

# The National Oil Spill Contingency Plan (NOSCOP)

## 1. INTRODUCTION

### 1.1 Background

- 1.1.1 Protection of the marine and coastal environment from pollution is of high priority for Sri Lanka. Oil spills have the potential to cause serious adverse impact on marine environment. It is not always possible to prevent oil spills occurring and thus the occasional need arises to face the consequences of oil spills.
- 1.1.2 “Marine Pollution” is a subject the responsibility of which is vested in the Minister in Charge of the subject of “Environment”.
- 1.1.3 “The Marine Pollution Prevention Act No. 35 of 20081” has designated the Marine Environment Protection Authority (MEPA) as the “Agency responsible for marine pollution prevention related activity”. Formulation and implementation of National Oil Spill Contingency Plan is one of its more important functions. The National Oil Spill Contingency Plan (NOSCOP) which has been prepared by the MEPA provides a guide and control on has to deal with an oil spill contingency.
- 1.1.4 The Eleventh Session of the Governing Council of the United Nations Environment Programme (UNEP) held in May 1983, by a decision designated the South Asian Seas as a region to be included in the UNEP’s Regional Seas Programme in close co-operation with the South Asian Co-operative Environment Programme (SACEP) and the Governments of the South Asian region. The Action Plan for the South Asian Regional Seas Programme was formally adopted at a meeting of the concerned countries held in New Delhi, on 24<sup>th</sup> March 1995.
- 1.1.5 “The Action Plan identified” development and implementation of National and Regional Oil Spill Contingency Planning, as one of the four priority activities, which are required to be developed for implementation under the plan.
- 1.1.6 The first intergovernmental meeting of the South Asian Seas Programme was held in Islamabad in March 1999, where it reviewed the progress achieved and adopted a work plan for the implementation of the programme in the subsequent two-year period. The meeting also provided the policy guidance for the procedures to be followed in the implementation of the programme. Under the priority area of development and implementation of National and Regional Oil Spill Contingency Planning, the following two specific projects were approved for implementation:-
- (a) Capacity Building in the Development and Operation of National Oil Spill Contingency Planning – 1999-2000; and
  - (b) Updating and Finalisation of the South Asian Seas Oil Spill

## Contingency Plan –2001-2002.

- 1.1.7 Thus in order to increase Sri Lanka's opportunities to obtain assistance, to contain and mitigate oil spills in the open sea, from countries in the region and others, a well documented NOSCOP has to be in place. It would be therefore, an advantage to have a close link with the Regional Oil Spill Contingency Plan initiated by IMO/SACEP in the preparation of revised NOSCOP.
- 1.1.8 The first NOSCOP was prepared by the MEPA in 1995 and was revised in 1998 and 1999. The NOSCOP received approval of the Cabinet of Ministers in July 2000. The NOSCOP needed revision as per the Regional Oil Spill Contingency Plan yet to be finalized and other National and International developments taken place over the years. The revision of the NOSCOP was undertaken by a group of consultants appointed by the Institutional Strengthening of Oil Spill Contingency Management (INSTCOM) Project of the MEPA. INSTCOM Project of MEPA was funded by the Norwegian Government.

More recently, new legislation has been introduced by the government to strengthen disaster management activity under the Sri Lanka Disaster Management Act No. 13 of 2005 that covers disasters related to oil spills including inland and marine oil spills. The Act provides for the establishment of the National Council for Disaster Management, Disaster Management Centre, appointment of Technical Advisory Committees, preparation of Disaster Management Plans; Declaration of a state of Disaster and payment of compensation.

Section 10 provides for the following important activities:

- (1) It shall be the duty of every Ministry, Government Department and public corporation to prepare a Disaster Management Plan with respect to such Ministry, Government Department or public corporation to counter any disaster or impending disaster based on the National Disaster Management Plan and in accordance with such guidelines as may be specified by the Council
- (2) The Disaster Management Centre shall if requested by a Ministry, Government Department or Public corporation referred to in subsection (1), extend all necessary assistance to such Ministry, Department or Corporation, as the case may be, in the preparation of its Disaster Management Plan
- (3) Every such Ministry, Government Department and public corporation shall on or before such date as shall be determined by the Council by order published in the Gazette, submit to the Centre, a detailed Disaster Management Plan relating to the disaster counter measures proposed to be taken by such Ministry, Government Department, public corporation as the case may be to counter any disaster or impending disaster.
- (4) The Centre shall submit every Disaster Management Plan received by such Centre under subsection (3) to the Council for its approval.

Section 11 provides for the President by proclamation declare that a state of disaster exists, either in respect of any area or areas specified in such proclamation or of the whole country shall remain in force for a period of two months from the date of making of the Proclamation and subject to extension every two months if necessary. The Proclamation made shall be placed before

Parliament at its first sitting immediately after the date of declaration of the Proclamation, to be approved by a resolution of Parliament.

Section 12 provides for the President to direct any one or more appropriate organizations designated by the Council under Section 21 to take immediate action to direct, co-ordinate and use all available resources as may be necessary within area or areas in respect of which a Proclamation has been made to counter the effect of the disaster or the impending disaster or to mitigate the effect of such disaster or impending disaster

### **Scope and Geographical Coverage**

1.2.1 The NOSCOP applies to oil spills which cause or could cause damage to the environment covering coastal area and the sea. It applies to the waters, which are under the jurisdiction of Sri Lanka for pollution prevention purposes, including the EEZ or pollution zone and the territorial sea.

1.2.2 The area of response extends to high seas where the oil spill has the potential to harm Sri Lanka's interests like beaches, estuaries and other areas connected to the sea in terms of power of intervention, under the Intervention Convention of 1969.

### **The Tiered Concept**

Oil spill risks and the responses they require could be classified into three Tiers according to the size of the spills and the proximity to a response centre.

Three levels of tiered responses are defined according to the following spill scenarios:

**Tier I - up to 50 tones** – a *relatively* small spill requiring local responses using local resources and own capabilities according to local “oil pollution emergency plan”, e.g.; bunkering operations; ship transfer.

Certain specified locations and associated management institutions such as Ports, harbour terminals, repair yards of ships, dry docks, off shore installations dealing with oil, pipe lines or any other apparatus used for transferring oil to, or from a ship to have their own Oil Spill Contingency Plans (OSCOP) capable of handling oil spillage (Tier I) arising from causes most proximate to that institution. Each such contingency plan must be consistent in strategy with that of the National Oil Spill Contingency Plan

The Combat Agency

(Potential polluters) will generally be able to respond to and clean up a spill utilizing local resources. In cases where additional resources are required these will generally be available from the local port authority, or by utilizing National Plan resources in the region or from adjacent industry operators under mutual aid arrangements.

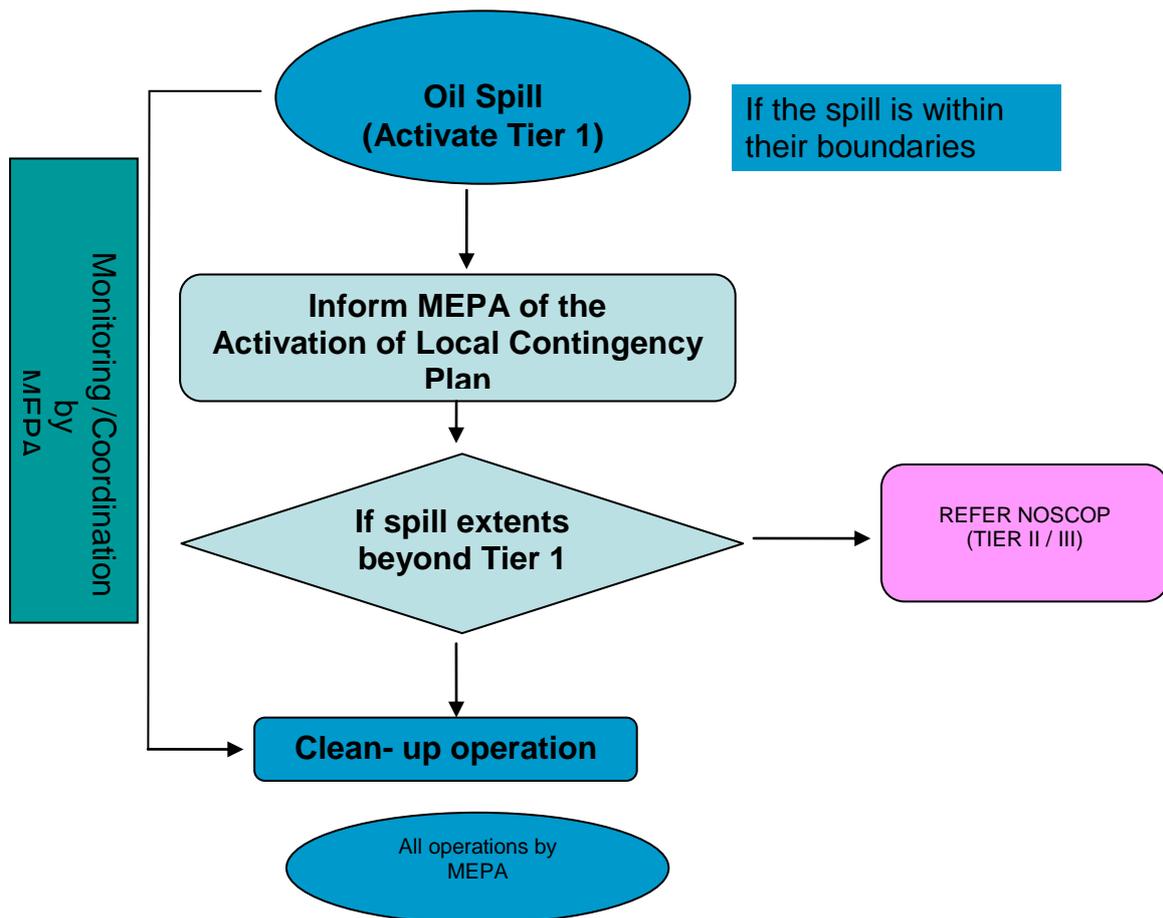
**Tier II: between 50-100 tones** – a medium spill that requires implementation of the national oil spill contingency plan. This operates with local and additional external resources area plans or industry mutual help plans pooled resources. Spill is to consist of a larger volume of oil that may occur in the vicinity of a response centre or smaller spills at distant locations for which resources from several sources may be required; for instance industry and governmental resources.

**Tier III - above 100 tones** – a large spill requiring international assistance. This includes spills of national interest for which a national contingency plan with international cooperation will be

required. Tier III response is dimensioned for large tanker accidents or offshore blowouts where arrangements will usually call for the entire oil spill response resources in a nation and extending it for international assistance. The response plan for such a spill will usually be part of the National Emergency Response Plan.

The Combat Agency will require local, provincial, national and possibly international assistance

**Figure 1** Response mechanism after a spill is detected



The above flow chart describes how the action process should be channeled when an oil spill is reported to any of the notifying authorities. Information receiving agencies should immediately notify MEPA about the message received with all the information that they received at the time.

AS per Marine Pollution Prevention act potential polluters are identified as:

- Ports, harbour, terminals

- Repair yards of ships
- Dry docks
- Off shore installations
- Pipe lines or any other apparatus used for transferring oil to, or from a ship

## **Aims and Objectives**

- 1.4.1 The purpose of Sri Lanka's National Oil Spill Contingency Plan is to protect Sri Lanka's coast to minimize the effects of oil spills including risks and their possible effects on environment, public health economic activities. The main priority is to protect the most sensitive areas and life and property and process affected.
- 1.4.2 NOSCOP is intended to delineate responsibilities for the operational response to marine emergencies, which could result in actual, potential or suspected spillage of oil into the marine environment. The marine environment includes the Exclusive Economic Zone (EEZ) and the coastal area.
- 1.4.3 NOSCOP will establish a mechanism for mutual understanding with legal and institutional foundation among the support agencies, state authorities, private and public sector organizations including oil/fishing/supply/ and port industry to co-operate under the control of MEPA and guidance of Disaster Management Council to co-ordinate and integrate their resources to respond effectively.
- 1.4.4 For the above purpose the following specific objectives are defined in the NOSCOP:
- (a) responsibilities of each Organisation;
  - (b) extent of co-operation for the implementation of the Plan between the Organisations at the operational level;
  - (c) type of assistance to be provided by each Organisation and the condition under which it will be provided;
  - (d) division of responsibilities between the Organisations;
  - (e) established principles of command and liaison and definition of corresponding structures;
  - (f) procedure for claiming compensation; and
  - (g) Administrative modalities related to co-operative actions in case of emergency.

## **Response Strategy**

- Response operations shall take place as close to the source of the spill as possible.
- Mechanical methods have first priority.

- Chemical methods can be used if NEBA (Net Environment Benefit Analysis) shows that use of dispersants is reducing the overall environmental impact.
- Enhanced capabilities for oil recovery from shorelines.
- As DMC is nationally responsible as an umbrella organization for co-ordination of activities relating to any disaster as defined in the relevant Act that includes disasters related to oil spills in the marine and inland waters, MEPA as a public corporation will have to report to DMC with a disaster management plan such as National Oil Spill Contingency Plan (NOSCOP). The NOSCOP will be formulated based on the National Disaster Management Plan and will be subjected to approval of the Disaster Management Council through DMC.

As the Disaster Management Act provides for public corporations to act independently on the implementation of the Disaster Management Plans developed by them for a particular sector, MEPA will be in a position to serve as the Lead Operational Authority for marine pollution sector. In case of a Tier II and Tier III events, depending on the magnitude and complexity of the oil spill impact mitigatory operations, a state of Disaster could be declared by the President under the provisions of Disaster Management Act that can be applicable to a designated geographical area or covering the entire country.

President can direct any one or more appropriate organizations designated by the Council under Section 21 to take immediate action to direct, co-ordinate and use all available resources as may be necessary within area or areas in respect of which a Proclamation has been made to counter the effect of the disaster or the impending disaster or to mitigate the effect of such disaster or impending disaster. The MEPA will be the appropriate agency to serve as the designated agency to direct and co-ordinate and use all resources as may be necessary for mitigatory actions in the event of an oil spill of Tier II and Tier III types.

Similarly, CPC, SLPA, CPSTL and any other commercial oil carrying vessel owner/ company will serve as designated organizations for Tier I type oil spill where localized impacts at the off-shore bunkering facility and within the territory of commercial harbours could be attended according to the Oil Spill Contingency Plans to be drawn by these agencies respectively.

- In case of a Tier II or Tier III type oil spill where a large oil spill can affect the coastal resources, a quick response could be arranged by providing well equipped operating response vessels/equipment by SLPA, NAVY, CPC, CPSTL and Support Resources by other committed agencies such as CCD, DFAR, NARA, MDET etc. and provincial/ District/ Divisional Secretariats/ Local authorities coordinated and managed by the MEPA.
- All available resources in society may be used in major environmental combat operations with the support of the DMC having access to all Divisional Secretaries (DSS) and NGOs through their regional network.
- Close co-operation between involved parties are to be ensured through awareness programmes, deck top exercise and drills Response Phases

### **1.5.1. Strategy for clean up of oil spills**

There are five main strategies that are currently used to clean up oil spills in water. In many spill situations spill responders employ more than one strategy in different locations or in different phases of the cleanup operation. Selection oil spill response strategies depend on several factors. Therefore, response strategies should be selected after evaluation of all these factors. Details of strategy for oil spill combat operations are given in annex....

### **1.6. Response Phases**

For the purpose of this Plan, pollution response operations could be divided into five distinct phases:

Phase I - Notification

Phase II - Evaluation of the status, formulation and activation of a  
Action Plan

Phase III - Joint response operations at sea

Phase IV - Joint response operations on shore

Phase V - Demobilization.

It is understood that according to circumstances entire phases or parts thereof may take place concurrently with one or more other phases.

### **The Threat**

A potential threat of oil spill does exist in Sri Lanka waters and the following are the most probable causes:

- A total of some 525 million tonnes of oil is transported in tankers, for a year within the EEZ and close to out side of this zone.
- The density of marine traffic in Sri Lanka's coastal waters. Sri Lanka, borders the main East/West shipping Route used by ships trading to and from the industrial centres of the Far East and the West.
- The offshore single point buoys mooring off the port of Colombo. Crude oil imported to Sri Lanka is pumped to the Ceylon Petroleum Corporation's land based storage tanks via an under-sea pipeline from this off shore terminal. The terminal is operated through-out the year, even during monsoon period and approximately two tankers carrying 120,000 tonne parcels of crude oil are transferred to the tanks ashore every month.
- Operations of Trincomalee Oil Tank Farm.

- Expansion and development of ports and new constructions of ports.
- Existing marine services industry, including offshore supply of bunkers and ship repairing industry.
- Exploration of oil within the Exclusive Economic Zone (EEZ) of Sri Lanka.
- External Threats.

## **2 RESPONSIBILITY AND ORGANISATION FOR RESPONSE**

### **Duties of National Leadership**

Following the provisions in the Disaster Management Act, in case of Tier III type oil spill depending on the magnitude and geographical spread of the impacts, the President will declare a state of Disaster and an emergency situation, by Special Gazette notification directing all relevant agencies to co-operate with the designated co-ordinating and directing body as MEPA and to serve as the Lead Operational Authority in association with DMC. DMC having mandated to develop network linkages with local administration units and NGOs to respond to any disaster situation, will assist in mobilizing local resources to combat pollution effects in affected areas. It will liaise with the MEPA in the assessment of the impacts of the disaster, guide and support all activities related to oil spill combat operations. It will monitor the whole process of implementation of the NOS COP and assist in mobilizing all government, NGO and private sector resources wherever needed at national and local level.

### **2.2. The Polluter**

The Polluter is responsible, for necessary oil spill combating efforts and economically liable for all costs incurred by the oil spill, for the combat efforts and the damages caused as environmental impacts, including the combat measures decided by Lead Operational Authority.

### **2.3. Ministry level Responsibilities**

#### **2.3.1. Ministry of Environment and Natural Resources**

The Ministry in-charge of the subject of marine pollution is responsible for prevention, control, mitigation and management of pollution of all maritime zones within the jurisdiction of Sri Lanka and the MEPA is coming under the purview of this Ministry of Environment and Natural Resources. Secretary Ministry of environment and Natural Resource is responsible for direct all ministries to carry out their responsibilities in an oil spill emergency situation as per laid down in this plan.

Secretaries of following ministries are responsible to direct all agencies preview under the ministry to assist MEPA to implement NOS COP as responsibilities assigned in this plan.

Ministry of Defence

Ministry of Finance

Ministry of Disaster Management and Human Rights

Ministry of Port and Aviation

Ministry of Foreign affairs

Ministry of Public Administration

Ministry of Health

Ministry of Fisheries and Aquatic resources

Ministry of Science and Technology

## **Responsibilities of Agencies**

### **2.3.1. MEPA Responsibilities-**

As Lead Agency for implementation of the NOSCOP it will liaise with DMC on the provisions of National Disaster Management policy and Plan. The MEPA is the designated agency for marine pollution prevention related activities. Management of an environmental threat arising from a marine oil spill emergency is one of its most important functions and responsibilities. The MEPA is responsible for formulation and implementation of the National Oil Spill Contingency Plan (NOSCOP) through co-ordination with all relevant institutions and manage the responses to oil spill incidents. NOSCOP provides a guide to control such environmentally threatened activities. In order to implement the NOSCOP

In respect of Tier II and Tier III Tier of oil spills, the MEPA in close co-ordination with the DMC will establish the Operations Room at the MEPA and strengthen the existing Cells for Planning, Adm. & Logistics, Operations and Monitoring and Evaluation functions with the appointment of qualified and experienced staff of other relevant agencies such as DMC, SLPA, CPC, NAVY, AIRFORCE, ARMY, Police Department, CCD, NARA and the MET Dept.

As the Lead Operational Authority, MEPA will obtain equipment, materials and man-power resources from above key support agencies and internationally recognized institutions in organizing implementation of the NOSCOP in case of Tier II or Tier III situations.

- As Lead Operational Authority to maintain an Operations Command Centre at the MEPA head office
- To formulate and activate NOSCOP
- To monitor Tier I oil spill incidents for which mitigatory actions will be planned and implemented by SLPA or CPC or CPSTL or any private sector agency responsible for creating the pollution incident as Operational Authorities
- To assist in mitigation of pollution of coastal waters and adjacent land if the need arises in case of Tier I incident
- To appoint Incident Commander on activation of NOSCOP for providing response to Tier II and Tier III oil spill incidents ( large scale and over and above 10 tonnes of oil spill)
- To invite relevant agencies at national, regional and international level seeking their support to field experienced professionals/ Technicians and equipment in joint response operations,

- To appoint Incident Management Team (IMT) composed of representative of various discipline IMT that performs the tasks of Planning, Operation, Logistics, finance and admin, media and advisory cells
- Planning, Operations, Logistics, and Finance and Administration sections of OSRICS and the Incident Commander (IC) and On-Scene Commanders (OSC) for field level activities
- To co-ordinate with relevant agencies to appoint professional staff released on full time basis to be attached to MEPA during the period of the oil spill incident and to release and application of equipment and materials in responding to an oil spill incident
- Regular updating of data base on available equipment and resources including trained staff, availability of committed NGOs/ CBOs, information on sensitive areas with assistance from NARA and Met Dept.
- To enforce the provisions of the MEPA Act and proposed provisions for improvements in 2007 under revisions to the Act and international conventions such as MARPOL73/78, CLC and FUND 92, OPRC 90 to which Sri Lanka is a party.
- To develop regulations to enforce the above conventions
- To conduct drills for Tier II and III spill incidents on a periodic basis in association with the related agencies and stakeholders.
- To train stakeholders and a selected number of agency staff on specific priority activities related to oil spill contingency plan.
- To detain any ship for breach of the provision of the Act as subsequently amended
- To survey any ship on the nature and causes of any accident or damage which the ship has sustained
- To provide information to DMC to monitor all activities relating to oil spill incident and activation of NOS COP
- To open a separate special account for handling finances under the MEPA to collect advances and donations and expedite meeting all expenses relating to the NOS COP operations
- Reporting mechanism to DMC and Ministry of Environment and Natural Resources on all expenses on a monthly basis on the operations of special account.

### **2.3.2. Disaster Management Centre**

- To assist MEPA to develop NOS COP on the basis of the national Disaster Management Plan and Emergency Operational Plan and to follow the provisions in the Sri Lanka Disaster Management Act No 13 of 2005
- To closely associate MEPA in oil spill combat operations and monitoring of the incident related activities and to facilitate seeking required funds from the Treasury for meeting the emergency related expenditure

- To recommend the need to declare the state of disaster to Disaster Management Council and to appoint MEPA as the appropriate authority for the oil spill incident Management serving as the lead operational authority
- To co-ordinate with provisional, District, and Divisional administration units and Local authority to establish on- site operational shore line response centers for administration of oil spill response team and to organize community networks at local level to assist in combat operations.
- To assist to provide logistics support and estimates for fund raising
- To assist in providing relief crews
- To Nominate IMT member
- To coordinate evacuation of affected parties with the assistance of local community networks and relevant authorities.
- To coordinate civil society and community networks to respond to an oil spill incident

### **2.3.3. Sri Lanka Ports Authority**

- To take command and control of the operations of oil spill incident in the Ports as per the Tier I under NOS COP
- To hold permanent staff as a first strike force trained and equipped to deal with an incident
- To seek assistance from DMC, MEPA and other agencies and stakeholders in case of emergency situations where the spill spreads to coastal area beyond the designated port areas.
- To ensure that the Oil Spill Response Plan is regularly updated and rehearsed as per guidelines
- To provide all necessary logistics, i.e. tugs, pilot boats, relief crews, booms, dispersant etc.
- To assist in the implementation of the Tier II / III- NOS COP in combating large scale oil spills by providing man-power, equipment and materials according to Disaster Management Act of 2005
- To collect samples, carry out investigations and report writing
- To Nominate IMT members to help Incident Commander
- To provide facilities at the communication centres with VHF and other communication facilities at Colombo and Galle.

### **2.3.4. Ceylon Petroleum Corporation-and Ceylon Petroleum Storage terminals Limited**

- respond to oil spill within their premises and at their facilities as per Tier I plan and provide information to MEPA and DMC to enable monitoring of the activities
- To seek assistance from DMC, MEPA and other agencies and stakeholders in case of emergency situations where the spill spreads to coastal areas beyond the designated port areas.

- To ensure compliance with FUND 92 requirements
- To ensure liaison between Director of NOS COP ( Chairman / MEPA) and ship owner
- To provide assistance, with equipment, personnel and logistics
- To provide facilities, if required, for storage of spilled oil
- To provide facilities at the communication centres with VHF and other communication facilities.
- To Nominate IMT members to help Incident Commander and MEPA in combating oil spill

#### **2.3.5. Sri Lanka Navy**

- To perform surveillance of oil slicks
- To hold permanent staff for a first strike force trained and equipped to deal with an incident
- To combat spill and participate in clean-up operations at sea and land by providing all facilities available with the Sri Lanka navy
- To provide all facilities available at the communication centers with VHF
- Nomination of Incident Management Team members to help Incident Commander and MEPA in combating oil spill at Tier II / III levels and to update NOS COP.
- Nomination of IMT member to help Incident Commander and MEPA in combating oil spill and to update NOS COP

#### **2.3.6. Coast Conservation Department**

- To combat spill and participate in clean-up operations on land with the provision of equipment and manpower
- To assist and advise on impacts of spill on the marine environment and marine resources
- To provide cost estimates for damages to revetment and other structures
- To nominate Incident Management team member to help Incident Commander and MEPA in combating oil spill and to update NOS COP.
- To assess damage to coastal and beach resources and assist in establishment of temporary structures for collection and disposal of oil along the beaches
- To assist in locating of permanent site for disposal of pollutants and organizing transportation.

#### **2.3.7. Division of Merchant Shipping**

- To enforce the provisions of the Merchant Shipping Act and the international conventions such as SOLAS with regard to safety for which Sri Lanka is a party.
- To develop regulations to enforce the above conventions
- To detain any ship for breach of the provision of the Act as subsequently amended

- To survey any ship on the nature and causes of any accident or damage which the ship has sustained
- To support the MEPA and the DMC in legal proceedings relating to claims from the polluters.

#### **2.3.8. Sri Lanka Army**

- To assist oil spill response team in establishing on site operational command centres
- To provide personnel and equipment for the shore clean-up operations
- To assist in transport of equipment associated with NOS COP.
- To set up camps for accommodation of staff.
- To make available its communication facilities.
- To maintain law and order in affected areas during the period of declaration of state of disaster
- Nomination of IMT member to help Incident Commander and MEPA in combating oil spill and to update NOS COP

#### **2.3.9. Sri Lanka Air Force**

- To assist oil spill response team in identification, estimation and movement of oil spill.
- To carry out aerial spray of dispersant chemicals.
- To provide available its communication facilities.
- To provide transport facilities for personnel and equipment.
- To take aerial photograph to enable proper documentation of the incident for claims.
- To inform MEPA the cost rates of the equipment and manpower to be provided under the response operation and during response time
- To maintain daily log entry systems to document the compensation claim.
- Nomination of IMT member to help Incident Commander and MEPA in combating oil spill and to update NOS COP

#### **2.3.10. Central Environmental Authority (CEA)**

- To make recommendations on proposed temporary storage and permanent disposal sites and organize availability of space for clean up operations.
- To make recommendations as to the location of temporary storage facilities for recovered oil and its adequate disposal including treatment or incineration
- To negotiate the provision of final oiled debris disposal sites with Local Authorities
- To continuously monitor the disposal system for efficiency, safety and compliance and recommend corrective actions where required.

- To nominate IMT member to assist Operations/ Incident Commander and MEPA in combating oil spill and to update the NOSCOP

#### **2.3.11. Industrial Technology Institute (ITI)**

- To analyze Oil sample collected from pollutant source and beach etc,
- Assist in providing laboratory facilities and required technical advisory services for monitoring of fresh water and soil quality of land areas affected by the pollutants

#### **2.3.12. Sri Lanka Police and Marine Police**

- To maintain law and order
- To provide personnel for spill combat
- To control transportation of spilled wastes
- To enquire into cases of criminal and civil nature
- To help oil spill response team in establishing emergency project office and administration.
- To monitor the oil drift and warn all crafts in the area about the emergency

#### **2.3.13. District / Divisional Secretariats and Local Authorities**

- To allocate temporary shelter to affected parties and assist in organizing food, clothing and shelter
- To maintain peace and order among affected community.
- To assist oil spill response team in establishing on- site operational shore line response centre and administration.
- To Propose suitable sites which could be used as temporary storage sites close to the vulnerable areas
- To provide logistics and assist in the collection, clean up and disposal of spilled wastes
- To provide relief measures for the affected parties in evacuation and support to establish and operate refugee camps where necessary
- To prepare compensation claims for the victims at village level and forward to MEPA and for action to be taken to raise funds from the polluter

#### **2.3.14. Department of Fisheries & Aquatic Resources (DFAR)**

- Introduce a lower level Response Team concept at various fisheries harbours to assist Oil spill response team to provide emergency information at sea.

- Seek protection to environmentally sensitive coastal areas by mobilizing coastal community to respond to such activities
- To assist and advise on impacts of spill on the marine environment and marine resources
- To provide cost of damage for fishermen and fishing gears and prepare claims for damages and forward to MEPA and DMC through divisional secretaries
- To provide fishing crafts, and shore clean-up facilities including associated operational staff
- To provide workshop facilities for repairing response equipment
- To provide communication facilities and engage in supporting monitoring of oil spill movement related activities at sea.
- To co-ordinate provision of relief measures to the affected fisher families
- Nomination of IMT member to help Incident Commander and MEPA in combating oil spill and to update NOS COP

#### **2.3.15. National Aquatic Resources Research & Development Agency (NARA)**

- To advise on ecosystem sensitivity for planning mitigatory measures.
- To provide oceanography information,
- To assist in impact assessment, spill monitoring, and pollution reporting.
- Nomination of IMT member to help Incident Commander and MEPA in combating oil spill and to update NOS COP
- To assist and advise on impacts of spill on the marine environment and marine resources
- To carry out short term and long term damage assessment of marine resources including all coastal ecosystems such as mangroves and fishery resources and related aspects.
- To engage in continues monitoring of lagoons, coastal and marine resources for contamination that will affect marine life affecting fish population and habitats
- To assist to update the environmentally sensitivity maps and the database and maintain the data base of MEPA

#### **2.3.16. Ceylon Fishery Harbours Corporation**

- To respond to oil spill within their premises as per Tier I plan and provide information to MEPA to enable monitoring of the activities
- To ensure that the Oil Spill Response Plan is regularly updated and rehearsed as per guidelines
- To maintain sufficient amount of oil spill combat equipment

#### **2.3.17. National Water Supply & Drainage Board (NWS&DB)**

Provides drinking water supply for the oil spill response operations and affected parties

### **2.3.18. Ministry of Finance/ Treasury**

- To release funds to combat oil spills on a priority/ urgent basis
- To expedite customs clearance for entry of oil spill combat equipment and consumable materials

### **2.3.19. Ministry of Foreign Affairs**

To make arrangements in seeking external agency support at the request of the Director/ NOSCOP and in expediting the process of seeking inputs from expatriate professionals and delivery of equipment and materials

### **2.3.20. Department of Wildlife Conservation**

- To assist and advise on the impacts of spill on the marine protected areas, and estuaries, wetland, Bird Sanctuary and migratory birds and other waders
- To assess damage to wild life and wildlife habitats including bird population, corals and coral reef fish, other fish species, and marine plants etc.
- To assist in saving wildlife including birds from oil traps and in cleaning operations
- To keep the close coordination with MEPA to get actions to minimize the damages of marine environment at protected areas.

### **2.3.21. Department of External Resources**

- To make necessary arrangements in seeking support of donors and international agencies ( bi-lateral and multi-lateral ) for capacity development of local staff and
- Organizing responses for international agreements on marine pollution prevention and combat operations.

### **2.3.22. Department of Health**

- To provide medical assistance throughout response for affected parties and reduce impacts arising from epidemics during clean up operations
- To advise on precautionary measures associated with hazards of oil spill.

### **2.3.23. Meteorology Department**

- To provide weather forecast on winds, rainfall, air and sea surface temperature and on sea conditions at regular intervals.
- To provide a meteorologist on the scene of the oil spill for forecasting of spill direction and speed based on meteorological data
- Provides Met-parameters for simulation models to forecast oil movement.

- Nomination of IMT member to help Operations.

#### **2.3.24. Colombo Radio**

- To provide communication facilities and engage in supporting monitoring of oil spill movement related activities at sea
- Report all oil spill incident reported to Colombo Radio to MEPA and other relevant agencies.

#### **2.3.25. Oil Industry and other private companies**

- To respond to oil spill within their premises and at their facilities as per Tier I plan
- To provide assistance, if required, with equipment, personnel and logistics
- To provide expertise and advice.

#### **2.3.26. Attorney General Department**

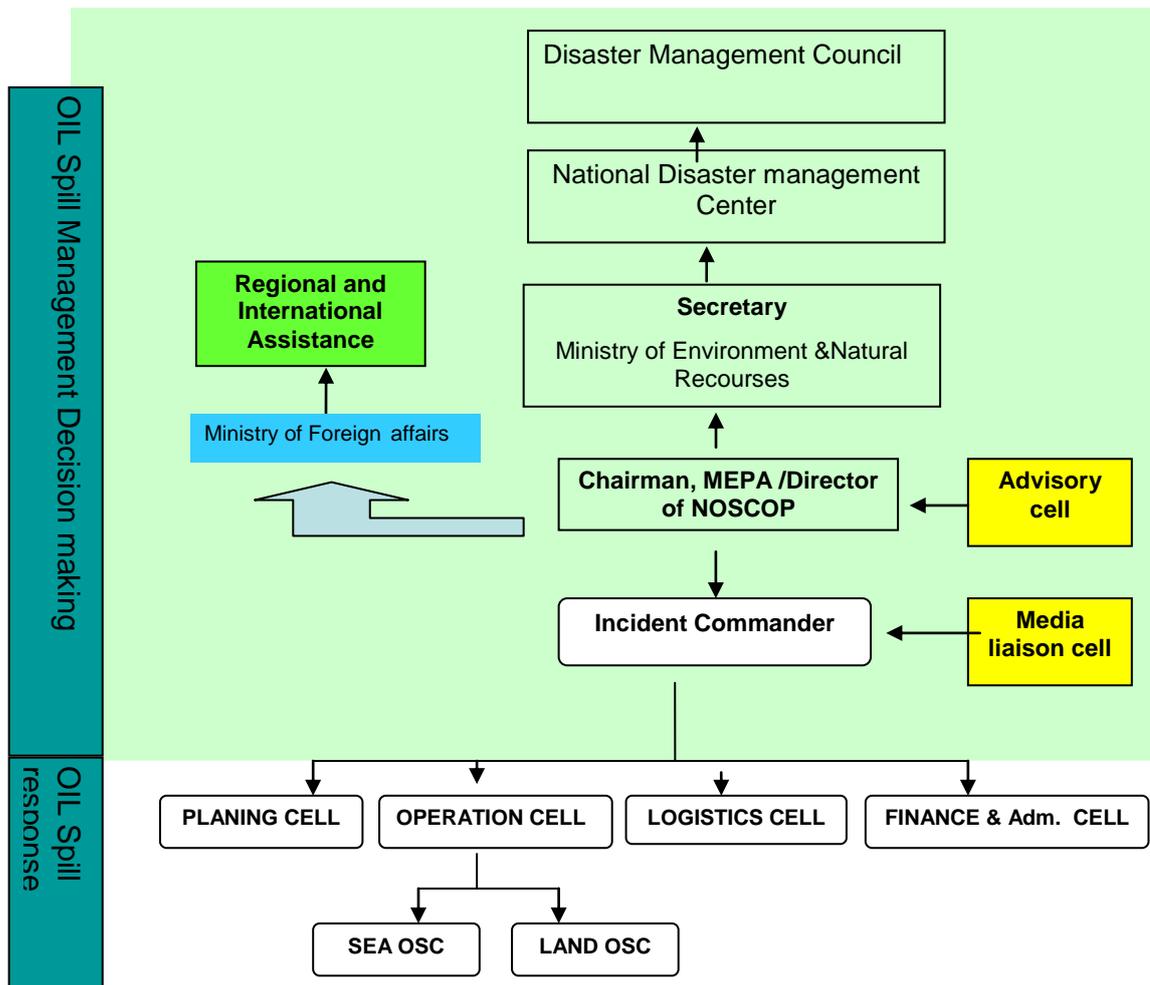
- To assess and make recommendations on all legal aspects as regards to claims for compensation and court cases.
- To assist preparation of regulations to implement related conventions which is a responsibility of the government of Sri Lanka?

#### **2.3.27. Non-Governmental Organizations (NGOs)**

- To provide awareness, community mobilization and personnel for beach cleaning
- To provide relief crews
- To assist in the provision of essential items of food, water, shelter and sanitation needs etc
- To participate as impartial observers in the response activities
- To help advisory teams to assess damage caused to the environment.

### **3. Task for the different bodies within the Response Organization**

**Figure 2      Response organization**



Tasks of above cells will perform by Incident Management Team (IMT) composed of representative of various discipline

### 3.1. Director NOSCOP- MEPA

- To prepare NOSCOP on the basis of the National Disaster Management Plan and Emergency Operational Plan
- To initiate action, upon notification, for appropriate measures to prevent, reduce or eliminate the adverse effects of a spill in association with DMC.
- To co-ordinate with relevant agencies including operational authorities and support agencies in organizing the implementation of NOSCOP
- To appoint the Incident Commander
- To co-ordinate response together with the Incident Commander and the Advisory team.
- To direct the liable party (Polluter) to restore the environment to its previous state, as far as is practicable.
- To prescribe clean-up procedures as well as methods of storage and disposal for the spilled pollutants.

- To advise the Minister of Environment and Natural Resources on the status of impact of oil spill to be placed before the National Disaster Management Council
- To request international assistance through the appropriate Ministry, if need arises.
- To submit progress reports to DMC / NDMC

### **Incident Commander**

- To manage operations on land and at sea and liaise directly with the Director of the NOSCP.
- To participate in advisory meetings with the Director of the NOSCP.
- Coordinate all cells activities and approve incident mitigatory action plan
- To give directives to the On-scene Commanders and authorise the release of any information relevant to the operations in consultation with Director of NOSCP who is the Chairman of MEPA.
- To provide instructions to the On Scene Commanders on the plan of action and any improvements to the strategies on the basis of feed back on actual operations
- To co-ordinate the overall operation of the containment, recovery, clean up, storage and disposal operations

## **3.2. PLANNING CELL**

Overall responsibility

The Planning Cell is responsible for the definition of the oil spill response strategy, after analysis of the situation and taking into account all relevant information

- To identify the source of oil spills or any other type of related oil pollution;
- To assess the magnitude of the spill (quantity of oil spilled);
- To conduct spill trajectory analysis on a regular basis using information available and surveillance reports, in order to predict future movements and identify those areas which have a potential for being affected;
- Using computer oil spill tracking predictions, if available or carrying out manual calculations using wind and current data to predict spill track
- To identify the type of oil spilled and to assess its likely behaviour at sea
- To ensure that monitoring of the movement of the oil slick through regular surveillance by air, sea and/or land is performed as required;
- To prepare large scale maps and charts of affected areas, showing current position of all spilled oil and provide reports to the Director of the NOSCP on a regular basis;
- To prepare a mitigatory action plan on the basis of the above analysis of real time data and information
- To define appropriate response strategies for land and sea, recommend methods for their implementation and resources needed

- To continuously evaluate the effectiveness of measures applied to the spill and recommend modifications and improvements as appropriate
- To make recommendations as to the location of temporary storage facilities for recovered oil and its adequate disposal including treatment or incineration;
- To negotiate the provision of final oiled debris disposal sites with Local Authorities
- To continuously monitor the disposal system for efficiency, safety and compliance and recommend corrective actions where required;

### **3.3. OPERATIONS CELL**

Overall responsibility

The Operations Cell is responsible for implementing the Oil Spill Response strategy and the mitigatory action plan defined by the Evaluation cell, after it has been approved by the Incident Commander.

- To be involved in the initial evaluation of the spill and formulation of the mitigatory action plan
- To set up the response strategy
- To mobilize all resources required for the implementation of the mitigatory action plan
- To coordinate the response operations on land and at sea
- To keep the IC informed of progress and effectiveness of actions taken
- To mobilize equipment and supplies during oil spill response operations.
- To Maintain Activity log book

### **3.4. LOGISTICS CELL**

The Logistics Cell is responsible for identifying and procuring all resources needed to support the oil spill response operation (Equipment, instruments, Material, Personnel, communication etc.)

- To carry out an inventory of all available equipment, materials and trained manpower (in advance)
- To request authorisation for expenses
- To facilitate procurement and movement of equipment, materials and local and foreign professionals in case of external assistance
- To provide equipment to oil spill combat personnel
- To monitor equipment used on each site of cleanup
- To ensure maintenance and repairs of equipment
- To record and justify expenses made
- To record all resources deployed and their costing

- To recruit personnel to be involved in the oil spill response operation
- To provide communication facilities
- To provide medical facilities & meals etc

### **3.5. Finance and Administration**

The Finance and administration Cell is responsible for setting up the procedures for appointment of personnel with list of duties and working arrangements, access to finance during oil spill incidents, as well as establishing approval procedure for expenses, recording and tracking and also management of Incident control centre. It is also responsible for preparing the claims documents for compensation.

- To prepare budgets for expected expenses related to implementation of the mitigatory action plan
- To request funds from the government with the support of DMC
- To release funds to combat oil spills in compliance with procedures
- To record all expenses made
- To prepare claims for compensation
- To certify expenses made and effect payment procedures
- To record claims of persons suffering losses
- To provide funds for clean up operations
- Contracting personnel and equipment
- Management of Incident control centre

### **3.6. MEDIA LIAISON CELL**

- To set up the press room for the media
- To prepare and validate press reports in consultation with the IC and D/NOSCOP
- To transmit to the press these reports for the information of the public
- To monitor and verify information relayed by the press for any rectification
- To organize press conferences and interviews with the press

### **3.7. ADVISORY CELL**

Provide technical and legal advice

The advisory cell will be composed of: representative of The Attorney General Department -To look after all judicial and legal aspects as regards to claims for compensation.

Advisors from IMO and ITOPFF -For technical advice to combat the spill effects

### **On-Scene Commanders**

The On-Scene Commanders will head their respective response team at the spill site. Their activities are as follows:

- To evaluate the initial situation and assess the magnitude of the problem;
- To activate the response and call out key personnel in the response team, as they deem appropriate to meet the situation;
- To develop the overall plan of action for the containment and clean-up of the specific incident (utilizing field observers),
- To delegate the responsibility of putting the plan into effect to key personnel in the response team;
- To ensure that the assigned responsibilities are carried out and that co-ordination exists between supervisory team members;
- To conduct meetings as required to co-ordinate the clean-up effort;
- To continuously review the progress and effectiveness of the clean-up co-operation based on advice;
- To ensure that adequate records are kept on a regular basis ;
- To keep the Operations Commander informed of progress achieved.
- To ensure appropriate health and safety practices are observed on site.
- Establish on- site operational shore line response centre with help of regional agencies-  
Sea on scene commander

### **3.8. Team Leaders Working under On-Scene Commanders**

- To receive instructions from the On Scene Commanders on the plan of action;
- To co-ordinate the overall operation of the containment, recovery, clean up, storage and disposal operations;
- To assign field supervisors to operations;
- To direct field supervisors to take effective clean-up action and maintenance and repairs;
- To ensure that all clean-up and maintenance operations are carried out in a safe manner;
  
- To ensure that adequate operations and maintenance are properly recorded;

- To establish procedures for security at the central command post, equipment depots and field operation sites;
- To act as liaison with local police forces for security to prevent loss of equipment, and to control unauthorized access to the spill site;
- To ensure those adequate records concerning security are kept and maintained in a diary;
- To ensure that safe working conditions are provided and health and safety issues addressed through the help of advisors as necessary:
- Proper practices and conditions
- Personal protective equipment
- Hazards inherent in the emergency situation
- Safe use of chemicals

The Chairman of the MEPA who is designated as Director of NOS COP has the authority to inspect operations to ensure that conditions and practices meet minimum acceptable standards and to stop temporarily any deviant activities that, if continued, could lead to serious consequences.

To receive and relay manufacturer's instructions to cope with hazards inherent in the products involved.

Will advise of the need for and location of, first aid stations and as required, make contact with such services to indicate possible involvement.

To carry out such other activities as requested by the On Scene Commander

## 4. NOTIFICATION – WARNING SYSTEM

### 4.1 General

**4.1.1** Notification and verification of information concerning pollution incidents shall be done at the Operational Authority level in accordance with the provisions of the NOS COP.

**4.1.2** It is the duty of any person who becomes aware of an oil spill to immediately notify MEPA or following agencies

SLPA Pilot station

Navy head quarters

Fisheries posts

Colombo radio

Police Stations

**4.1.3** Upon receipt of this information, the emergency service should immediately notify the Marine Environment Protection Authority provide as much information as possible, such as:

Location of the spill

Type of facility involved

Oil type /estimated quantity

Source of spill

Resource at risk

Contact details

Contact at incident site

The circumstances of the spill

Any action taken or proposed to be taken in relation to the spill incident

Action Required by Duty Officer of above agencies

The checklist below specifies the alert procedure when an oil spill is reported

| Actions  | Completed/remarks |
|--|-------------------|
| Ascertain location and nature of spill (tanker, truck, tank farm) from person reporting spill. |                   |
| Notify the Duty officer of MEPA<br>Office Phone:<br>Home Phone:<br>Cell Phone:<br>Fax:         |                   |

Action Required by Duty Officer of above agencies

| Actions  | Completed/remarks |
|--|-------------------|
| Ascertain location and nature of spill (tanker, truck, tank farm) from person reporting spill.   |                   |
| Notify the Duty officer of MEPA<br>Office Phone:<br>Home Phone:<br>Cell Phone:<br>Fax:   |                   |
| Contact appropriate agencies and request to verify directly or through Colombo Radio or Navy or Fisheries Post or SLPA (pilot station.) Request return phone call on emergency basis |                   |
| When verification report comes in, immediately communicate it to the Director of NOS COP   |                   |
| Fill in Oil Spill Report Form  |                   |
| Standby to alert key personnel as directed by the Director of NOS COP or the OSC in charge.  |                   |

In the event of a major pollution incident that requires counter-pollution resources to be mobilized, the relevant Operational Authority shall inform MEPA or/and DMC, other Operational Authorities and Organizations providing support services through their contact points immediately after receiving and verifying the incident report, regardless of the need for the activation of the NOS COP.

### **Initial Warning System**

#### 4.2.1. Reports of oil pollution

Reports of oil pollution may be received from the following sources:

- (a) Casualty
- (b) Other ships
- (c) Sightings from Air Craft
- (d) Sightings from coastal surface craft (local)
- (e) Citizens
- (f) Harbour Authorities
- (g) Neighbouring states

4.2.2. Neighboring States under the Regional Contingency Plan shall submit the reports to Chairman MEPA while in the case of others warning by Telephone or Facsimile should be issued immediately either to one of the Operational Authorities or Chairman MEPA or DG/ DMC. Annex 1 gives the contact details of Chairman MEPA, Operational Authorities and all designated agencies as given in the next paragraph. Any pollution incident presenting a potential threat to the country shall be reported without delay.

4.2.3. Any of the above organizations on receipt of alert shall inform the other organizations in the group and it is the responsibility of each organization to take action according to the NOSCOP.

A pollution alert report is expected to indicate the following:-

- Date and time of observation (specify local time or GMT)
- Position (latitude and longitude or nearest landmark)
- Source and cause of pollution
- Estimate of oil spilled and likelihood of further spillage
- Description of oil slicks including direction, length, breadth and appearance
- Type of oil spilled and its characteristics
- Weather and sea condition
- Action both taken and intended to combat pollution and prevent further spillage
- Name and occupation of initial observer and any intermediate reporter and how they could be contacted.

### **Notification**

4.2.4. On receipt of alert regarding an oil pollution incident the relevant Operational Authority shall proceed with the Tier 1 response operations and with the help of Air Force/Navy would estimate the extent of oil pollution and report to MEPA and the DMC.

The decision to notify support agencies and other organisations shall be taken by Chairman MEPA in association with DMC after receipt of report on extent of oil pollution.

Only organisations that are necessary will be notified to provide support services.

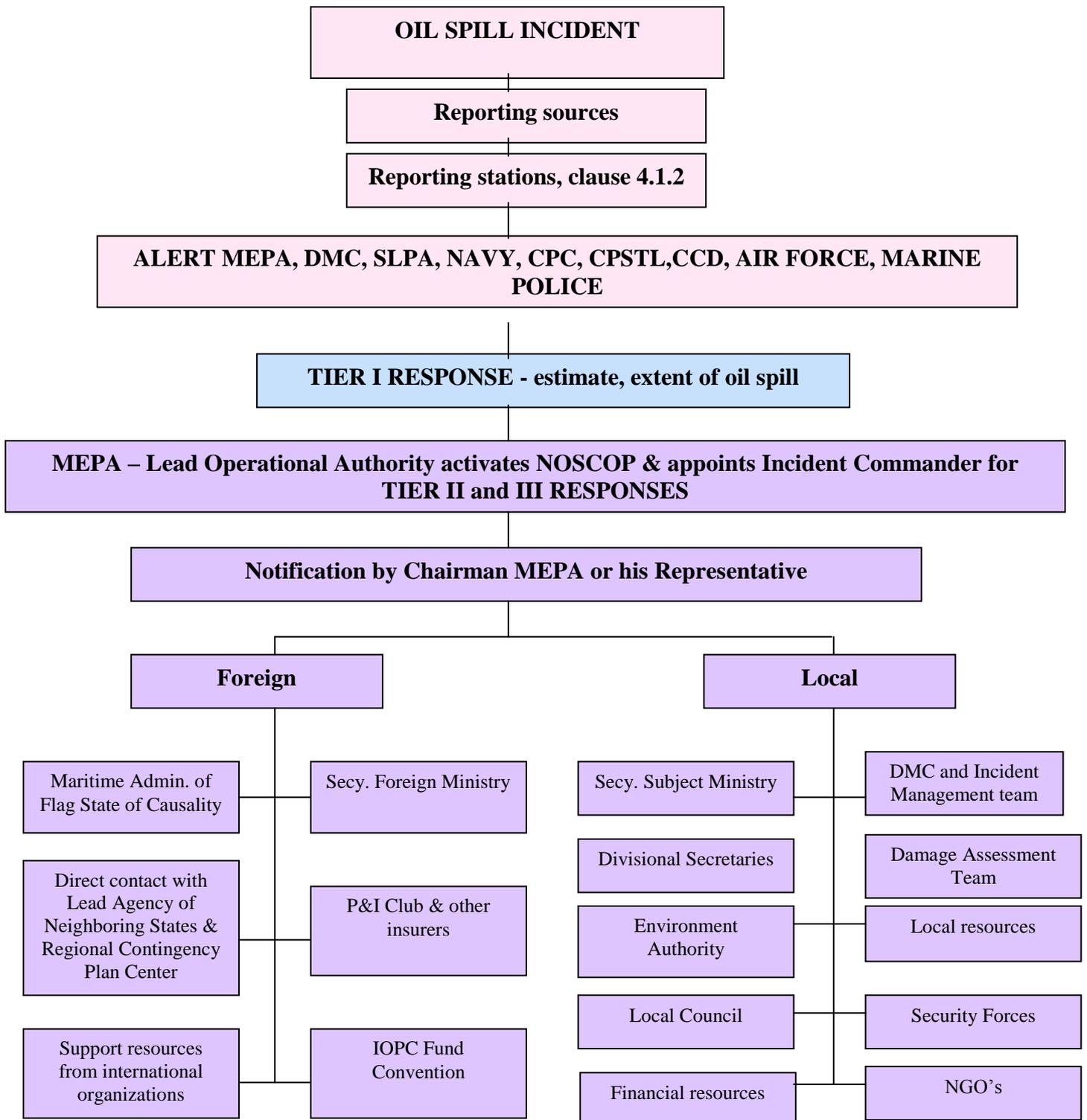
Other organizations will be kept on standby. It is the responsibility of MEPA to notify the member countries of the Regional Plan even if the spill or accident is minor.

Based on an assessment of the magnitude and geographical coverage of the damages and their impacts on life and property and the natural resources, DMC in association with MEPA will submit a report to the Disaster Management Council seeking their support for all efforts of combat operations at the ministerial level.

4.2.5. Notification to local and foreign organizations where necessary shall follow the chart given on the next page.

4.2.6. Notification Chart

**Figure 3 Mobilization Chart**



## **Pollution Reporting System**

- 4.2.7. For the exchange of information between the different authorities concerning pollution incidents, the Organizations/Operational Authorities shall use the standard Report Forms described in Annex 11.
- 4.2.8. The Lead Operational Authority shall endeavour to transmit a status report, verified by the IC, on a daily basis.
- 4.2.9. If pollution combating operations continues after deactivation of the Plan, the Organization affected by the incident shall continue to inform the MEPA and other Organizations on the situation until final termination of all pollution response operations is effected.
- 4.2.10. It is the responsibility of the Operational Authority of affected Organization to ensure that the Situation Reports (SITREP) is transmitted to all interested parties within the country. It is the responsibility of IC to ensure that SITREP and other regular progress reports are communicated to all other units under the command.
- 4.2.11. For exchange of information between Sri Lanka and other countries, the Pollution Reporting System (POLREP) shall be used. The POLREP system is described in the Regional Plan.

## 5. EVALUATION AND MOBILIZATION

### Evaluation

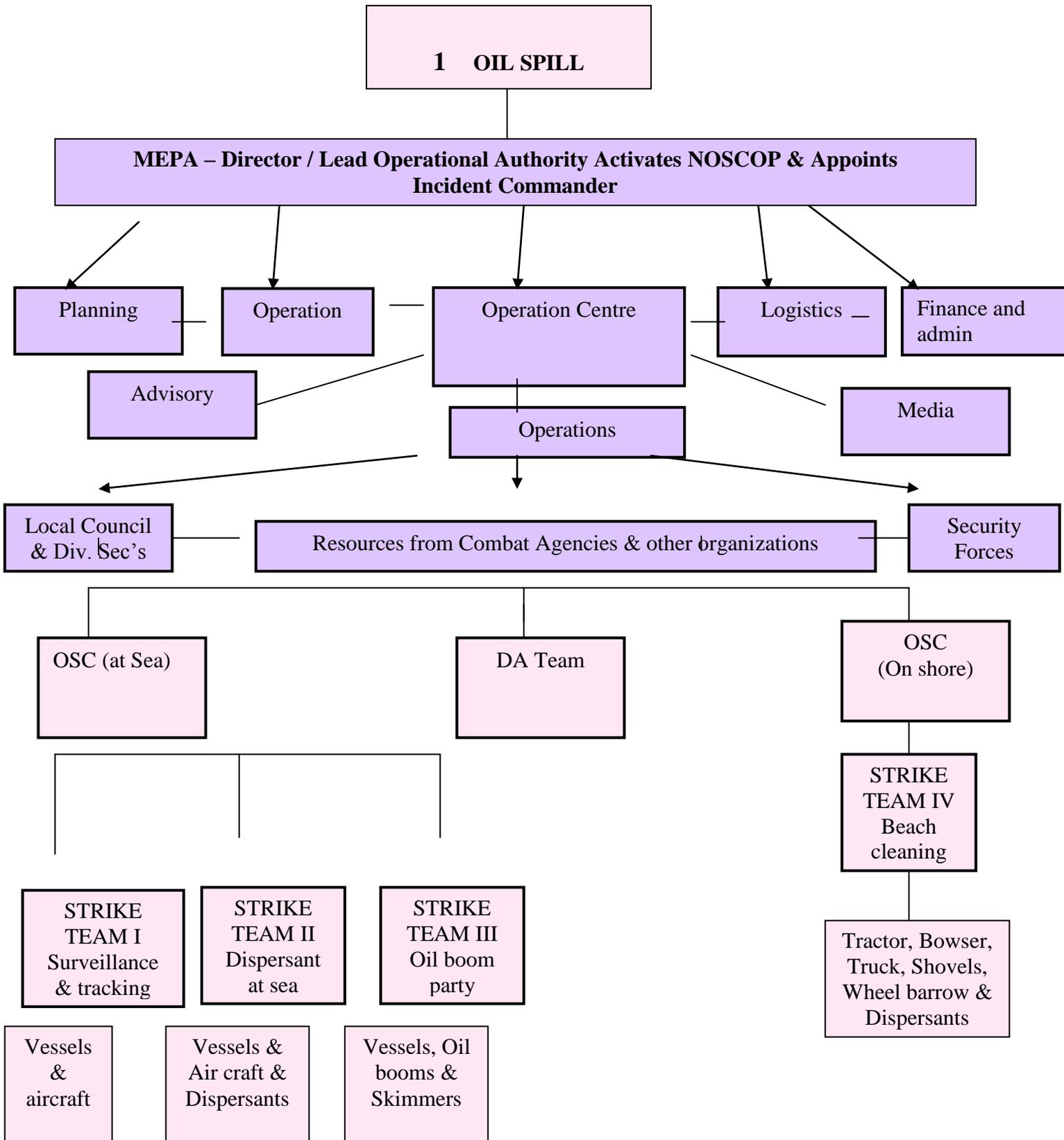
- 5.1.1 After the receipt of the first notification, the Operational Authority in case of Tier I incident or the Lead Operational Authority in case of Tier II or Tier III incident needs to evaluate the situation. The evaluation must be based on information about:
- the source of the spill
  - The type of oil (Specific gravity, Viscosity, Pour Pt: Wax content, Distillation Characteristics)
  - The expected track of the slick at regular intervals from data on currents, tide and winds
  - weather forecast
  - identify threatened resources and their sensitivity
- 5.1.2 For the above purpose MEPA in association with DMC and other operational authorities (CPC and SLPA or private sector agency responsible for mitigatory actions as polluter) shall seek assistance of NAVY, Air-force, NARA, Meteorological Department and National Communication Centre for information received from the public.
- 5.1.3 Based on the information of the first evaluation of the area affected by an incident or the area likely to be affected first, Operational Authorities shall activate their own Tier 1 response. Immediately thereafter a report is to be provided to MEPPA on the type and Tier level of response required and advice on whether or not to activate the NOSCOP and other support service Organizations.
- 5.1.4 The decision to activate NOSCOP and appointment of IC shall be made by MEPA in consultation with DMC. The IC with assistance of planning cell based on the Tier level of pollution shall prepare a mobilization Plan, both for personnel, infrastructure and logistics.
- 5.1.5 Before activating the NOSCOP, the operational authority of the area concerned shall activate their-own Plan, which may be sufficient to contain and mitigate the pollution at Tier 1 level.
- 5.1.6 The decision to activate the NOSCOP shall be taken by the MEPA and shall assume the role of the Lead Operational Authority and shall:

- (a) inform, DMC, Operational Authorities, and other Support Organizations and IMT providing support services through their designated contact points that the NOSCOP has been activated and announce the appointments for IC, OSCs and their contact points;
- (b) activate the CC which shall also assume the role of IC;
- (c) activate its Advisory and appoint other staff requirements;
- (d) Through the OSC(s), with the advice of the IC/planning cell if available, formulate the strategy to deal with the incident and evaluate the need for assistance from other Organizations. OSC/IC shall initiate response operations at sea and on shore;
- (e) Request for assistance from other Organizations, on the basis of OSC/IC requirements and advice.

## **5.2 Mobilization Chart**

5.2.1. Each Operational Authority shall have their own mobilization plan in their oil spill contingency plan to provide Tier 1 response and support the National Response Operations. The mobilization plan given below is for activation of the NOSCOP. When the Lead Operational Authority (MEPA) activates the NOSCOP and appoints IC it is their responsibility to ensure that the mobilization takes place as per the plan given below based on the response requirement. The mobilization takes place under IC at the National Operation Center which is to be set up at the MEPA to look after Planning, Operation, Logistics, Finance and admin, media, advisory cell to advice IC and at the site for operations, local councils, divisional secretaries, security forces, Operational Authorities as per their own plan and other support resources. All the activities shall be under the direct control of IC and guided by the Director of NOSCOP who will be the Chairman of MEPA. Assistance of DMC to be obtained when dealing with local administration and NGOs who have already been organized for meeting any emergency disaster situation at the field / local level.

**Figure 4. Mobilization chart**



## **6. RESPONSE OPERATIONS**

### **Objectives of National Response Operations (NRO's)**

- 6.1.1 The main objectives of National Response Operations at sea are to stop the spillage of the pollutant from the source, to restrict its spreading and movement and remove as much pollutant as possible from the sea surface before it reaches the shores. In some situations, an option could be to remove the pollutant onshore due to the weather conditions.
- 6.1.2 National Response Operations at sea shall be conducted in accordance with the procedures described in the NOS COP. Units of assisting Organizations shall work directly under Operational Control and Tactical Command of their respective OSC(s) and unit commanders or team leaders.
- 6.1.3 The main objectives of National Response Operations on shore are to protect environmentally sensitive coastal areas and other vulnerable resources from the impact of the pollutant and to remove the pollutant, which has reached the shore. The combat operation should ensure the safety of citizen and response personnel.
- 6.1.4 This phase includes treatment and final disposal of collected pollutant and contaminated beach material. It may include restoration of polluted areas.
- 6.1.5 Provision of land and suitable places to collect all pollutants and debris of damaged property should be initiated by co-coordinating with CEA, CCD, Local authorities and DSS.

### **Command and Control**

- 6.2.1 Operational Command that is overall co-ordination and control of National Response Operations and consists of taking decisions concerning response strategy and defining the tasks of various groups of teams. Following the activation of the Plan, MEPA appoints the IC and support staffs who take operational control over National Response Operations that is exercised by the Operational Authorities and other support resources through the OSC(s). The operational command will be stationed at MEPA with expanded service Cells currently in place at MEPA for Planning, Operations, Finance and Adm, Logistics, Media and Advisory.
- 6.2.2 Operational Control which is direct control over personnel, means and units taking part in the response operations, including giving orders to specific groups of teams and units for execution of response operations, in accordance with the strategy and the tasks defined by the Incident Command.
- 6.2.3 Tactical Command which consists of directing and supervising the execution of specific tasks by teams or units on the scene. Tactical Command is exercised by the Leader of each team or the Commander of each unit taking part in the response operations.

## **Liaison**

6.1.1. Liaison between the Lead Operational Authority, DMC and the assisting Operational Authority (in case of Tier I and supporting agencies in case of Tier II or Tier III) shall be maintained, according to the circumstances and to the type and importance of the assistance rendered, in one of the following ways:

- (a) By direct e-mail, telex, Tele-fax, telephone or radio contacts between the IC, DMC, supporting agencies and OSC(s).
- (b) By a Liaison Officer from the supporting agencies who are integrated in the staff of the IC. His/her duties shall be to provide necessary information on resources rendered as assistance and to facilitate communication with his/her OSC(s), CC(s), Strike Teams, etc. taking part in the operations.
- (c) By OSC(s) of the supporting agencies who personally attends at the spill site and participates in National Response Operations.

## **Environmental Issues**

### **6.1.2. Spill Monitoring**

- For the monitoring of spill movement and behavior, aerial monitoring is likely to be most effective although any other suitable means (ships, vessels) might also be used if the aircraft are not immediately available.
- The monitoring of the spill and its movement and transmission of relevant reports to other Organizations, prior to activation of the NOS COP, is the responsibility of the Operational Authority. Following the activation of the NOS COP this responsibility rests with OSC/IC, who shall take all necessary measures to ensure regular monitoring of the spill and its movement and behavior, in order to properly assess the situation and decide on adequate response measures. For that purpose OSC/IC may request assistance from other Support Organisations.
- Reporting procedures, which shall be followed for the purpose of the NOS COP by the crews of monitoring aircraft, are given at Annex 5.

### **6.1.3. Damage Assessment Team**

The purpose of DAT team is of collect and analyzes information of natural resources to evaluate the nature and extent of injuries resulting from an incident, and determine the restoration actions needed to bring injured natural resources and services back to baseline and make the environment whole for interim losses. In this purposes NRDA team will appoint from relevant agencies.

- In order to make compensation claims sufficient data have to be presented with the damage assessment. Thus the Operational Authority of the area (in case of Tier I) or IC in consultation with supporting agencies shall:

- Take sufficient photographs showing the condition of the area prior to being affected, during clean-up and after clean-up,
- Maintain log entries on extent of oil spill and condition of effected area at regular intervals during the period of combat operations,
- Maintain log entries on executed operations at regular intervals during the period of combat operations, and
- Maintain log entries on equipment and personnel used at regular intervals during combat operations.
- Prepare damage assessment report
- The Operational Authority or IC shall also ensure the presence of the damage assessment team early. The damage assessment shall be carried out by a team of experts determined by MEPA.

#### 6.4.3 **Use of Dispersants**

The MEPA shall define the National policy regarding the use of dispersants in combating oil pollution. For this purpose the IMO publication “Guidelines for the use of dispersant” shall be followed. Dispersant

#### 6.4.4 **Other environmental issues**

- The Metrological Department and NARA Ocean observation Centre shall be contacted to obtain the weather forecast and magnitude and velocity of ocean waves and currents and impact on fisheries etc. while damage to coastal resources can be assessed in close contact with CCD at regular intervals.
- The sensitive coastal areas could be determined from Annex 6.
- The oil drift could be evaluated using the oil spill model given in Annex 7
- The oil spill impact assessment on sensitive coastal resources and the priority on protection are given in Annex 8.

### **Request for Assistance from other Countries**

6.5.1 Following the activation of the NOS COP, based on a decision made by the MEPA, OSC’s and IC’s, request for assistance from countries in the region or other countries, should be made by the MEPA.

6.5.2 Assistance may be requested from countries in the region in the form of :-

Trained response personnel, and in particular, strike teams;

Specialized pollution combating equipment;

Pollution treatment products; and

Other means, including, in particular, self-contained units such as vessels and aircraft, and/or any combination thereof.

- 6.5.3 A request for assistance from countries in the region shall be formulated in a clear and precise manner, using the standard form defined at Annex 12. It shall contain detailed description of the kind of assistance required and the purpose for which personnel, equipment, products and other means will be used.
- 6.5.4 Annex 13 to this plan sets out information on resources which might be available from outside the region and their contact points, including those from oil companies and States which might reasonably be called on under Article 7 of the OPRC Convention.

## **Termination of National Response Operations (NROs) and Deactivation of the Plan**

### **6.1.4. Termination**

- The IC shall recommend termination of the Norse to the MEPA taking into account the following factors:
  - Whether pollution combat response measures have been completed; or
  - Whether or not the pollution threatens the interest of Sri Lanka; or,
  - Whether or not the benefits of further counter pollution measures would be justified by their cost; or
  - Whether the response has reached a point where the local organization can complete it without assistance.
  
- MEPA in consultation with DMC shall take the decision to terminate the Norse and inform the IC, OSCs of other Organizations and their respective support agencies of such decision and deactivation of the Plan.
- Following the deactivation of the Plan, all personnel, equipment, unused products and other means that were deployed in the NROs shall be returned to their respective place of origin.
- The MEPA shall take necessary measures for prompt repatriation of the personnel, equipment, unused products and other means to their countries of origin.
- The Lead Operational Authority (MEPA) who requested assistance from other countries shall prepare a report on the effectiveness of the personnel, equipment, products and other means received as assistance. These reports shall be circulated among all Organizations involved in the operation.

### **6.1.5. Post Incident Reports**

- Following the termination of pollution response the IC shall prepare the final report including:
  - description of the pollution incident and development of the situation;
  - description of response measures taken;
  - description of assistance rendered by the other Organisations based on reports by respective OSCs;
  - assessment of the complete response operations;
  - assessment of assistance rendered by the other Organisations;
  - costs incurred during the response by each Organisation;
  - an estimate of environmental and economic damage;
  - description and analysis of problems encountered in responding to the pollution incident;
  - Recommendation regarding possible improvement of existing arrangements and, in particular, provisions of the Plan.

### **Cleaning and Restoration of Equipment**

- 6.7.1 Oiled equipment should be cleaned as soon as possible after being taken out of use. Trained operators, in an area where oily run-off can be contained should carry out cleaning.
- 6.7.2 High pressure hosing of equipment is effective, but steam cleaning must not be applied to booms of PVC manufacture as it may cause loss of plasticity of the fabric. Oil spill dispersants or detergents can be applied to heavily oiled booms. Oiled parts should be sprayed and subsequently brushed. Pumps and other equipments used in applying dispersants should be thoroughly flushed out with fresh water as soon as possible after use. Aircraft used in aerial spraying should also be thoroughly washed down.

### **Debriefing Arrangements**

As soon as practicable after termination of the spill response, a full debriefing should be held by Chairman, MEPA, IC and Incident Management team. The aim of this session is not to assess the performance of individuals but to evaluate the response and translate the lessons learned into planning for future operations. All coordinators and representatives of assisting agencies should critically examine the conduct and effectiveness of activities under their control. Aspects of the response operation should be critically examined with a view to improving the organization and effectiveness of the National Plan.

## **7. PREPAREDNESS AND PLANNING**

### **Exchange of Information**

- 7.1.1 The MEPA, Operational authorities in case of Tier I incident and directly involved Supporting Agencies and their regional offices shall keep each other correctly informed at all times on changes in the information listed in the following Annexes as soon as they occur:
- Directory of MEPA and other officials, Contact Points, Emergency response Centres, Incident Commander, National On-Scene Commanders and Other Relevant Addresses (Annex 1);
  - List of organisations involved in the implementation of the NOSCOP and their responsibilities (Annex 2);
  - Oil Spill Combat and Clean up Capacity - Directory of Response Personnel and Inventory of Response Equipment, Products and other means which each organisation might offer as assistance in case of activation of the plan including information relating to the wages of personnel, the rental rates of equipment and the cost of materials (Annex 3); and
  - Guidelines for Reporting Oil Spills (Annex 5).
- 7.1.2 Each Organisation / Operational Authority shall acknowledge receipt of any changes or modifications to the plan and is responsible for updating its copies of the plan accordingly.
- 7.1.3 English/Sinhala language shall be used in all communications related to the Plan.

### **Training and exercises**

- 7.2.1 The MEPA shall conduct periodically training courses and exercises for the Operational Personnel and other agencies. The main objectives of these training courses and exercises shall be to :-
- improve the level of co-operation and co-ordination among the operational personnel and in particular strike teams of different organisations;
  - test the command structure of the Plan;
  - test communications between the Organisations / Operational Authorities, including procedures for activating the Plan and calling of assistance;
  - test the logistic arrangements and facilitation procedures for joint operations;
  - exercise key officials in the roles they would play in joint operations;
  - achieve satisfactory level of communication among personnel and, in particular, strike teams designated to take part in response operations;

- acquire knowledge in handling equipment, products and other means which might be used in response operations; and
- enable the personnel from different organisations to gain experience in working together.

## **Communication**

- 7.3.1 For the purpose of this NOS COP, Lead Operational Authority and each relevant Operational Authority shall set up one or many Communication Centers (CC) manned 24 hours a day, which will be equipped with appropriate communication system. Main communication center will be an Operation room at MEPA head office. All IMT members should gather to Operation room and should activate their roles as per NOS COP after notification of MEPA in and oil spill emergency.
- 7.3.2 In case of the activation of the Plan, the National Command Room will communicate with on scene commanders and other relevant parties using available communication facilities such as HF, VHF, Telephone and mobile phone and fax. The NCR shall serve as the base of the NOS C and main communications centre for all communications related to the implementation of the Plan. If it is necessary The NOS C may shift the location of CC at short notice after informing all committed Organisations and the MEPA, in order to improve command and communication requirement.
- 7.3.3 Relevant information concerning CCs of each Organization is given in Annex 1.
- 7.3.4 Communications for the implementation of the Plan shall be established by the Operational Authorities in accordance with Annex 4.
- 7.3.5 English language shall be used in all communications related to the implementation of the Plan.
- 7.3.6 Important communications by radio or telephone should be confirmed by fax, telex, or e-mail. This is to include the activation of the Plan, requests for assistance, offers of assistance, estimated costs of assistance, acceptance of requests, instruction by the command for the movement and deployment of assisting units, tasks assigned to units and termination of operations.

## **Nomination of On Scene Commanders**

- 7.4.1 For the purpose of the NOS COP, the Operational Authority of each Organization shall nominate officers who will exercise operational control over all response activities of the Organization, including control over personnel (strike teams), equipment, vessels, etc. This officer shall be called On-scene Commander (OSC).

After the activation of the NOS COP and commencement of the National Response Operation with other Operational Authorities, MEPA may appoint one of the OSC of the Operational Authorities involved as the IC. The IC shall have the overall responsibility for all decisions

and actions taken in order to combat the pollution and to mitigate its consequences and for coordination of Response Operations.

- 7.4.2 The OSCs of the assisting organizations shall operate under the IC, but shall nevertheless retain operational control over personnel, equipment, vessels, etc. of their respective Organization.
- 7.4.3 In exercising his/her functions, the IC and OSC(s) shall be assisted by Advisory cell.
- 7.4.4 Relevant information and contact details related to the public and private sector organizations and OSCs is given in Annex 1 & 2.

### **Update of NOSCOP and Basic Data**

The MEPA with the help of the Incident Management team shall annually update NOSCOP and improve the basic data in the Annexes.

## 8. OBTAINING SAMPLES FOR EVIDENCE AND ANALYSIS

### Sampling of Spilled Oil

- 8.1.1 Identification of spills with unexplained cause and the possibilities to find the polluter responsible for these spills is very difficult.
- 8.1.2 In the aftermath or during an oil spill, identification of the sources of contamination is a vital component in the allocation of costs. Correct sampling, storage, preparation and analyses of the polluting oil and its potential sources are essential if identification is to be proved beyond reasonable doubt.
- 8.1.3 The recommended procedure for collecting and forwarding oil samples for analysis are:
- Samples should be taken from the source and from the water/foreshore areas with the minimum of delay so that changes in composition due to the effects of sunlight and time are kept to a minimum.
  - Every effort should be made to obtain un-contaminated sample of oil for comparison purposes, particularly if prosecution is envisaged. It should be noted that proof of identity is more easily shown by comparative analysis against a sample of origin than by deduction from special characteristics obtained from the polluting oil alone.
  - In certain circumstances it may be possible to obtain samples of the pollutant using an inert type of absorbent, e.g. polypropylene. When this technique is used great care should be taken to ensure that the device for squeezing the oil out of the absorbent material and the funnel and other items in use are absolutely clean and will not contaminate the oil sample.
  - At each position three samples with each sample containing of a minimum of 100 grams and probably of up to one kilogram should be taken in clear glass bottles with glass stoppers or Teflon coated lids. The stopper should be firmly tied to the bottle by wire or with twine and the lid sealed with tape. Plastic bottles should not be used.
  - The bottles should be numbered and labeled. A second copy of the label for each bottle should accompany the request for analysis.
  - The labels should contain the following information:
    - date and time of sampling,
    - place where it was taken, with as much as geographical details as possible,
    - direction of the movement of the oil (i.e. wind direction, current etc.), and
    - name, signature and address of sample collector and witness.

- The bottle should be carefully packed in metal or any other crush resistant container. The outer container should clearly indicate that the contents are fragile. Refrigeration of sealed samples in the dark at less than 5°C is recommended.
- For prosecution purposes, unless the sample is delivered personally to the laboratory it is important to adopt security measures. The measures should include:
  - sealing the bottle, preferably with wax
  - sealing the bottle's label
  - Written confirmation of delivery.
- Where convenient and where no undue delay would result, it is recommended that the staff of the approved laboratory be called to take samples.
- The official responsible for sampling shall submit a report on adopted procedure.

It is recommended that suitable sampling devices and preferably purified containers be maintained as part of normal oil spill emergency response equipment.

8.1.4 It is desirable to obtain samples of oil from the sea surface or from shorelines so that the type of oil and its character can be determined. This may be required for:

- ◆ Development or assessment of cleanup or other response options.
- ◆ Determining the source of the spill (Legal reasons).
- ◆ Ecological effects assessment.
- ◆ Determining likely persistence or future behavior of the oil.

When samples are taken for the purpose of prosecutions it is important that procedure recommended in section 8.1.3 is followed.

## **Powers of Inspection**

8.2.1 The Marine Pollution Prevention Act No. 59 of 1981, which implements the MARPOL 73/78 convention provides for the appointment of inspectors for the purpose of obtaining evidence relating to an illegal discharge or a suspected illegal discharge.

8.2.2 An inspector may in consultation with the Director, Merchant Shipping:

- go on board the ship with such assistants and equipment as he considers necessary,
- require the master of the ship to take such steps as the Inspector directs to facilitate the boarding,

- inspect and test any machinery or equipment of the ship,
- require the master of the ship to cause to be opened, any hold, bunker, tank, compartment or receptacle in or on board the ship and inspect the contents of any hold, bunker, tank, compartment or receptacle in or on board the ship,
- require the master of the ship to produce a record book required by the Act to be carried in the ship or any other books, documents or records relating to the ship or its cargo that are carried in the ship,
- make copies, or take extracts from any such books,
- require the master of the ship to certify that a true copy of an entry in a record book required by the Act to be carried in the ship made by the inspector is true copy of such an entry,
- examine, and take samples of any substances on board the ship, and,
- Require a person to answer questions.

8.2.3 For the purpose of inspection, the MEPA will appoint government engineer, ships surveyor, in consultation with Director, Merchant Shipping or any other surveyor recognized by the maritime administration or the MEPA.

## **9. FUNDING AND ASSISTANCE FROM OTHER COUNTRIES**

### **Immigration and customs formalities for assistance from other countries**

9.1.1. In order to facilitate the movement of response personnel and equipment provided as assistance from other countries to handle emergency situation the requesting Operational Authority through the MEPA shall :-

- (a) make arrangements for the rapid entry of equipment, products and personnel prior to their arrival;
- (b) ensure that, should ships and aircraft be provided, ships are granted all necessary authorisations and aircraft cleared to fly in the national airspace;
- (c) make provisions for rapid granting of entry visas and work permits for personnel; and
- (d) ensure that customs formalities are facilitated to the maximum extent.

9.1.2. It is the responsibility of the Lead Operational Authority and the MEPA to inform the expatriate Operational Authority of the assisting Party to establish direct contact with competent customs office in order to obtain necessary clearance for entry of equipment, products and other means into the country.

### **Over-flight procedures**

9.1.3. Within the framework of the NOS COP and upon the request of the Sri Lankan Operational Authority or MEPA, aircraft of the other countries might enter and operate in the airspace of Sri Lanka only in the areas specified by the country, for one of the following purposes :-

- (a) Monitoring of oil spills;
- (b) transportation of response personnel, equipment and products;
- (c) spraying of dispersants or other treatment products;
- (d) other flights related to pollution response operations.

9.1.4. The Sri Lankan Operational Authority or the MEPA shall make, in advance, necessary arrangements concerning rapid granting of permits and clearances for civil aircrafts (fixed wing or helicopters) of other countries, who might be requested to take part in response operations within the airspace. Similar arrangements shall be made for the use of airport facilities by civilian fixed wing aircraft and helicopters engaged in JROs.

## **Navigation procedures**

- 9.1.5. Within the framework of the NOSCOP and upon the request of the Sri Lankan Operational Authority or the MEPA, vessels of the other countries might enter and operate in the territorial waters of Sri Lanka only in the areas specified by the country, for one of the following purposes :-
- (a) Monitoring of oil spills;
  - (b) Salvage operations;
  - (c) transportation of response personnel, equipment and products;
  - (d) pollution response operations, including containment and recovery of spilled products, spraying of dispersants or other treatment products, storage and transportation of recovered pollutant;
  - (e) any other voyage related to pollution response operations.
- 9.1.6. The Sri Lankan Lead Operational Authority or the MEPA shall make, in advance, necessary arrangements concerning rapid granting of permits and clearances for the navigation of civil vessels (ships, boats, specialised anti-pollution vessels) of other countries, who might be requested to take part in response operations within its internal and territorial waters. Similar arrangements shall be made for the use of port facilities by civilian vessels engaged in NROs.

## **Financial Procedures**

- 9.1.7. All Organisations shall inform each other in advance on the wages of personnel, the rental rates for equipment and other means and the cost of treatment products, which might be rendered as assistance. This information shall be included at Annex 3 and regularly updated by the MEPA preferably by the beginning of each year.
- 9.1.8. The Organizations shall Endeavour to harmonize their rates and discuss all relevant questions during the regular meetings of the Operational Authorities.
- 9.1.9. The assisting Organisation shall, immediately following receipt of request for assistance, submit to the requesting Operational Authority an estimate of the costs of assistance.
- 9.1.10. If assistance is provided the assisting organisation will submit an invoice for the cost as soon as possible after the termination of operations to the requesting Operational Authority. The invoice shall itemize the costs, which shall be clearly related to the tasks performed and if possible should verified independently.
- 9.1.11. The following items shall be included in the invoice :-
- wages of personnel engaged in NROs, calculated on the basis of the price list given at Annex 3 or determined by MEPA and the daily work logs approved by the IC or another responsible officer of the Lead Operational Authority;

- costs of rental of equipment and means calculated on the basis of the price list given at Annex 3 or determined by MEPA and the daily work logs approved by the IC or another responsible officer of the Lead Operational Authority;
  - costs of treatment products used during NROs calculated on the basis of the price list given at Annex 3 or determined by MEPA and the daily work logs approved by the IC or another responsible officer of the Lead Operational Authority;
  - all expenses listed in paragraph 8.5.10 below,
  - costs of cleaning repair or replacement of equipment damaged beyond repair during the NROs.
  - replacement and repair costs of damage caused by the incident as determined by the panel nominated for oil spill damage assessment as shown in Annex 9.
  - economic loss incurred as determined by the above panel .
- 9.1.12. Financial records and invoices shall be prepared in accordance with the guidelines provided by IOPC Fund in the “Guide for Filing Claims”.
- 9.1.13. The MEPA shall pay to the assisting Organisations all agreed expenses incurred in rendering such assistance, according to the invoices approved by the Lead Operational Authority.
- 9.1.14. The Organisations shall resolve all questions related to financial matters after termination of joint operations. In case of dispute the MEPA will provide for a mutually acceptable resolution procedure.
- 9.1.15. The provision of the section shall be considered on a case-by-case basis and shall not prejudice the resolution of any dispute involving third parties, which may arise respecting liability and compensation for damages resulting from any pollution incident, wherever it may occur. It shall be for the MEPA to pursue the country claim for reimbursement of pollution response related costs, submitted to the party liable for pollution incident, its insurers or an international system for compensation of pollution damages, as appropriate. Payment of those rendering assistance must not depend on the success of claims for compensation from third parties.
- 9.1.16. In case of NROs the requesting Operational Authority through the MEPA shall cover the following expenses related to the stay in the territory of personnel, equipment and means (including vessels and aircraft) of the assisting Parties :
- board and lodging or daily subsistence allowances as appropriate, of response personnel other than the crew of ships and vessels, unless this was provided by the requesting Operational Authority;
  - any port dues for vessels and ships rendered as assistance;
  - any airport dues for aircraft rendered as assistance;
  - fuel, as might be necessary, for all equipment and means including, in particular, vessels and aircraft, engaged in NROs;
  - medical services provided to injured and ill personnel of the assisting Party;
  - costs related to repatriation of any person who died, was injured or taken ill during NROs;

- maintenance and cleaning costs for any piece of equipment, vessel and aircraft engaged in NROs;
- repair costs for any piece of equipment, vessel and aircraft, damaged in its territory during and due to the NROs, if such repair needs to be made prior to returning it to its country of origin;
- costs of communication related to the JROs incurred by the assisting Party in the territory of the Lead Operational Authority.

9.1.17. The assisting Party shall directly cover the following expenses :-

- mobilisation of personnel, equipment, products or other means;
- costs of transport to and from the territory where NROs are taking place, of personnel, equipment and products;
- fuel for vessels and aircraft proceeding to the site of NROs under their own power;
- costs of communication related to NROs originating from the territory of the assisting Party;
- medical services rendered, following their return, to any of their own nationals injured or taken ill during NROs;
- maintenance and repair costs for equipment and means engaged in NROs incurred after their return.

### **Medical Insurance and Medical Assistance**

9.1.18. Each Organization shall take necessary measures to insure against death, illness and injury, its own personnel who might participate in NROs.

9.1.19. The Lead Operational Authority shall endeavour to offer the best possible initial medical care and services to any person who was injured or taken ill during his/her participation in NROs.

9.1.20. The Lead Operational Authority shall facilitate repatriation of assisting personnel injured or taken ill during NROs.

9.1.21. The costs of hospitalization and medical assistance rendered within the country to injured or ill personnel of the assisting Party shall be borne by the Lead Operational Authority. The Lead Operational Authority might decide to claim the reimbursement of all such costs from the Party responsible for the pollution incident, its insurer or international system for compensation of pollution damages as appropriate.

9.1.22. The Parties shall waive the right to make claims against each other for the reimbursement of costs of medical care rendered to persons injured and taken ill during NROs.

### **Responsibility for Injury and Damage**

If those called upon to assist in the response operations cause, at the site of operation, any damages to third parties, and these damages are related to the response operations, such damages shall be the responsibility of the Lead Operational

Authority MEPA who had requested assistance, except if the damages are caused by the gross negligence of the assisting Party. Documentation of Response Operations and Related Costs

9.1.23. IC shall take necessary measures to ensure that detailed records of all actions taken in order to respond to a pollution incident, within the framework of the Plan, are accurately kept. For this purpose, IC might include a record keeping officer or financial controller in his/her Support Team.

9.1.24. At least the following records shall be regularly kept :-

- Description of the situation, decisions taken and implemented response measures;
- Daily work log, giving details of;
  - operations in progress (place, time, purpose);
  - equipment and other means in use (place, time, purpose);
  - personnel employed (number, time);
  - Response products and other material (e.g. fuel) consumed (quantity, purpose).
  - Records of all expenditures made in relation to pollution response operation.
- Any activities that could result in damages or other claims should also be noted in the records of the response.

9.1.25. A photographic record taken during various stages of the clean up is of value when settling claims or disputes. Response personnel should ensure that this record is maintained as much as possible.

9.1.26. Following the termination of the response operations, such records shall be made available to the MEPA for the submission of claims for compensation.

### **Cost Recovery**

9.1.27. Cost incurred in preventing or responding to a marine oil pollution incident, or the threat posed by an incident, are recoverable from the polluter. In most cases the identity of the polluter is known and a representative of Protection and Indemnity Club (P&I Club) is nominated to follow-up the action taken. If this is not so, the P&I Club should be notified. . It is the responsibility of MEPA to notify the polluter, P&I Club, IOPC, and other insurers and initiate action for making claims for cost recovery. The MEPA could request for assistance from Incident commander, operational authority, Advisory cell members, damage assessment panel and other participants in preparation of claims related to the incident.

9.1.28. Beside media representatives, spill incident may be attended by insurance representatives, who pay increasing attention to the cost and effectiveness of field response.

9.1.29. The IC, in conjunction with Record Keeping Officer, should brief insurance and other authorized representatives to ensure that a clear understanding exists of the measures being taken.

9.1.30. Liaison during the spill response can assist later with satisfactory settlement of claims for recovery of costs.

- 9.1.31. The MEPA shall initiate cost recovery action direct with the polluters or polluters' representatives and if required, to negotiate or take legal action to achieve full settlement of amounts incurred in the response.
- 9.1.32. The Lead Operational Authority shall provide with respect to each incident identifying the methods used to determine the source of the oil spill, clean up measures taken and details of equipment, dispersant and other materials used and costs incurred.

### **Funding**

9.1.33. Allocation of Funds:

The DMC has the powers under section 4 of Sri Lanka Disaster Management Act No. 13 of 2005 to recommend the allocation of funds for disaster management from the relevant authorities and bodies and the Reconstruction and Rehabilitation Fund established under the relevant act No. 58 of 1993. There is provision under Section 8 (1) to obtain financial assistance from the Treasury for implementation of disaster management plans prepared by Ministries, Government Departments and public corporations and release the same to the relevant regions and monitor and evaluate these activities by the DMC.

Accordingly MEPA shall seek assistance from DMC for raising funds for implementation of the NOS COP. However In order to establish sustainable funding mechanism with out extra burden to tertiary, MEPA will arrange alternative funding mechanism. It will utilised to all activities relevant to oil spill contingencies management

9.1.34. Payment of Compensation for affected Parties

The Victims / affected parties of an oil spill will have to be compensated according to type and nature of incidents through development of criteria.