



Office of
Deputy Commissioner
of Maritime Affairs

THE REPUBLIC OF LIBERIA
LIBERIA MARITIME AUTHORITY

Marine Notice

POL-003
Rev. 06/12

TO: ALL SHIPOWNERS, OPERATORS, MASTERS AND OFFICERS OF MERCHANT SHIPS, AND AUTHORIZED CLASSIFICATION SOCIETIES

SUBJECT: Approval of Shipboard Oil Pollution Emergency Plans or a Shipboard Marine Pollution Emergency Plans

Reference: (a) ISM Code Ch.8
(b) Maritime Regulation 2.37
(c) MARPOL, Annex I, Regulation 37
(d) MARPOL, Annex II, Regulation 17
(e) IMO Resolution MEPC.54 (32) as amended by Resolution MEPC.86 (44)
(f) IMO Resolution MEPC.85 (44), as amended by Resolution MEPC.137 (53)
(g) IMO Resolution A.851 (20), as amended by Resolution MEPC.138 (53)

Supersedes: Marine Notice POL-003, dated 6/01

PURPOSE:

This Notice provides guidance to vessel owners, operators and managers in the development of emergency response plans for spills of oil and noxious liquid substances to meet the requirements of reference (a) through (g).

APPLICABILITY:

This instruction applies to the following Liberian flag vessels:

- oil tankers and ships certified to carry noxious liquid substances in bulk of 150 GT and over; and
- all other vessels over 400 GT.

REQUIREMENTS:

1.0 Introduction

Liberia is a Party to the International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 and the Protocol of 1997, generally known as MARPOL. All nations that are parties to MARPOL are required to take the necessary steps to ensure that ships entitled to fly their flag have on board a Shipboard Oil Pollution Emergency Plan (SOPEP), a Shipboard Marine Pollution Emergency Plan for Noxious Liquid Substances or a Shipboard Marine Pollution Emergency Plan (SMPEP) as appropriate to the vessel. These plans are required by

Regulation 37 of Annex I and/or Regulation 17 of Annex II of MARPOL.

- 1.1 **SOPEP** - Regulation 37 became effective on April 4, 1993 for oil tankers over 150 GT and all other ships over 400 GT delivered on or after April 4, 1993. For existing ships of the same description delivered before April 4, 1993, the requirements became effective on April 4, 1995. Regulation 37 requires the plan be reviewed and approved by the Administration.
- 1.2 **SMPEP** – The requirements found in Regulation 17 of Annex II regarding Shipboard Marine Pollution Emergency Plans for Noxious Liquid Substances and/or a Shipboard Marine Emergency Plan described in Resolution MEPC.85 (44) as amended by Resolution MEPC.137 (53), entered into force on 01 January 2001 with an application to ships of 150 GT and above certified to carry noxious liquid substances (NLS) in bulk not later than 01 January 2003. Regulation 17 requires the plan be reviewed and approved by the Administration.

2.0 SOPEP and SMPEP Review and Approval

For this Administration (or Class Society on its behalf) to approve the Plan, it must satisfy a review in accordance with Reg 37 of Annex I of MARPOL 73/78 or Regulation 17 of Annex II of MARPOL 73/78 and must be prepared based on guidelines in Resolution MEPC.54(32), as amended by Resolution MEPC.86(44) or Resolution MEPC.85 (44) as amended by Resolution MEPC.137(53).

Resolution A.851 (20) as amended by Resolution MEPC.138 (53), General Principles for Ship Reporting Systems and Ship Reporting Requirements, including Guidelines for Reporting Incidents Involving Dangerous Goods, Harmful Substances and/or Marine Pollutants must be incorporated into the Plan or referenced and made available on board.

Note: SOPEPs which have already been developed and approved by the Administration in accordance with Resolution MEPC.54(32) need not be modified in accordance with Resolution MEPC.85(44), as amended by Resolution MEPC.137(53)

2.1 Fees for SOPEP or SMPEP review and approval by the Administration

Please refer to ADM-003 for fees to review and approve the SOPEP/SMPEP by the Administration. Fees are payable upon receipt of the plan approval certificate. An approved Plan is required to obtain a MARPOL IOPP Certificate issued by class on behalf of the Administration. In order to allow a short term IOPP certificate to be issued by Class, while the plan has been submitted to the Administration for approval, an email providing confirmation of receipt will be issued by the Administration. Fees and charges by class societies for their review and approval of these Plans on behalf of the Office of the Deputy Commissioner are set by the class societies.

Questions regarding this instruction, the MARPOL requirements may be referred to the Office of the Deputy Commissioner of Maritime Affairs, Republic of Liberia, Liberian International Ship & Corporate Registry, LLC, Attn: Marine Safety, 8619 Westwood Center Dr., Suite 300 Vienna, Virginia 22182, USA, Telephone: +1 7032512469, Telefax: +1 7037905655 E-mail: safety@liscr.com.

3.0 PLAN (SOPEP AND/OR SMPEP) General Notes

3.1 All plans should:

- be specific to the ship for which it is prepared;
- be realistic, practical and easy to use;
- be understood by ship management personnel, both onboard and ashore; and
- be evaluated, reviewed and updated regularly.

3.2 **Format:** A Plan is intended to be a simple document, and the use of checklists and flowcharts is encouraged. Inclusion of extensive background information on the ship, cargo, etc., should be avoided whenever possible and be restricted to annexes, if included. When such information is relevant it shall be kept in the annexes where it will not dilute the ability of ship's personnel to locate the operative part of the plan

3.3 **Language:** All Plans should be submitted in English. The Plan shall be available in a working language or languages understood by the master and officers. If English is not understood, then the plan should be made available in the language or languages understood by the master and officers on board. If the master and officer's change and the new crew are not familiar with the language used in this plan then it shall be altered to the language understood by the master and officers on board.

3.4 **Ship identification:** Each Plan must identify the ship to which it applies, using the ship's name and/or IMO number, call sign and port of registry.

3.5 **Response and the Coastal State:** Without interfering with the shipowner's liability, some coastal States consider it their responsibility to define techniques and means to be taken against a pollution incident and approve such operation which might cause further pollution (i.e., lightening). States are in general entitled to do so under the International Convention relating to "Intervention on the High Seas in cases of Oil Pollution Casualties," 1969 (International Convention).

4.0 PLAN PREPARATION

4.1 **Plan development:** An owner may elect to prepare the Plan himself or have it prepared for him. Regardless, approval by or on behalf of the Administration must be obtained. SOPEP and SMPEP models are provided to assist shipowners and operators in writing the Plans required by MARPOL. The model Plans should simplify the preparation of a SOPEP or SMPEP and may be structured as outlined below:

Index

Mandatory

- | | |
|------------|--|
| Section 1: | Introduction (Preamble) |
| Section 2: | Reporting Requirements |
| Section 3: | Steps to control discharge (an example of a table is provided and should be completed with more detail by the Plan writer) |
| Section 4: | National and Local coordination; and |

Non Mandatory

Section 5: Owner's are encouraged to supply relevant information.

- 4.2 **Notification:** The nearest coastal State shall be notified of actual or probable discharges. The intent of this requirement is to ensure that coastal States are informed without delay, of any incident involving pollution, or threat of pollution, of the marine environment, as well as of assistance and salvage measures, so that appropriate action may be taken.
- 4.2.1 When required, the Plan should provide clear, concise guidance to the master to determine when to report to the coastal State.
- .1 Actual discharge - A report to the nearest coastal State is required whenever there is:
 - .1 a discharge above the permitted level of oil or noxious liquid substance for whatever reason including those for the purpose of securing the safety of the ship or saving life at sea; or
 - .2 a discharge during the operation of the ship of oil or noxious liquid substance in excess of the quantity or instantaneous rate permitted under the present Convention.
 - .2 Probable discharge - The Plan should give the master guidance to evaluate a situation which, may not involve an actual discharge, but would qualify as a probable discharge and thus require a report. In judging whether the report should be made, the following factors, as a minimum, should be taken into account:
 - .1 the nature of the damage, failure or breakdown of the ship, machinery or equipment;
 - .2 ship location and proximity to land or other navigational hazards;
 - .3 weather, tide, current and sea state; and
 - .4 traffic density.
 - .3 It is impracticable to lay down precise definitions of all types of situations involving probable discharge, which would warrant an obligation to report. As a general guideline, the master should make a report in cases of:
 - .1 damage, failure or breakdown which affects the safety of ships; examples of such situations are collision, grounding, fire, explosion, structural failure, flooding, cargo shifting; and
 - .2 failure or breakdown of machinery or equipment which results in impairment of the safety of navigation; examples of such incidents are failure or breakdown of steering gear, propulsion, electrical generating system, essential shipboard navigational aids.
- 4.2.2 Information required - The Plan must specify, in appropriate detail, the procedure for making the initial report to the coastal State. The Organization's Guidelines in Resolution A.851 (20) as amended by Resolution MEPC.138 (53) provide necessary detail for the Plan writer. The Plan should include a prepared message form, an example of which is included in Appendix II to these Guidelines. Coastal States are encouraged to take note of Table I of Appendix II and accept this as sufficient initial information. Supplementary or follow-up reports should, as far as possible, use the same format.

4.3 **Communication:**

4.3.1 The ship involved in oil or noxious liquid substance pollution incident will have to communicate with both coastal State or port contacts and ship interest contacts.

4.3.2 When compiling contact lists, due account must be taken of the need to provide 24-hour contact information and to provide alternates to the designated contact. These details must be routinely updated to account for personnel changes and changes in telephone, telex, and telefax numbers. The preferred means of communication (E-mail, telex, telephone, telefax, etc.) should be identified.

4.3.3 Coastal State contacts:

- .1 To expedite response and minimize damage from an oil or noxious liquid substance pollution incident, the coastal States should be notified without delay. The process begins with the initial report required by article 8 and Protocol I of the Convention. Guidelines for making this report are provided in Resolution A.851 (20) as amended.
- .2 The Plan should include as an appendix the list of agencies or officials of administrations responsible for receiving and processing reports as developed and updated by the Organization in conformance with article 8 of the Convention. An up to date list of coastal state spill response contacts is available from IMO by going to the IMO web site at www.imo.org (Select 'Circulars/Contact Points' or 'National Contacts/Contact Points' at the bottom of the IMO homepage, then select the most current version of the MSC-MEPC.6 Circ.XX Annex II). Changes or amendments to the last release is available on gisis.imo.org/Public. Select 'Contact Points', then select 'Annex 2: Changes and amendments to the last release'. In the absence of such a list, or should any undue delay be experienced in contacting the responsible authority by direct means, the master should be advised to contact the nearest coastal radio station, designated ship movement reporting station or rescue co-ordination center (RCC) by the quickest available means.

4.3.4 Port contacts:

- .1 For ships in port, notification of local agencies will speed response. The variety of trades in which ships engage makes it impractical to specify in these Guidelines a definitive approach to listing these agencies in the Plan. Information on regularly visited ports should be included as an appendix to the Plan. Where this is not feasible, the Plan should require the master to obtain details concerning local reporting procedures upon arriving in port.

4.3.5 Ship interest contacts:

- .1 The Plan should provide details of all parties with an interest in the ship to be advised in the event of an incident. This information should be provided in the form of a contact list. When compiling such lists, it should be remembered that in the event of a serious incident, ship's personnel will be fully engaged in life saving and taking steps to control and minimize the effects of the casualty. Therefore, they should not be hampered by having onerous communications requirements imposed on them.

- .2 Procedures will vary between companies but it is important that the Plan clearly specifies who will be responsible for informing the various interested parties such as cargo owners, insurers and salvage interests. It is also essential that both the ship's Plan and its company's shore side Plan are coordinated to guarantee that all parties having an interest are advised, and that duplication of reports is avoided.

4.4 **Steps to control discharge:**

4.4.1 Ship personnel will almost always be in the best position to take quick action to mitigate or control the discharge of oil or noxious liquid substance from their ship. The Plan should provide the master with clear guidance on how to accomplish this mitigation for a variety of situations. The Plan should not only outline action to be taken, but it should also identify who on board is responsible so that confusion during the emergency can be avoided.

4.4.2 This section of the Plan will vary widely from ship to ship. Differences in ship type, construction, cargo, equipment, manning, and even route may result in shifting emphasis being placed on various aspects of this section. As a minimum, the Plan should provide the master with guidance to address the following:

- .1 Operational spills - The Plan should outline the procedures for safe removal of oil or noxious liquid substance spilled and contained on deck. This may be through the use of on-board resources or by hiring a clean-up company. In either case, the Plan should provide guidance to ensure proper disposal of removed oil, noxious liquid substances and clean-up materials.

- .1.1 Pipe leakage - The Plan should provide specific guidance for dealing with pipe leakage.

- .1.2 Tank overflow - Procedures for dealing with tank overflows should be included. Alternatives such as lowering cargo or bunkers back to empty or slack tanks or readying pumps to transfer the excess ashore should be outlined.

- .1.3 Hull leakage - The Plan should provide guidance for responding to spillage due to suspected hull leakage. This may involve guidance on measures to be taken to reduce the head of cargo in the tank involved either by internal transfer or discharge ashore. Procedures to handle situations where it is not possible to identify the specific tank from which leakage is occurring should also be provided. Procedures for dealing with suspected hull fractures should be included and they should carry appropriate cautions regarding attention to the effect corrective actions may have on hull stress and stability.

- .2 Spills resulting from casualties - Casualties should be treated in the Plan as a separate section. The Plan should include various checklists or other means, which will ensure that the master considers all appropriate factors when addressing the specific casualty. These checklists must be tailored to the specific ship and to the specific product or product types. For the ships certified to carry NLSs, the checklists or other means

(Material Safety Data Sheets, etc), shall identify physical properties of the NLS, special protective equipment or unusual response techniques in a format consistent with section 3.2 of these guidelines. Reference may be made to Data Sheet or similar documents that identify characteristics of NLS. A copy of such document should be kept with the plan, but need not be part of the approved plan. In addition to the checklists, specific personnel assignments for anticipated tasks must be identified. Reference to existing fire control plans and muster lists is sufficient to identify personnel responsibilities. The following are examples of casualties, which should be considered:

- .2.1 grounding;
- .2.2 fire/explosion;
- .2.3 collision (with fixed or moving object);
- .2.4 hull failure;
- .2.5 excessive list;
- .2.6 containment system failure;
- .2.7 dangerous reactions of cargo (for ships certified to carry NLSs);
- .2.8 other hazardous cargo release (for ships certified to carry NLSs);
- .2.9 loss of tank environmental control (for ships certified to carry NLSs);
- .2.10 submerged/foundered;
- .2.11 wrecked/stranded;
- .2.12 cargo contamination yielding a hazardous condition (for ships certified to carry NLSs); and
- .2.13 hazardous vapor release.

4.4.3 In addition to the checklists and personnel duty assignments mentioned in section 4.4.2, the Plan should provide the master with guidance concerning priority actions, personnel safety, stability and stress considerations, and lightening and mitigating activities.

4.4.4 Priority actions - This section provides some general considerations that apply to a wide range of casualties. The Plan should provide ship-specific guidance to the master concerning these broad topics.

- .1 In responding to a casualty, the master's priority will be to ensure the safety of personnel and the ship and to take action to prevent escalation of the incident. In casualties involving spills, immediate consideration should be given to measures aimed at preventing fire, personnel exposure to toxic vapors, and explosion, such as altering course so that the ship is up wind of the spilled cargo, shutting down non-essential air intakes, etc. If the ship is aground, and cannot therefore maneuver, all possible sources of ignition should be eliminated and action should be taken to prevent toxic vapors or flammable vapors entering accommodation and engine-room spaces. When it is possible to maneuver, the master, in conjunction with the appropriate shore authorities, may consider moving his ship to a more suitable location in order, for example, to facilitate emergency repair work or lightening operations, or to reduce the threat posed to any particularly sensitive shoreline areas. Such maneuvering may be subject to coastal State jurisdiction.
- .2 Prior to considering remedial action, the master will need to obtain detailed information on the damage sustained by his ship. A visual inspection should be carried out and all cargo tanks, bunker tanks, and other compartments should be sounded. Due regard should be paid to the indiscriminate opening of ullage plugs or sighting ports, especially when the ship is aground, as loss of buoyancy could result.

.3 Having assessed the damage sustained by the ship, the master will be in a position to decide what action should be taken to prevent or minimize further discharge. When bottom damage is sustained, hydrostatic balance will be achieved (depending on physical properties) fairly rapidly, especially if the damage is severe, in which case the time available for preventive action will often be limited. When significant side damage is sustained in the way of fuel, lubrication, or cargo tanks, bunkers or cargo will be released fairly rapidly until hydrostatic balance is achieved and the rate of release will then reduce and be governed by the rate at which bunkers or cargo is displaced by water flowing in under the bunkers or cargo. When the damage is fairly limited and restricted, for example, to one or two compartments, consideration may be given to transferring the substance involved internally from damaged to intact tanks. When considering the transfer of oil or noxious liquid substances from a damaged tank to an intact tank, the master should consider:

- .1 the extent of the damage;
- .2 hydrostatic balance;
- .3 the ship's ability to transfer cargo safely; and
- .4 the physical properties of the substance(s) (for ships certified to carry NLSs) involved such as:
 - .1 solubility;
 - .2 density;
 - .3 water reactivity;
 - .4 solidification; and
 - .5 compatibility.

4.4.5 Stability and strength considerations - Great care in casualty response must be taken to consider stability and strength when taking actions to mitigate the spillage of oil or noxious liquid substance or to free the ship if aground. The Plan should provide the master with detailed guidance to ensure that these aspects are properly considered. This section shall **not** be construed as creating a requirement for damage stability plans or calculations beyond those required by relevant international conventions.

.1 Internal transfers should be undertaken only with a full appreciation of the likely impact on the ship's overall longitudinal strength and stability. When the damage sustained is extensive, the impact of internal transfers on stress and stability may be impossible for the ship to assess. Contact may have to be made with the owner or operator or other entity in order that adequate information can be provided so that accurate damage stability and damage longitudinal strength assessments may be made. These could be made within the head office technical departments. In other cases, classification societies or independent organizations may need to be contacted. The Plan should clearly indicate whom the master should contact to acquire this assistance. Additionally, in the case of ships certified to carry NLSs, consideration as to the compatibility of all substances involved such as cargoes, bunkers, tanks, coatings, piping, etc., must also be considered before such an operation is undertaken.

.2 The Plan should provide a list of the information required to make damage stability and damage longitudinal strength assessments possible for the Master to provide to the contact points who will provide the appropriate assistance.

4.4.6 Lightning - Should the ship sustain extensive structural damage, it may be necessary to transfer all or part of the cargo to another ship. The Plan should provide guidance on

procedures to be followed for ship-to-ship transfer of cargo. Reference may be made in the Plan to existing company guides. A copy of such company procedures for ship-to-ship transfer operations should be kept with the Plan. The Plan should address the need for coordinating this activity with the coastal State; as such operation may be subject to the coastal state's jurisdiction.

4.4.7 Mitigating activities - When the safety of both the ship and personnel has been addressed, the master can initiate mitigating activities according to the guidance given by the plan. The plan shall address such aspects as:

- .1 assessment and monitoring requirements;
- .2 personnel protection issues:
 - .1 protective equipment; and
 - .2 threats to health and safety.
- .3 physical properties of the substance (for ships certified for NLSs) involved such as:
 - .1 solubility;
 - .2 density;
 - .3 water reactivity;
 - .4 solidification; and
 - .5 compatibility
- .4 containment and other response techniques (e.g. dispersing, absorbing, neutralization);
- .5 isolation procedures;
- .6 decontamination of personnel; and
- .7 disposal of removed oil, noxious liquid substances and clean-up materials.

4.4.8 In order to have the necessary information available to respond to the situations, certain plans, drawings, and ship-specific details such as, a layout of a general arrangement plan, a tank plan, etc., should be appended. The Plan should show where current cargo, bunker and ballast information, including quantities and specifications, are available.

4.5 **National and local co-ordination** - Quick, efficient co-ordination between the ship and coastal State or other involved parties becomes vital in mitigating the effects of an oil or noxious liquid substances pollution incident. The Plan should address the need to contact the coastal State for authorization prior to undertaking mitigating actions.

4.5.1 The identities and roles of various national and local authorities involved vary widely from State to State and even from port to port. Approaches to responsibility for discharge response also vary. Some coastal States have agencies that take charge of response immediately and subsequently bill the owner for the cost. In other coastal States, responsibility for initiating response is placed on the shipowner. In the case of the latter the Plan will require greater detail and guidance to assist the master in organizing this response.

5.0 NON-MANDATORY PROVISIONS

5.1 **Owner/operator policies:** In addition to the provisions required by regulation 37 of Annex I and/or regulation 17 of Annex II of the Convention, local requirements, insurance company, or owner/operator policies, etc., may dictate that other guidance be provided in the Plan. These topics may include: provision of diagrams and drawings; ship-carried response equipment; public affairs; record keeping; product specific response information (for ships certified to carry NLSs) and reference materials.

- 5.2 **Plans and diagrams:** In addition to the plans required by paragraph 4.4.6 above, other details concerning the ship's design and construction may be appended to the Plan or their location identified.
- 5.3 **Response equipment:** Some ships may carry on board equipment to assist in pollution response. The type and quantity of this equipment may vary widely. The Plan should indicate an inventory of such equipment, if carried. It should also provide directions for safe use and guidelines to assist the master in determining when such use is warranted. Care should be exercised to ensure that the use of such equipment by the crew is practical and consistent with safety considerations. When such equipment is carried, the Plan should establish personnel responsibilities for its deployment, oversight, and maintenance. In order to ensure safe and effective use of such equipment, the Plan should also provide for crew training in the use of it. The Plan should include a provision that no chemical agent should be used for response to pollution on the sea without authorization of the appropriate coastal State and that such authorization should also be requested, when required, for use of containment or recovery equipment.
- 5.4 **Shore-side Spill Response Co-coordinator or Qualified Individual:** Guidance to the master for requesting and co-coordinating initial response actions with the person responsible for mobilizing shore side response personnel and equipment.
- 5.5 **Coastal State Requirements:** Some coastal States require ships to have contracts with "response contractors." When ships sail toward such States, it is recommended that response resources (personnel and equipment) and capabilities be identified in advance for each potential port State. In other States, the response equipment is identified by the coastal State and they direct the response.
- 5.6 **Planning Standards:** To facilitate forethought about the amount of response resources, which should be requested, possible scenarios should be analyzed and planned for accordingly.
- 5.7 **Public affairs:** The owners may want to include in the Plan guidance for the master in dealing with the distribution of information to the news media. Such guidance should be fashioned to reduce the burden on ship's personnel already busy with the emergency at hand.
- 5.8 **Record-keeping:** As with any other incident that will eventually involve liability, compensation and reimbursement issues, the owner may want to include in his Plan guidance for the keeping of appropriate records of the oil or noxious liquid substances pollution incident. Apart from detailing all actions taken on board, records might include communications with outside authorities, owners, and other parties, as well as a brief summary of decisions and information passed and received. Guidance on collecting of samples of spilled oil or noxious liquid substance as well as that carried on board may also be provided.
- 5.9 **Plan review:** Regular review of the Plan by the owner, operator or master is recommended to ensure that the specific information is current. A feedback system should be employed to allow quick capture of changing information and incorporation of it into the Plan. This feedback system should incorporate the following:

- .1 Periodic review - The Plan should be reviewed by the owner or operator at least yearly to

capture changes in local law or policy, contact names and numbers, ship characteristics, or company policy.

- .2 Event review - After any use of the Plan in response to an incident, its effectiveness should be evaluated by the owner or operator and modifications made accordingly.

5.10 **Plan testing:** The Plan will be of little value if it is not made familiar to the personnel who will use it. Regular exercises will ensure that the Plan functions as expected and that the contacts and communications specified are accurate. Such exercises should be held in conjunction with other shipboard exercises and appropriately logged. Where ships carry response equipment, hands-on experience with it by crewmembers will greatly enhance safety and effectiveness in an emergency situation. Procedures for training and exercise should be defined.

5.11 **Salvage:** The plan should contain information on what the crew's responsibilities are in a casualty where a vessel is partially or fully disabled, and what constitutes dangerous conditions. A decision process should be outlined in the plan that will aid the master in determining when salvage assistance should be obtained. The decision process should include, but not be limited to the following:

- .1 Nearest land or hazard to navigation;
- .2 Vessel set and drift;
- .3 Location and time of impact with hazard based on vessel set and drift;
- .4 Estimated time of casualty repair; and
- .5 Determination of the nearest capable assistance and its response time (i.e. for tug assistance, the time it will take to get on scene and secure the tow). When a casualty occurs to a vessel underway which reduces its maneuverability, the master needs to determine his window of opportunity considering the response time of assistance, regardless of the estimated time of repair. It is not prudent to hesitate in calling for assistance when the time needed to repair something goes beyond the window of opportunity.

6.0 ATTACHMENTS AND APPENDIXES

6.1 **Appendixes:** It is envisioned that a notebook or small binder be used for this Plan as the numerous Appendixes should be arranged for easy use by shipboard personnel and to ease updating. Appendixes should include at least:

- IMO Resolution A851 (20) as amended by Resolution MEPC.138 (53)
- Listing of Coastal State Agencies or Officials
- Listing of Regional or Port Authorities
- Listing of Ship Interest Contacts
- Listing of Shore-based Spill Response Contractors
- Listing of Shore-based Technical Advisors
- Ship's plans and drawings
- Summary flowchart (consideration should be given to adapting the flowchart for bulkhead display on board.)

6.2 **Review of appendixes:** The data contained in the Appendixes shall be routinely reviewed and updated as necessary. Updates to the Appendixes may be done without the Office of the Deputy Commissioner's approval.

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APPENDIX I

Additional references for the development of shipboard marine pollution emergency plans

The following publications are suggested to provide additional assistance in the preparation of Plans:

Manual on Oil Pollution, Section II, Contingency Planning
International Maritime Organization (IMO)
ISBN 978-92-801-13303
Available in English from IMO Publications Section,
4 Albert Embankment, London SE1 7SR, United Kingdom

Provisions Concerning the Reporting of Incidents Involving Harmful Substances under
MARPOL 73/78
Available in English from IMO
ISBN 978-92-801-60987

Manual on Chemical Pollution (Section 1 - Problem assessment and response arrangements)
Available in English, French and Spanish from IMO
ISBN 978-92-801-60963

IMDG Code Supplement (Emergency Response Procedures Guide -EMS + Medical First Aid
Guide for use in accidents involving dangerous goods-MFAG + Reporting Procedures)
Available in English, French, and Spanish from IMO
ISBN 978-92-801-15147

International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals
in Bulk (IBC) Code
Available in English, French and Spanish from IMO
ISBN 978-92-801-42266

Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
(BCH) Code
Available in English from IMO
ISBN 978-92-801-15093

International Safety Management Code (ISM Code) and Guidelines on Implementation of the
ISM Code
Available in English, French and Spanish from IMO
ISBN 978-92-801-51510

Guidelines for the Development of Shipboard Marine Pollution Emergency Plans
Available in English, French and Spanish from IMO
ISBN 978-92-801-15185

Response to Marine Oil Spills
International Tanker Owners Pollution Federation (ITOPF)
ISBN 9781856093545
Available in English and Spanish from Witherby Seamanship International,
4 Dunlop Square, Deans Estate, Livingston,
EH54 8SB, United Kingdom

International Safety Guide for Oil Tankers and Terminals (ISGOTT)
International Chamber of Shipping and Oil Companies International Marine Forum
(ICS/OCIMF)
Available from Witherby Seamanship International
ISBN 9781856092913

Peril at Sea and Salvage -- A Guide for Masters
ICS/OCIMF
Available from Witherby Seamanship International
ISBN 9781856090957

Ship-to-Ship Transfer Guide (Petroleum)
ICS/OCIMF
Available from Witherby Seamanship International
ISBN 9781856092586

Tanker Safety Guide (Chemicals)
ICS
Available from Marisec Publications, 12 Carthusian Street,
London EC1M 6EB, United Kingdom

Ship-to-Ship Transfer Guide (Liquefied Gases)
ICS/OCIMF/SIGTTO
Available from Witherby Seamanship International
ISBN 1 85609 0825

Model SOPEP & SMPEP
International Chamber of Shipping (ICS), 12 Carthusian Street, London EC 1 M 6EB, United
Kingdom

U.S. Code of Federal Regulations, Title 46, Part 150, Compatibility of Cargoes Available from
Superintendent of Documents, Government Printing Office, Washington, DC 20402, United
States

Chemical Hazards Response Information System (CHRIS) Hazardous Data Manual Available
from Superintendent of Documents, Government Printing Office, Washington, DC

APPENDIX II

MODEL SOPEP or SMPEP

INTRODUCTION

1. This Plan is written in accordance with the requirements of Regulation 37 of Annex I and/or 17 of Annex II of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 and 1997 relating thereto.
2. The purpose of this Plan is to provide guidance to the master and officers on board this ship with respect to the steps to be taken when a pollution incident has occurred or is likely to occur.
3. This Plan contains all information and operational instructions required by the guidelines. The appendices contain names, telephone; telex numbers, etc., of all contacts referenced in this Plan, as well as other reference material.
4. This Plan has been approved by the Administration and, except as provided below, no alteration or revision shall be made to any part of it without the prior approval of the Office of the Deputy Commissioner.
5. Changes to Section 5 and the appendices will not be required to be approved by the Office of the Deputy Commissioner. The appendices should be maintained up to date by the owners, operators and managers.

SHIPBOARD MARINE POLLUTION EMERGENCY PLAN

FOR THE (NAME AND/OR IMO NUMBER OF SHIP AND PORT OF REGISTRY)

INDEX OF SECTIONS

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Section 1: Preamble

This Plan is available to assist shipboard personnel in dealing with an unexpected discharge of oil or noxious liquid substances. Its primary purpose is to set in motion the necessary actions to safely stop or minimize the discharge and to mitigate its effects. Effective planning ensures that the necessary actions are taken in a structured, logical and timely manner.

The need for a predetermined and properly structured Plan is clear when one considers the pressures and multiple tasks facing personnel confronted with an emergency situation. In the heat of the moment, lack of planning will often result in confusion, mistakes, and failure to advise key people. Delays will be incurred and time will be wasted; during which the situation may deteriorate further. As a consequence, the ship and its personnel may be exposed to increasing hazards and greater environmental damage may occur.

This plan has been developed to address such emergency situations. It is intended to be a realistic practical document, easy to use, and understood by the Master, ship's officers and shore side management. This Plan is in the working language of the Master and officers; contains procedures to be followed by the master or other person in charge in reporting an oil pollution incident; includes a description of the actions that should be taken immediately by persons on board to protect themselves and others from the hazards presented by the chemical released and to reduce or control the discharge. The Plan includes procedures for coordinating shipboard activities with coastal, national, and port authorities' response activities.

Detailed information regarding the ship or the cargo shall be readily accessible on board but is not required to be maintained as part of this Plan. This Plan shall be maintained on board and made available for inspection by flag State and port State authorities on demand.

Section 2: Reporting Requirements

The requirements for reporting actual and/or probable oil pollution incidents under MARPOL, Annex I, Regulation 37, and Regulation 17 of Annex II are as follows.

2.1 A report is required whenever there is:

- .1 Actual discharge of oil or NLS
 - an actual discharge of oil or NLS resulting from damage to the ship or its equipment, or for the purpose of securing the safety of a ship or saving life at sea; or
 - an actual discharge of oil or NLS during the operation of the ship in excess of the quantity or instantaneous rate permitted under the present Convention.
- .2 Probable discharge of oil or NLS

While it is impracticable to provide precise definitions of all types of situations involving the probability of a discharge of oil or NLS, the general guideline for making a report includes cases of:

- damage, failure or breakdown which affects the safety of ships; examples of such situations are collision, grounding, fire, explosion, structural failure, flooding, cargo shifting; and
- failure or breakdown of machinery or equipment which results in impairment of the safety of navigation; examples of such incidents are failure or breakdown of steering gear, propulsion, electrical generating system, essential ship borne navigational aids.

2.2 Notification of the Coastal State(s) shall be by the most expeditious means available and should follow the guidelines of IMO Resolution A851(20), as amended by MEPC.138(53), General Principles for Ship Reporting Systems and Ship Reporting Requirements, including Guidelines for Reporting Incidents Involving Dangerous Goods, Harmful Substances and/or Marine Pollutants_ (adopted November 27, 1997).

The Master, in deciding on the need to report, shall consider at least the following factors:

- the nature of the damage, failure or breakdown of ship, machinery or equipment;
- ship location and proximity to land or other navigational hazards;
- weather, tide, current and sea state; and
- traffic density.

- .1 If additional Coastal State(s), regional or port area authorities are known to the Master or vessel owner, additional notifications via appropriate and timely means are encouraged.
- .2 Supplementary or follow-up reports shall be made using this same procedure. Once an initial report is made, at least one follow-up report will be needed so as to conclude any further activity regarding the reported matter.
- .3 Information required includes:

- Ship Name, Call Sign, Flag
- Date, Time of Event (UTC)
- Position
- True Course
- Speed
- Intended Track
- Radio stations/frequencies guarded
- Time of Next Report
- Type and Quantity of Cargo & Bunkers on board
- Defect, Deficiencies or Damage Report
- Pollution Details (type and amount lost)
- Weather & Sea Conditions
- Ship's Representative or Owner
- Ship size and type
- Other Data: Incident details, need for assistance, action being taken, size of crew, injury or fatality report, and so on.

- .4 The Plan's Appendices should include copies of the message format to be used (illustrated in Table 1 below) and Resolution A.851(20) as amended by Resolution MEPC.138(53) including its Annex, to assist in making this report.

2.3 Whom to Contact:

- .1 Coastal States: for ships at sea, a listing of authorities to be notified as requested through IMO follows in the Appendices.
- .2 Port Contacts: for ships in port, see the appropriate Appendix for a listing of authorities within the Port where the incident is occurring. Local agent, coast guard or port authorities should be considered.
- .3 Ship Interest Contacts: as directed by the owner, agent, Administration, P & I clubs, and so forth. Provide a precedent order and complete identification, E-mail, fax, phone and telex information. The Decision-Maker must be among those kept informed as that individual will be the primary liaison with the Office of the Deputy Commissioner.

Section 3. Steps to Control Discharge

Timely effort must be made to attempt to stop the discharge of oil and/or NLS. The following tables outline the needed action and responsible person for various Pollution Emergencies.

3.1 For operational spills related to cargo operations or bunkering – This section should contain ship-specific information concerning actions to be taken in response to operational spills. As a minimum, procedures to address spills resulting from pipe leakage, tank overflow and hull leakage should be included. The table 2-A is provided as an example only and is not designed to limit you in the development of the tables to be used in the Plan you are developing.

TABLE 2-A

<u>Spill Cause</u>	<u>Action to be Taken</u>	<u>Responsible Person</u>
Pipe Leak (on board)	Ensure proper safety precautions are being followed. Stop Product Flow.	Cargo Watch Officer or Chief Officer
Pipe Joint Leak (on board)	Ensure proper safety precautions are being followed. Contain Spill on Deck.	
Hose Rupture/Connection Leak (on deck)	Ensure proper safety precautions are being followed. By-Pass, replace or repair failed component (in cooperation with coastal state, class society representatives, flag administration).	
Hose or Pipe Leak (Facility or other vessel's)	Ensure proper safety precautions are being followed. Stop Product Flow. Contain spill (in charge or assist, depending on Pre-Transfer Agreement). Coordinate with facility or other vessel.	Cargo Watch Officer or Chief Officer
Tank Overflow (on board)	Ensure proper safety precautions are being followed. Stop product flow. Contain spill on deck. Safely transfer cargo until tank level is satisfactory.	Cargo Watch Officer or Chief Officer.

Hull Leakage - above waterline	Ensure proper safety precautions are being followed. Stop Product Flow. Contain spill, determine source, and safely transfer cargo until tank level is satisfactory. Repair tank in cooperation with coastal state, class society & flag administration.	Cargo Watch Officer or Chief Officer
Hull Leakage - at or below waterline	Ensure proper safety precautions are being followed. Stop Product Flow. Contain spill, determine source, and safely transfer cargo until tank level is satisfactory. Repair tank in cooperation with coastal state, class society & flag administration.	Cargo Watch Officer or Chief Officer

*NOTE: Other Crewmembers should be assigned duties as appropriate.

3.2 Spills resulting from casualties

This section should contain ship-specific and company-specific information concerning actions to be taken to address, as a minimum, the following casualty scenarios: grounding, fire/explosion, collision (with fixed or moving object), hull failure, excessive list, containment system failure, submerged/foundered, wrecked/stranded, hazardous vapor release, and especially for ships certified to carry NLSs, dangerous reactions of cargo, other dangerous cargo release, loss of tank environmental control and cargo contamination yielding a hazardous condition (see section 4.5.2.2 of the Guidelines). An example of presentation of information relating to response activities and personnel responsibilities is given in table 2-B below.

TABLE 2-B

<u>Spill Cause</u>	<u>Action to be Taken</u>	<u>Responsible Person</u>
Grounding	Ensure proper safety precautions are being followed. Stabilize ship. Determine position, if safe, attempt to re-float. If not, engage salvage resources. Contain spill.	Master assesses damage.
Fire/Explosion	Ensure proper safety precautions are being followed. Contain area of damage. Stabilize ship If needed, obtain salvage resources. Contain spill.	Master assesses damage.
Collision	Ensure proper safety precautions are being followed. Contain area of damage. Stabilize ship If needed, obtain salvage resources. Contain spill.	Master assesses damage.
Excessive List	Ensure proper safety precautions are being followed. Determine cause of list. Stabilize ship. If safe, correct list. If needed, obtain salvage resources. Contain spill.	Master

*NOTE: Other Crewmembers should be assigned duties as appropriate to their rank, training and experience.

3.3 Priority actions

In all cases, the SAFETY OF SHIPBOARD PERSONNEL COMES FIRST. The second priority is to stabilize the ship, limit damages and other related response actions whose goal is to prevent the loss of the vessel. This could include technical data from the Class Society related to damage stability and hull stress calculations, use of on-board plans, cargo loading plans, lightering or other similar matters. Third, summon assistance from sources off the ship such as firefighting, damage control, and towing and spill response.

3.4 Stability and strength considerations

Where appropriate, this section should provide a list of information required for making damage stability and damage longitudinal strength assessments.

3.5 Lightening

The Plan should provide guidance on procedures to be followed for ship-to-ship transfer of cargo. Reference may be made in the Plan to existing company guides. A copy of such company procedures for ship-to-ship transfer operations should be kept with the Plan.

3.6 Mitigating activities

When the safety of both the ship and personnel has been addressed, the master can initiate mitigating activities according to guidance given in section 4.4.7 of the guidelines.

3.7 Plans & Drawings

In order to respond to the situations referred in section 4.4.2, certain plans, drawings and ship-specific details such as layout of a general arrangement plan, a tank plan, etc. should be appended.

Section 4. National and Local Co-Ordination

4.1 Co-ordination between ship and coastal state authorities

Quick, efficient co-ordination between the ship and coastal State or other involved parties becomes vital in mitigating the effects of an oil or noxious liquid substances pollution incident. The Plan should address the need to contact the coastal State for authorization prior to undertaking mitigating actions.

.1 The Master shall initiate rapid and accurate reporting to appropriate Coastal State(s) authorities. It is imperative that the Master, or other designated person, be clearly identified as the official and only point of contact on board for all matters related to the response to the reported incident.

.2 It is recognized that while the Master may be the best person for this task, an owner may wish to remove this onerous burden from the Master, particularly if the ship is underway, aground or on fire. This is acceptable so long as the individual is present and accessible to Coastal State(s) authorities, port authorities and the Office of the Deputy Commissioner.

.3 THE ON-BOARD CONTACT PERSON ON ALL MATTERS RELATED TO THIS PLAN IS _____.

Telephone:

Fax:

Telex:

E-mail:

.4 The names, address, phones, faxes, telexes or E-mails of relevant Coastal State, regional and local authorities are in the appendices to this Plan. Consideration for the ship's trade route or pattern must be given. For example, if not a regular caller in the USA, the National U.S. Coast Guard Hotline telephone number will be sufficient for initial notification. Local Coast Guard, regional or state government notifications should also be made.

4.2 Roles of national and local authorities

Without interfering with the shipowner's liability, some coastal States consider it their responsibility to define techniques and means to be taken against a pollution incident and

approve such operation which might cause further pollution (i.e., lightening). States are in general entitled to do so under the International Convention relating to “Intervention on the High Seas in cases of Oil Pollution Casualties,” 1969 (International Convention).

Section 5: Additional Information (non-mandatory)

5.0 This section should contain additional information included in the Plan at the owner’s discretion. This information, although not required by regulation 37 of Annex I and regulation 17 of Annex II of MARPOL 73/78, may be required by local authorities in ports visited by the vessel, or it may be included to provide additional assistance to the ship’s master when responding to an emergency situation. This information may include:

- .1 response equipment
- .2 plan review procedures;
- .3 training and drill procedures;
- .4 record-keeping procedures;
- .5 public affairs policy of the owners/operators;
- .6 salvage.
- .7 etc.

APENDICES

Table of Contents

1. Response Decision-Making Aid (Flow Chart)

2. Guidelines for When and How to Report -

IMO Resolution A851(20) as amended by Resolution MEPC.138(53), Guidelines General Principles for Ship Reporting Systems and Ship Reporting Requirements, including Guidelines for Reporting Incidents Involving Dangerous goods, Harmful Substances and/or Marine Pollutants

3. To Whom a Report is to be made -

List of Coastal State Authorities, IMO document MSC-MEPC.6/Circ.XX, Annex II (see section 4.3.3.2 of the guidelines)

List of Port or Regional Authorities

List of Ship Interest Contacts

4. Ship's Plans and Drawings -

Location and access

5. Vessel Loading and Hull Stress Calculation References -

Loading/Discharge Manuals

On-Board Technical Resources (Loadmaster, computer, etc.)

Shore-based Technical Support

6. Additional Materials

APPENDIX

SHIP INTEREST CONTACTS

The following table provides an example of how ship interest contact information could be presented:

(a) Owner/operator contacts

Name of institution person to be contacted	Address	Means of contact	Remarks
Owner/Operator		Phone: Fax: Telex: INMARSAT Telex:	

(b) Other ship interest contacts

Name of institution person to be contacted	Address	Means of contact	Remarks
Charter			
Local Agent			
P&I Club and correspondents			

**SHIPBOARD MARINE POLLUTION EMERGENCY PLAN
(FOR OIL AND/OR NOXIOUS LIQUID SUBSTANCES)**

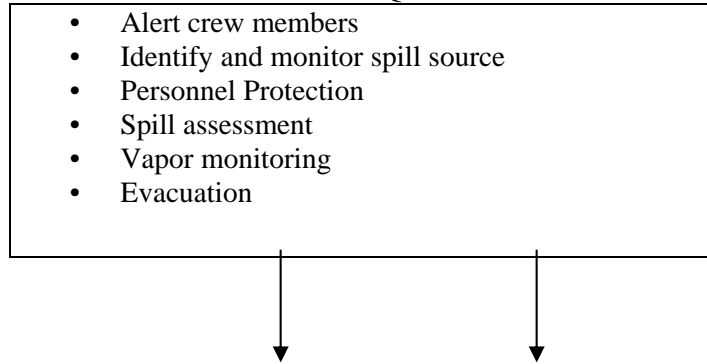
Summary flow chart

This flow diagram is an outline of the course of action that shipboard personnel should follow in responding to an oil or noxious liquid substance pollution emergency based on the Guidelines published by the Organization. This diagram is not exhaustive and should not be used as a sole reference in response. Consideration should be given for inclusion of specific references to the Plan. The steps are designed to assist ship personnel in actions to stop or minimize the discharge of oil or noxious liquid substances and mitigate its effects. These steps fall into two main categories - reporting and action.

**DISCHARGE OF OIL OR NOXIOUS LIQUID SUBSTANCE
(Probable or actual)**

ASSESSMENT OF THE NATURE OF INCIDENT

ACTIONS REQUESTED



<p>REPORTING</p>	<p>ACTION TO CONTROL DISCHARGE</p>	
<p>By master and/or designated crew member</p>	<p>Measures to minimize the escape of oil or noxious liquid substance and threat to the marine environment</p>	
<p>When to report All probable and actual spills</p> <p>How to report</p> <ul style="list-style-type: none"> • By quickest means to coastal radio station • Designated ship movement reporting station • Rescue co-ordination center (at sea), • By quickest available means to local authorities. <p>Whom to contact</p> <ul style="list-style-type: none"> • Nearest coastal State • Harbor and terminal operators (in port) • Shipowner's manager; P & I insurer, • Head charterer; cargo owner • Refer to contact lists <p>What to report</p> <ul style="list-style-type: none"> • Initial report (res. A.851(20) as amended) • Follow-up reports <ul style="list-style-type: none"> • Characteristics of oil or noxious liquid substance spilled Cargo/ballast/bunker dispositions- <ul style="list-style-type: none"> • Weather and sea conditions • Slick movement • Assistance required <ul style="list-style-type: none"> - Salvage - Lightening capacity - Mechanical equipment - External response team - Chemical dispersant/degreasing. 	<p>Navigational measures</p> <ul style="list-style-type: none"> • Alter course/position and/or speed • Anchoring • Setting aground • Initiate towage • Assess safe haven requirements, • Weather/tide/swell forecasting, • Slick monitoring • Record of events and communications taken. 	<p>Seamanship measures</p> <ul style="list-style-type: none"> • Safety assessment and • Change of list and/or trim precaution, • Advice on priority countermeasures/ preventive measures • Damage stability and stress considerations • Ballasting/deballasting • Internal cargo transfer operations transfers of cargo and/or bunker • Set up shipboard response for: <ul style="list-style-type: none"> - Leak sealing - Fire fighting - Handling of shipboard response equipment(if available) etc.
<p>STEPS TO INITIATE EXTERNAL RESPONSE</p>		
<ul style="list-style-type: none"> • Refer to coastal port State listings for local assistance • Refer to ship interest contact list • External clean-up resources required • Continue monitoring of activities 		