP outlines the procedures for responding to Tier 1 incidents. The Harbour Master is the designated On-Scene Commander, and will interface with the Environmental Protection Agency and various stakeholders.

He mentioned that the GPHA maintains a database of oil spill incidents, and that there have been four incidents over the last eight years. Various oil pollution resources are listed in the OSCP including, tug boats, multipurpose oil spill response vessels, and containment and recovery systems. Waste reception facilities are available at the Port of Tema and the disposal of oily waste is done in an environmentally accepted manner under EPA guidance. The GPHA conducts oil spill exercises once a year. An oil spill exercise, which will involve the deployment of oil spill equipment, is scheduled for November 2011. Mr Gaisie expressed the need for training in the Health and Safety management aspects of oil pollution.

Government / Private Sector Partnership

Mr Joe Small; Director; EPE Ghana Limited

Mr Small presented an overview of the government / private sector partnership, which is currently being discussed with the Ministry of Environment for Science and Technology. The aim of this partnership is to advise the government on oil spill preparedness and response matters.

He mentioned that EPE Ghana would provide a national stockpile, which will include an aerial surveillance capability and offshore and inshore oil spill response vessels. Three response centres will be established, which will employ and train approximately 200 local people. These resources will provide the Ghanaian government with the capacity to respond to Tier 3 incidents of up to

21,000 tonnes, which is in line with the NOSCP. It is anticipated that EPE Ghana Limited will work closely and interface with the National Disaster Management Organisation.

Jubilee Field Oil Spill Preparedness

Mr Ray Ramsay; Emergency Advisor; Tullow Ghana Limited

Mr Ramsay provided an overview of TGL's level of preparedness which includes an Oil Spill Contingency Plan. TGL's Oil Spill Contingency Plan outlines the response procedures and lists oil spill response resources to effectively mitigate the impacts of oil pollution incidents. Tier 1 resources include offshore containment and recovery equipment; dispersant stocks, anchor handling vessels with a dispersant spraying capability. TGL also have access to an aerial surveillance and aerial dispersant spraying capability through the WACAF service. TGL has implemented a number of measures following the Macondo incident to ensure that they will be able to effectively deal with oil pollution incidents of a similar nature. These measures include access to a capping device through its Tier 2/3 response contractor; OSRL. TGL staff and contractors have been trained in oil spill response measures at all levels.

KOSMOS Energy Oil Spill Preparedness

Dr Kwame Boakye-Agyei; HSE Manager; KOSMOS Energy

Dr Boakye-Agyei presented an overview of KOSMOS Energy's Oil Spill Contingency Plan. He mentioned that KOSMOS Energy has in place a Crisis Management Plan, which interfaces with the OSCP. The OSCP is complemented by site-specific mobilisation plans covering 17 villages along the Ghanaian coast. These plans provide technical guidelines for responding to nearshore and shoreline environments. KOSMOS in partnership with TGL have established a shoreline response base under a base sharing agreement. Under this Agreement, both companies have access to dedicated response resources that are based in Takoradi. KOSMOS have access to Tier 2/3 resources in the event of a major incident through its membership with OSRL. The Emergency Management Team has been trained to the OPRC Level 3 and they have conducted a number of tabletop and equipment deployment exercises.

ENI Ghana Limited Oil Spill Contingency Plan

Mr Francesco Nanglaviri; HSE Manager; ENI Ghana

Mr Nanglaviri provided an overview of ENI Ghana's Oil Spill Contingency Plan. He mentioned the requirements of the OPRC Convention. The interface between the National Oil Spill Contingency Plan and OSCP and Emergency Response Plans was illustrated.

He outlined the roles and responsibilities of various members of the Emergency Management Team (EMT) and showed decision flowcharts of the response strategies adopted. ENI Ghana has Tier 1 resources, which is commensurate with the risk profile of the operation. They have access to Tier 2/3 resources including the WACAF aerial surveillance and dispersant spraying service provided by

OSRL. The staff have been trained in oil spill response at all levels, and members of the EMT have been familiarised with the contents and the use of the OSCP. It is anticipated that oil spill exercises will be conducted regularly. These will include tabletop and equipment deployment exercises.

GIWACAF Consultant Oil Spill Response Strategies

Gail Nxumalo; GIWACAF Consultant; IMO/IPIECA

Ms Nxumalo provided an overview of the main response strategies employed offshore and onshore during oil spill incidents. The presentation also considered the benefits, the operational limitations and some of the important issues that may arise with regard to these response strategies. The issues related to offshore (monitor and evaluate, containment and recovery, chemical dispersants) and shoreline cleanup operations (shoreline types, management, logistics), the setting of standards for clean-up efforts, 'how clean is clean', termination of response and waste management were highlighted.

Tabletop Exercise

The aim of the exercise was to test the National Oil Spill Contingency Plan and to encourage delegates to put into practice the knowledge that they have gained from the presentations. The information, combined with their personal experience, assisted delegates in addressing issues such as dealing with incidents involving offshore installations. The exercise lasted approximately four hours.

Methodology

Exercise planning consists of four separate chronological phases, which collectively describe the process for developing and running exercises. These phases are illustrated Figure 1 and discussed in more detail below.

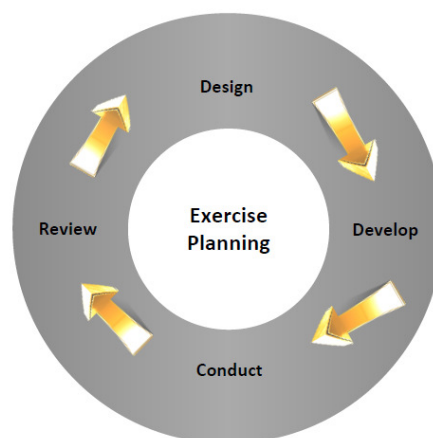


Figure 1. Exercise Planning Process

Design

An initial preparatory meeting was held with the EPA Focal Point to establish their expectations for the delivery of a national tabletop exercise. A meeting with all the key stakeholders to discuss the exercise scope, objectives and establish an agreement in principle to participate followed this. These consultation meetings took place from 30th November to 02nd December 2010 in Accra, Ghana. An Action Plan outlining all the items discussed and actions agreed was issued to the EPA.

Develop

The scenario was based on a hypothetical incident in the Jubilee Field.

Scenario

At 0400am on 4 May 2011 an outbound unladen tanker traversing through the Jubilee field, loses power and drifts into the FPSO. The tanker is damaged and some light pollution has been seen in the vicinity of the vessel. The FPSO Operator is investigating the damage to the FPSO and trying to ascertain the volume of oil released.

Conduct

The delegates were divided into four groups. The composition of these groups was established to ensure representation from all organisations. For the purpose of the exercise, delegates assumed the role of members of the National Incident Management Team, charged with the responsibility for dealing with the incident, and making decisions accordingly.

The groups were provided with a sequence of Information Sheets, which summarised the circumstances as the incident developed. Additional information was displayed on a projector screen. Copies of the National Oil Spill Contingency Plan including coastal sensitivity maps and charts were provided to the delegates.

The groups reconvened and the spokesperson for each group summarised the main points of their strategy to the audience.

Review and Feedback

The EPA and GIWACAF Consultant facilitated a debrief session upon completion of the tabletop exercise. The feedback collated from all delegates are summarised in the sub-sections below.

Realism of scenario

The delegates felt that the scenario should have been more realistic and that the Ghana Navy as the National Operations Focal Point should be involved in the planning of future simulation exercises.

Organisation and Management of Tier 3 Incidents

The exercise highlighted that there is no mechanism in place for the escalation of oil spill incidents emanating from offshore installations. It was pointed out that the Ghana Navy will fulfil the role of the On-Scene Commander in the event of all Tier 3 incidents including those from the offshore installations.

Training and Capacity Building

The delegates recognised that the On-Scene Commander requires a good understanding of the role designated to him/ her. They felt that there is a need for a pool of dedicated trained personnel. A request was made to the oil operators to invite government officials to participate in their training programmes.

National Stockpile of Resources

The EPA pointed out that the government recognised the need for dedicated in-country response resources and that discussions were underway between the EPA and a number of companies with the aim of establishing a public/private partnership. The delegates suggested that the EPA should consider visiting National Response Centres of countries abroad or in the region with the aim of replicating these models in Ghana.

Port State Control

It was highlighted that there is no system in place for vessel inspections. Port control activities should be prioritised in the future, with regular audits conducted by marine surveyors.

Involvement of Coastal Communities

The delegates highlighted the need for a mechanism to provide funding to those coastal communities (e.g. fishermen) who will be involved in a shoreline response under the management of ZOIL.

Development of a National Action Plan

The main objective of session was to develop an Action Plan to identify priority items for the implementation of the National Oil Spill Contingency Plan (NOSCP). It was also a good opportunity for the delegates to interact with colleagues from other departments and the industry. The delegates were divided into four groups. The composition of these groups was established randomly in order to ensure representation from all organisations including industry.

Working groups were requested to identify five priority actions for the effective implementation of the NOSCP. The responsible organisations and the timescales for the implementation of the priority items were identified.

Priority Actions for the Effective Implementation of the NOSCP

The priority items identified by the delegates are as follows:

1. Provide training for stakeholders who are responsible for the implementation of the NOSCP.
2. Establish a national stockpile of response resources as required under the OPRC 1990 Convention.
3. Develop Claims and Compensation Procedures.
4. Develop enabling legislation for the approval of dispersants under the National Dispersant Policy.
5. Conclude trans-boundary agreements under the auspices of the Emergency Protocol of the Abidjan Convention.

Refer to **Annex 6** for priority actions identified by the syndicate groups.

Summary of the closing ceremony

Mr Kojo Agbenor-Efunam, Ghana EPA, acted as chairperson during the closing ceremony. He thanked the delegates for their active participation. He mentioned that the outcomes of the four working groups would be considered by EPA for inclusion in the Action Plan. He acknowledged the assistance provided by IMO and IPIECA under the auspices of the GIWACAF project and thanked the external Consultants for their continued support.

Mr Kojo Agbenor-Efunam invited Brigadier- General Mankatah to provide a short closing statement. Brigadier-General Mankatah thanked the delegates for their active participation during the proceedings. He said that he was delighted to hear that priority actions were identified for the development of an Action Plan to strengthen the national oil spill response capability.

He mentioned that Strategic Environmental Assessments are currently being undertaken for the oil and gas sector and that there was a need to develop the capacity for dealing with hazardous and noxious substances in Ghana. In conclusion, he reiterated the need for a national effort to ensure the effective implementation of the National Oil Spill Contingency Plan.

Conclusions

The primary objective of the workshop was to test the National Oil Spill Contingency Plan through the execution of a tabletop exercise. The representation from both the public and private sectors

enabled the delegates to have productive discussions and gain a better understanding of issues to be considered in the event of a major oil pollution incident. The delegates produced an Action Plan comprising of priority items for the implementation of the National Oil Spill Contingency Plan (NOSCP), which would strengthen Ghana's national response capability.

This workshop clearly demonstrated the interest and motivation of all parties to work together to improve the capacity of Ghana to deal with oil pollution incidents and to minimise its impact on local communities and the economy.

Recommendations

1. Conclude the passage of the Marine Pollution Bill into Law and reinforce the legal status of the EPA's position as the National Competent Authority;
2. Review the NOSCP to take into account the recent emergence of the oil industry;
3. Strengthen the National Oil Spill Contingency by developing a mechanism, which clearly defines when the Competent National Authority (EPA) will take charge of the management of pollution incidents, which emanate from offshore installations.
4. Insert a clause in the National Oil Spill Contingency Plan that requires the Competent National Authority (EPA) to make an explicit statement that they have taken charge of the management of an incident;
5. Request support for IMO OPRC Model Levels 2 & 3 training under the auspices of the GIWACAF Project for members who are responsible for the implementation of the National Oil Spill Contingency Plan; and
6. Conduct a national inventory of response resources including resources held by the oil industry.

It is further recommended that the IMO and IPIECA under the auspices of the GIWACAF Project continue to support the further development, updating and implementation of the NOSCP for Ghana.

Annex 1 List of Acronyms

Abidjan Convention 1981	Convention for Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region, and its Protocol concerning Co-operation in Combating Pollution in cases of Emergency
CLC 92	The 1992 International Convention on Civil Liability for Oil Pollution Damage
EPA	Ghana Environmental Protection Agency, Ministry of Environment, Science and Technology
FUND 92	International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992
GPHA	Ghana Ports and Harbours Authority
GI-WACAF	Global Initiative for West and Central Africa
GMA	Ghana Maritime Authority
HSE Manager	Oil Industry Manager with responsibilities for Health, Safety and Environment
IMO	International Maritime Organization
IPIECA	International Petroleum Industry Environmental Conservation Association
MARPOL	International Convention on the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto
NCP	National Contingency Plan
NGO	Non-Governmental Organization
NOSCP	National Oil Spill Contingency Plan
OPRC 1990	International Convention on Oil Spill Preparedness, Response and Co-operation, 1990
OPRC-HNS	Protocol to the OPRC 1990 Convention on Preparedness, Response and Co-operation on Spills from Hazardous and Noxious Substances, 2000
OSCP	Oil Spill Contingency Plan
OSRL	Oil Spill Response Limited
TGL	Tullow Ghana Limited
UNEP	United Nations Environment Programme

Annex 2 Workshop Programme

03 May 2011	
	Opening Ceremony
09h00	Registration
10h00	<ul style="list-style-type: none"> - Welcome Address; D. Amlalo; Acting Executive Director; EPA - Opening Remarks; R. Chancerel; GIWACAF Project Manager; IMO/IPIECA
	Overview of the GI WACAF Project: Progress to Date R.Chancerel; GIWACAF Project Manager; IMO/IPIECA
11h00	Refreshment Break
	Ghana National Oil Spill Preparedness
11h30	Overview of the National Oil Spill Contingency Plan K. Agbenor-Efunam; Senior Programme Officer; EPA
12h30	Public /Private Sector Equipment Partnership J. Small; Director; EPE Ghana
13h00	Lunch Break
	Oil Industry Preparedness
14h00	<ul style="list-style-type: none"> - Tullow Ghana Limited; R. Ramsay; Emergency Advisor; Tullow Ghana Limited - KOSMOS Energy; K. Boakye-Agyei; HSE Manager; KOSMOS Energy
15h00	Refreshment Break
15h30	<ul style="list-style-type: none"> - ENI Ghana Limited; F.Nanglaviri; HSE Manager; ENI Ghana - Ghana Ports and Harbours Authority; J.B. Gaisie; Estate & Environment Manager; GPHA
	End of Day 1

04 May 2011	
	Response Strategies
09h00	Response Strategies
09h00	Response Strategies: Issues and Limitations G. Nxumalo; GIWCAF Consultant
	Tabletop Exercise Briefing G. Nxumalo; GIWCAF Consultant
10h00	Refreshment Break
	Tabletop Exercise
10h30	Tabletop Exercise Commences Delegate & Facilitators
13h30	Lunch Break
	Tabletop Exercise
14h30	Tabletop Exercise Continues Delegate & Facilitators
15h30	Refreshment Break
16h00	Tabletop Exercise Debrief K. Agbenor-Efunam; Senior Programme Officer; EPA G. Nxumalo; GIWCAF Consultant J. Small; Director; EPE Ghana R. Ramsay; Emergency Advisor
	End of Day 2

05 May 2011

Development of an Action Plan

09h00 **Development of Action Plan Briefing**
G Nxumalo; GIWACAF Consultant

09h30 **Syndicate Group Work**
Delegates

11h00 **Refreshment Break**

Development of an Action Plan

11h30 **Plenary Session**
K. Agbenor-Efunam; Senior Programme Officer; EPA

13h00 **Closing Ceremony**
K. Agbenor-Efunam; Senior Programme Officer; EPA
Brigadier General Mankatah – National Coordinator; PSCC

End of Workshop



Annex 3 List of Delegates

No	NAME	INSTITUTION	POSITION	EMAIL	MOBIL NO
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Annex 4 Opening Speech Acting Executive Director, Environmental Protection Agency

NATIONAL OIL SPILL CONTINGENCY PLAN SIMULATION EXERCISE

WORKSHOP ACCRA, GHANA 3RD -5TH MAY 2011

WELCOME ADDRESS BY THE AG. EXECUTIVE DIRECTOR, ENVIRONMENTAL PROTECTION AGENCY

- Representative of IMO
- Representative of IPIECA
- Distinguished delegates
- Distinguished ladies and gentlemen

The discovery of the usefulness of petroleum to humankind has over the years revolutionized our mode of transport, lightening, manufacturing of goods, agriculture, etc. In fact, without petroleum our life will probably grind to a halt for a long time. However, we have and do talk about alternative energy sources, none of these energy sources have matured enough to totally replace petroleum. That is, for the foreseeable future we would have to depend on oil and gas.

However, important as petroleum is to mankind its exploitation and use are not without problems. About a year ago, we all watched the horrific incident of the *Deepwater Horizon* incident which occurred in the Gulf of Mexico. The people of United States that were affected by the release of more than a million barrels of crude from the *Macondo Well* are yet to recover from that disaster. We, in Ghana, are not ignorant of the devastating effect of an oil spill on the environment and the people. That is why in 1986 we developed the National Oil Spill Contingency Plan (NOSCP) after an initial risk assessment. At that time we set out certain specific goals for ourselves so as to have a certain level of preparedness for management of an oil spill. Some of these goals are: development of an environmental sensitivity map of the entire coast of Ghana, development of policy on the use of dispersants in our marine environment, guidelines on the importation and use of dispersants, guidelines on management of oily waste generated as a result of an oil spill, continuous review of the NOSCP, training and conducting exercises.

Distinguished Ladies and Gentlemen, EPA, as the manager of the NOSCP, through collaborative effort of its stakeholders has been able to achieve all these goals set out in the NOSCP. We have developed the policy on dispersant use, guidelines on the application of

dispersants, guidelines on management of oily waste and the environmental sensitivity atlas of the coastal area of Ghana. We have also conducted a number of training and exercises in the past. We have also reviewed the NOSCP on a number of occasions the latest being in November 2009 and reprinted in January 2010.

Nevertheless, since disaster preparedness is not a onetime event but a continuous process, we cannot rest on our laurels and start patting each other on the back. We have to keep the boat afloat all the time. That is why, as important stakeholders in this process, we have called you again for this important assignment of exercising the revised plan.

I must however add that we are not here to find fault or to put any institution or individual person(s) on the spot. It is an effort to find out whether collectively we are on the right track. If not, what do we do to be on track? If we are on track, what do we do to improve the system we are building? This is our task for the next three (3) days. We believe that we have assembled the right people for the task, for the institutions that you represent thought that you are the right person for the assignment.

I therefore wish to welcome you to this important event and wish you a fruitful discussion.

Thank you

Annex 5 Opening Speech IMO/IPIECA

The Executive Secretary of the EPA;

Distinguished Delegates;

Ladies and Gentlemen;

It is an honour for me to deliver this opening address on behalf of the International Maritime Organization (IMO) and the International Petroleum Industry Environmental Conservation Association (IPIECA) at this National workshop and exercise to and update the National Oil Spill Contingency Plan.

I would like to briefly remind you of the roles of these organizations. IPIECA is the global oil and gas industry association for environmental and social issues. It was formed in 1974 following the launch of the United Nations Environment Programme (UNEP). IPIECA is involving both the upstream and downstream oil and gas industry on environmental and social issues and its membership covers over half of the world's oil production. The work of IPIECA is supported by a number of specialized working groups of industry members that address the following areas: biodiversity; climate change; health; oil spill preparedness; operations and fuels; reporting; and social responsibility.

The International Maritime Organization (IMO) is a specialized agency of the United Nations with a global mandate. The mission of IMO is to promote safe, secure, efficient, environmentally sound and sustainable shipping. This is pursued by adopting the highest practicable standards of maritime safety and security, of efficiency of navigation, and of prevention and control of pollution from ships.

After the event of the Exxon Valdez near the Alaskan coast, in 1989, the IMO member states elaborated the International Convention on Oil Pollution Preparedness, Response and Co-operation. The OPRC Convention, as it became known, was adopted in 1990. The OPRC Convention provided for the first time a truly global framework to facilitate international co-operation and mutual assistance in preparing for and responding to major pollution incidents. It encourages States to develop and maintain an adequate preparedness and response capability while simultaneously recognizing the importance of co-operation with the oil and shipping industries to deal with major oil or HNS pollution emergencies. It was then complemented in 1992 by the CLC 92 and the Fund 92 Conventions which provide compensation for oil pollution damage resulting from spills of persistent oil from tankers.

To support the implementation of these international conventions, IMO and IPIECA launched in 1996 the Global Initiative with objective to support countries in strengthening their oil spill response capability and ensure the full implementation of these above-mentioned international conventions. The Global Initiative is active at various degrees in four regions of the world: Caspian and Black Sea, the Mediterranean Sea, the Caribbean and West and Central Africa.

The Global Initiative for West and Central Africa, known as GI WACAF, was launched in April 2006; it is considered as the flagship programme of the various GI regional initiatives. The project is jointly funded by IMO and eight oil companies through IPIECA. Today, it covers 22 countries in West and Central Africa. Since its establishment, significant progress in improving oil spill response capability has been achieved. For instance, from 2006 to 2010 a total of 43 workshops were delivered and more than 3000 persons were trained. From a results-based perspective, the overall preparedness indicator has increased by 30% since 2006 and all six key performance indicators of preparedness have progressed.

As you are aware we have been recently reminded how important the preparedness to oil spills is. On the 20th of April 2010 a tragic event, the Deep Water Horizon caused the death of 11 workers and a subsea well blow out. This incident generated a release of oil estimated to 700,000 m³ over 87 days. The scale of the response implemented by the US government and BP had no equivalent in the past with 48,000 “responders” involved, 77 major skimming vessels, 5 C130 aircraft based spray systems, 976,000 gallons of dispersant applied from air and at sea, and 411 in-situ burning operations.

This event reminded us of the need for West and Central Africa to be equipped with a functional regional instrument for cooperation amongst countries. Such instruments are crucial to facilitate customs and immigration procedures in case of an oil spill response emergency for international assistance to reach the country.

It also stressed the importance of the cooperation between government and industry for oil spill preparedness and response. The establishment of a joint command centre including representative from government and industry enabled fast and efficient decision for the on-going response operations. It is crucial to understand that if large-scale oil spills incidents occur it becomes the responsibility of everyone to make every possible effort to cooperate in the event of an incident.

In 1986, the National Oil Spill Contingency Plan of Ghana was officially approved. This approval was a great step in strengthening the oil spill preparedness in the country and showed commitment to progress in the region. The development of a National Oil Spill Contingency Plan is indeed the corner stone of a fast, efficient and well-coordinated response to oil spill events. However, as everybody knows, contingency plans need to be tested and exercised regularly to be proved fully operational. Thus, the objective of this workshop is to raise the awareness of the Ghanaian National Oil Spill Contingency Plan to ensure that all its users are fully aware of its contents and its procedures, so it can be fully operational in case of emergency.

Finally, I would like to encourage delegates during the next three days to participate actively, and to support the successful outcome of this workshop to test the National Marine Oil Spill Contingency Plan. It is crucial that all delegates gain a full understanding and knowledge of this document and I strongly encourage the regularly replicate such events to sustain and increase the level of preparedness in Ghana.

In conclusion, I have the pleasure in conveying to all of you the very best wishes of the IMO Secretary-General, Mr. Efthimios Mitropoulos who is looking forward to a fruitful outcome

of your deliberations this week. I wish to express my sincerest thanks to all those involved in the organization of this event and especially to the Environment Protection Agency, as our hosts.

Your Excellencies,
Distinguished delegates,
Ladies and Gentlemen,

Thank you for your kind attention.

Annex 6 Development of an Action Plan to strengthen the National Oil Spill Response Capability

Step 1. Your priorities

Exercise objectives:

Complete the “Matrix of Preparedness” below to identify the level of preparedness, and actions that require a high priority.

How to complete the form

1. Identify the level of preparedness for each element from the “Matrix of Preparedness”:
 - Implemented Yes/No
2. Identify the priority actions and difficulty faced in implementing each of the elements from the “Matrix of Preparedness”:
 - Priority Ratings: 0(None); 1 (Low); 2 (Medium); 3 (High)

Preparedness Matrix

1. Legislation: To adapt the national legal and institutional framework and ensure sustainability of the NOSCP		None 0	Low 1	Medium 2	High 3
Ratification	Ratification of the OPRC 90 Convention				
	Ratification of the CLC 92 and FUND 92				
Implementation	Implementation of the OPRC 90 Convention				
	Implementation of the CLC 92 and FUND 92				
	Integration of the provisions of the conventions in the national legislation				
Approval	Approval of the NOSCP				
	Approval of the Dispersant Use Policy				
Other...					
2. National Oil Spill Contingency Plan: To have a standardised oil spill preparedness and response system in place		None 0	Low 1	Medium 2	High 3
Management system	Setup of a national working group/ coordinator for the development of the National Oil Spill Contingency Plan				
	Development of the National Oil Spill Contingency Plan				
	Crisis Management System				
	Reporting & Alerting systems				
	Public Information / Designated Public Affairs/ Media Advisor				
Policy	Dispersant Use Policy: (List of Approved Dispersants; Pre-approved area of use; Conditions of Use)				
	In-Situ Burning Policy				
	Waste Management Procedures				
Risk assessment and sensitivity mapping	Coastal Oil Spill Sensitivity Maps				
	Trajectory Modelling				
	Risk Assessment				
	Oil Spill Risk and Scenarios				
Interface with Local Oil Spill Contingency Plans	Integration of Local Oil Spill Contingency Plans (Ports, terminals)				
	Integration of oil industry Oil Spill Contingency Plans				
Finance	Claims and Compensation Procedures				
	Financial Commitment / Claims / Record Keeping				
	Procedures for Sampling and Evidence				
Other...					
3. Designation of authority: To ensure that all requested authorities (with regards to national/ international laws and NOSCP) are officially designated.		None 0	Low 1	Medium 2	High 3
Designation of Competent National Authority	Competent National Authority with responsibility for oil pollution preparedness and response officially designated				
	National Operational Contact Point(s) responsible for the reception and transmission of oil pollution reports				
	National Organisation(s) in charge of oil pollution preparedness and response				
	National Authority which is entitled to act on behalf of the State to request or provide assistance				

Other...					
4. Trans-boundary and mutual assistance agreement: To ensure that cooperation and assistance at bi-lateral/ regional level is developed.		None 0	Low 1	Medium 2	High 3
Agreement	Regional agreements				
	Sub-regional agreements				
	Bilateral agreements				
	Government / industry Mutual Aid Agreements				
Other...					
5. Training and exercise developed by the country: To develop the expertise and competence in the country.		None 0	Low 1	Medium 2	High 3
Training	Introductory Level				
	OPRC Level 1				
	OPRC Level 2				
	OPRC Level 3				
	Train the trainers				
	Other seminars and workshops hosted by the country				
Exercise	Crisis Management Exercise (Table top)				
	Notification Exercise				
	Mobilisation Exercise				
	Government Deployment Exercise				
	Industry Deployment Exercise				
	Joint Industry / Government Exercise				
Other...					
6. National Resources Objectives: To ensure that sufficient and appropriate equipment is available in the country to: - Deal with oil spill incidents up to a certain level (i.e. minimum Tier 1 oil spill response equipment) - Enable prompt alerting procedures as well as operational communications (i.e. communications equipment and infrastructure)		None 0	Low 1	Medium 2	High 3
Equipment	Storage facilities and maintenance of equipment				
	Oil spill response equipment acquisition				
	Communication equipment acquisition				
	Equipment Inventories				
Centre	Response Centre (Communications, Meeting Rooms)				
	Training centre (documentation – resource centre for oil spill response and preparedness)				
Other...					

N°	High Priority Actions	Person / Authority / organisation in charge of implementing	Estimated time for completion
Group 1	Develop a Crisis Management System.	EPA; Ghana Navy	Sept 2011
	Develop Reporting and Alerting Procedures.	EPA; Ghana Navy	Jan 2012
	Develop Claims and Compensation Procedures.	EPA; Finance Department; GMA; Attorney General	December 2011
	Establish National Operational Contact Points / Reporting and Alerting System that is operational 24/7.	EPA	December 2011
Group 2	Conduct an oil spill simulation exercise involving role players, etc.	EPA	2011
	Conduct a full inventory of national oil spill response resources.	EPA	June 2012
	Raise public awareness through road shows. This should to be interfaced with the National Communication Strategy Cooperation at all levels via,		2011
	Trajectory modelling should be conducted to inform the risk assessment	Meteorological Agency; GNPC; EPA	

N°	High Priority Actions	Person / Authority / organisation in charge of implementing	Estimated time for completion
Group 3	Conduct a 'Train the trainers' course.	EPA	2011 (ASAP)
	Standardise crisis management systems.	Ghana Navy	2011
	Develop oil spill risk scenarios to complement the risk assessment.	EPA	2011
	Conclude bilateral/ multilateral regional agreements.	EPA; GMA	2011
Group 4	Training is required for individuals who are responsible for the implementation of the NOSCP.	EPA	2011
	Establish a national stockpile of response resources as required under the OPRC 1990 Convention.	EPA	2012
	Conclude transboundary Agreements under the auspices of the Emergency Protocol of the Abidjan Convention.	GMA; EPA	2011
	National Dispersant Policy approval process - develop enabling legislation.	GMA	2012

Annex 7 Workshop Pictures



