

MANUAL ON CHEMICAL POLLUTION

SECTION 3 – LEGAL AND ADMINISTRATIVE ASPECTS OF HNS INCIDENTS

2015 EDITION



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First published in 2015 by the
INTERNATIONAL MARITIME ORGANIZATION
4 Albert Embankment, London SE1 7SR
www.imo.org

Printed and bound by CPI Group (UK) Ltd, Croydon, CR0 4YY

ISBN 978-92-801-1614-4

IMO PUBLICATION
Sales number: I637E

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Foreword

The *Manual on Chemical Pollution* currently has three sections. Section 1, *Problem Assessment and Response Arrangements*, first published in 1987 and revised in 1999, provides guidance to Governments on ways of assessing hazards associated with spills of harmful substances other than oil and of setting up response organizations. It describes safe operational practice in spillage response and appropriate training. Section 2, *Search and Recovery of Packaged Goods Lost at Sea*, published in 2007, provides guidance to Governments on search and recovery procedures for packaged goods lost at sea to which the provisions of chapter VII of SOLAS 1974, as amended, and Annex III of MARPOL, as amended, apply. The present publication, section 3, *Legal and Administrative Aspects of HNS Incidents*, was prepared by the OPRC-HNS Technical Group, formerly a subsidiary body of Marine Environment Protection Committee (MEPC) of the International Maritime Organization (IMO), and approved by the MEPC at its sixty-sixth session in 2014.

The addition of this new section to the *Manual on Chemical Pollution* series was approved by MEPC at its fifty-fourth session with a view to addressing the legal and administrative aspects of HNS incidents, based on the need to assist Governments in the implementation of the *Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances, 2000* (OPRC-HNS Protocol 2000). It aims to provide the reader, in particular on-scene commanders, response personnel, government entities and others involved in the management and/or response to pollution incidents involving hazardous and noxious substance (HNS), with a description of the various interests involved in an HNS incident and its aftermath. This section is not intended to provide an authorized or definitive commentary on the legal relationships between the various entities involved in an HNS pollution emergency or an interpretation of relevant international conventions, but rather to provide a guide to the various elements and instruments to be considered when establishing a comprehensive regime for addressing HNS.

It should be noted that the risk and resulting response to incidents involving HNS can vary significantly from the response to marine oil spills. The safety of personnel and the public is of paramount importance for HNS incidents,

given the significant potential and immediate threat to human health in comparison to an oil spill, depending on the nature of the substance or substances involved and the type of incident encountered.

Problems related to oil pollution casualties and related information are specifically addressed in the IMO *Manual on Oil Pollution*, Sections I to VI.

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Glossary

Athens Convention	The 1974 Athens Convention relating to the carriage of passengers and their luggage by sea, as amended by the 2002 Protocol thereto
BC Code	Code of Safe Practice for Solid Bulk Cargos
Bareboat Charter	A type of charter in which the shipowner provides only the ship and gives the charterer complete control, management and operation of the vessel for an agreed leasing period; the charterer has to appoint the crew and pay all operating costs including stores and bunkers; also known as demise charter.
BCH Code	Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (predecessor of the IBC Code)
Charter Party	The contract between the owner of a vessel and the charterer for the use of a vessel. The charterer takes over the vessel for either a certain amount of time (a time charter) or for a certain point-to-point voyage (a voyage charter), giving rise to these two main types of charter agreement. There is a subtype of time charter called the demise or bareboat charter.
CLC 1992	International Convention on Civil Liability for Oil Pollution Damage, 1969, as amended by the Protocol of 1992 relating thereto
CLC Certificate	Certificate of Insurance or Other Financial Security in respect of Civil Liability for Oil Pollution Damage
EEZ	Exclusive Economic Zone
EGC Code	Code for Existing Ships Carrying Liquefied Gases in Bulk
FPSO	Floating Production Storage and Offloading
FSU	Floating Storage Unit
Funds	International Oil Pollution Compensation Funds

Fund Convention 1971	International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971
Fund Convention 1992	International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971, as amended by the Protocol of 1992 relating thereto
GESAMP	Group of Experts on the Scientific Aspects of Marine Environmental Protection
GHS	United Nations Globally Harmonized System of Classification and Labelling of Chemicals
HNS	Hazardous and Noxious Substance
HNS Convention 1996	International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996 (HNS Convention)
HNS Fund	International Hazardous and Noxious Substances Fund, i.e. the organization set up under the HNS Convention
IBC Code	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (liquid)
IGC Code	International Gas Carrier Code
IMDG Code	International Maritime Dangerous Goods Code
IMSBC Code	International Maritime Solid Bulk Cargoes Code
INF Code	International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Waste on Board Ships
Intervention Convention 1969	International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969
Intervention Protocol 1973	Protocol relating to Intervention on the High Seas in Cases of Pollution by Substances Other Than Oil, 1973
IOPC Funds	The International Oil Pollution Compensation Funds, i.e. the 1971 Fund, the 1992 Fund and the Supplementary Fund
IOPC Fund 1971 (1971 Fund)	International Oil Pollution Compensation Fund 1971, i.e. the organization set up under the 1971 Fund Convention

IOPC Fund 1992 (1992 Fund)	International Oil Pollution Compensation Fund 1992, i.e. the organization set up under the 1992 Fund Convention
ISM Code	International Management Code for the Safe Operation of Ships and for Pollution Prevention
ISU	International Salvage Union
LLMC 1976	Convention on Limitation of Liability for Maritime Claims, 1976
LNG	Liquefied Natural Gas
LOF 2011	Lloyd's Standard Form of Salvage Agreement, 2011
LPG	Liquefied Petroleum Gas
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973, as amended by the Protocol of 1978 relating thereto
MEPC	Marine Environment Protection Committee (MEPC) is IMO's senior technical body on marine pollution related matters
NLS	Noxious Liquid Substance
OPRC 1990	International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990
OPRC-HNS Protocol	Protocol on Preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances, 2000
P&I Club	Protection and Indemnity Club
Salvage Convention 1910	Convention for the Unification of Certain Rules of Law relating to Assistance and Salvage at Sea, 1910
SALVAGE 1989	International Convention on Salvage, 1989
SCOPIC	Special Compensation P&I Club – A Supplementary Clause to the Lloyd's Form Salvage Agreement "No cure – No pay"
SDR	Special Drawing Right. The US dollar equivalents of SDRs vary according to the current exchange rates
SMPEP	Shipboard Marine Pollution Emergency Plan
SMS	Safety Management System
SOLAS 1974	International Convention for the Safety of Life at Sea, 1974

SOPEP	Shipboard Oil Pollution Emergency Plan
SOLAS Protocol 1978	Protocol of 1978 relating to SOLAS 1974
SOLAS	International Convention for the Safety of Life at Sea. Consolidated version
STCW	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978
Supplementary Fund Protocol	Protocol of 2003 to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992
Supplementary Fund	International Oil Pollution Compensation Supplementary Fund, i.e. the organization set up under the Supplementary Fund Protocol
UNCLOS	United Nations Convention on the Law of the Sea, 1982

Chapter I

Introduction

11 This section of the Manual on Chemical Pollution is intended to provide the reader, in particular on-scene commanders, response personnel, government entities and others involved in the management of and/or response to pollution incidents involving hazardous and noxious substance (HNS) with an appreciation of the various interests involved in an HNS incident and its aftermath. This will include a general review of the international legal regimes governing the various aspects of HNS, ranging from prevention, preparedness and response through to liability and compensation. This section is not intended to provide an authorized or definitive commentary on the legal relationships between the various entities involved in an HNS pollution emergency or an interpretation of relevant international conventions, but rather to provide a guide to the various elements and instruments to be considered when establishing a comprehensive regime for addressing HNS.

12 There are three main IMO instruments governing the prevention, preparedness and response and liability and compensation for HNS pollution incidents, as follows:

- 1** *International Convention for the Prevention of Pollution from Ships, 1973* as modified by the Protocol of 1978 (MARPOL) and its related codes, which together provide the framework for the prevention of chemical pollution from ships in bulk or packaged form, which also incorporate aspects of preparedness and response;
- 2** *Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances, 2000* (OPRC-HNS Protocol), which provides the framework for the development of national and regional systems of response and a platform for mutual aid and multilateral co-operation; and
- 3** *the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996* (HNS Convention) and

its Protocol, addressing liability and compensation for HNS pollution incidents.

13 Other legal regimes such as bilateral or regional agreements and, to the extent consistent with international law, domestic legal regimes may also govern these topics. Depending on the legal instrument referred to chemical substances may be identified in various ways, such as “hazardous and noxious substances”, “noxious liquid substances in bulk”, “and harmful materials and substances carried in packaged form”, “dangerous goods” or more colloquially as “hazardous materials” or “hazmat”. They all nevertheless address some form of pollution incident, which may involve a chemical or a combination of chemical substances.

14 This document focuses primarily on Hazardous and Noxious Substances (HNS) as defined by the OPRC-HNS Protocol 2000, which defines HNS as follows:

“Hazardous and noxious substance means, any substance other than oil which, if introduced into the marine environment is likely to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea.”

15 Like the OPRC Convention 1990, the OPRC-HNS Protocol 2000 aims to provide a framework for the development of national and regional capacity to prepare for and respond to HNS pollution incidents, and a platform to facilitate international co-operation and mutual assistance in combating major incidents or threats of marine pollution from hazardous and noxious substances. Parties to the Protocol are required to establish appropriate measures for responding to pollution incidents, either nationally or in co-operation with other countries. Ships are required to carry a shipboard pollution emergency plan (SMPEP) on board to specifically address incidents involving HNS.

16 The Protocol also requires each Party to maintain a HNS pollution contingency plan and, within its capabilities, a minimum level of pre-positioned equipment for responding to pollution incidents. Each Party is also obligated to require its ships, and as appropriate its sea ports and HNS handling facilities, to have pollution incident emergency plans or similar arrangements.

17 Following the adoption of the OPRC-HNS Protocol and recognizing the benefit of liability and compensation regimes for HNS pollution incidents, the *International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances (HNS) by Sea, 1966* was adopted in May 1996, regarding compensation to

victims of maritime incidents involving HNS. The HNS Convention aims to ensure adequate, prompt and effective compensation for damage to persons and property, costs of clean-up and reinstatement measures and certain economic losses caused by the maritime transport of hazardous and noxious substances (HNS).

18 It should be noted that the risk and resulting response to incidents involving HNS can vary significantly to the response to marine oil spills. A single HNS can have a number of chemical names associated with it, or may be identified by a variety of trade names, which in some cases may take time to identify the component chemical substance. A single vessel may transport a combination of product types which, if involved in a maritime incident, may potentially mix, causing a dangerous reaction or the creation of more hazardous by-products. A fire or explosion on board vessels transporting HNS as bulk cargo, in ISO tank containers or as packaged cargo in containers may result in the generation of toxic fumes.

19 As a result, the safety of personnel and the public is of paramount importance for HNS incidents, given the potential significant and immediate threat to human health in comparison to an oil spill, depending on the nature of the substance or substances involved and the type of incident encountered (spill, fire, leak).

Chapter II

Roles and functions of entities which could be involved in an HNS pollution emergency and its aftermath

There are many different entities involved in the transportation of HNS by sea. When a pollution incident involving HNS occurs, there are even more entities that will have a role and/or responsibilities and obligations, in order to protect life and to prevent or minimize damage to the marine environment. Chapter II attempts to identify the various players, define their respective roles, responsibilities and obligations, and the nature of the relationship between them, both for regular operations and during a marine pollution incident, in many pollution incident scenarios. In any given actual spill scenario, facts, entities, roles, relationships and functions may vary.

2.1 Shipowner

General rights and obligations

2.1.1 The ownership structures of ships are varied. The main parties that a coastal State is likely to encounter in a marine pollution emergency are:

- .1 the shipowner;
- .2 bareboat charterer;
- .3 time charterer;
- .4 technical manager; and
- .5 commercial operator.

2.1.2 The phrase “shipowner” is used throughout the Manual. However, in some cases a ship may be owned by more than one entity on a share basis, with the traditional denomination of 64ths being the common standard. In such cases, there is usually an agreement between the owners that one will take operational decisions on behalf of all, and joint ownership only becomes of particular interest when recovery of damages is sought.

2.1.3 The technical manager of the vessel is responsible for the technical operation of the ship. Commercial management may be established in any number of ways. However, the master will act as the agent of the ship and cargo owner.

2.1.4 The interests of the ship are, to a certain extent, protected under international law. For example, not only is there freedom of navigation on the high seas, but ships are generally also entitled to the right of innocent passage through territorial sea. In some cases where a marine pollution emergency occurs that threatens to or causes damage to the coastline of a State or its related interests, however, the coastal State may, in accordance with international law and its own domestic law, take measures to protect its interests.

2.1.5 The primary concern of the shipowner in a marine pollution emergency will be the preservation of life, followed by the preservation of property (ship and cargo) and the protection of the environment, especially if there is a significant release of HNS or oil. He will therefore be concerned about the protection of his proprietary interest in the ship, the contractual obligations concerning the cargo and the potential environmental consequences, given the shipowner's strict liability under many regimes in the event of a pollution incident. The shipowner should liaise with all parties directly concerned with the position of the ship in the emergency, either directly through the master or his nominated agent.

2.1.6 In addition to the general rights and obligations concerning the operation of the ship, the shipowner, or his nominated agent, typically has certain specific obligations concerning:

- .1 documentation that is required and carried on board for HNS pollution preparedness and response;
- .2 notification of the marine pollution emergency to the nearest coastal State;
- .3 pollution response and clean-up; and
- .4 compensation.

Shipboard marine pollution emergency plan (SMPEP)

2.1.7 In 1999, amendments to MARPOL Annex II were adopted that added a new regulation 17 which requires ships of 150 gross tonnage and above certified for the carriage of noxious liquid substances (NLS) in bulk to carry a contingency plan on board identifying the procedures to be followed in the event of a spill or a probable spill of NLS. This requirement also includes procedures for notifying the relevant authorities. The plan is called a shipboard marine pollution emergency plan for noxious liquid substances (SMPEP/NLS). This new Annex II requirement is a similar requirement to regulation 37 of MARPOL Annex I, which requires ships carrying oil in bulk, either as cargo or bunkers, to have a contingency plan on board, referred to as a Shipboard Oil Pollution Emergency Plan (SOPEP).

2.1.8 The two planning requirements under MARPOL for oil and HNS are quite similar. Taking this into account and recognizing that ships certified for the carriage of noxious liquid substances that are carrying oil either as cargo or bunkers would require both plans on board, regulation 17 of Annex II and regulation 37 of Annex I allow for the two to be combined into a single plan called a shipboard marine pollution emergency plan (SMPEP).

2.1.9 In addition, ships flying the flag of a Party to the OPRC-HNS Protocol must carry on board a pollution emergency plan for incidents involving hazardous and noxious substances for any HNS carried on board. The SMPEP, as required under MARPOL for NLS, would also satisfy the requirement for a “Pollution Incident Emergency Plan” under the OPRC-HNS Protocol.

2.1.10 The Guidelines for the Development of Shipboard Marine Pollution Emergency Plans have been developed by IMO to help Administrations and shipowners meet this planning requirement. The Guidelines provide instructions and guidance on the development of SOPEPs and SMPEPs, with sample formats included.

The ISM Code

2.1.11 The *International Management Code for the Safe Operation of Ships and for Pollution Prevention* (ISM Code), which became mandatory in July 1998 by amendments to the *International Convention for the Safety of Life at Sea, 1974* (SOLAS), may also assist. The purpose of this Code is to provide an international standard for the safe management and operation of ships and for pollution prevention. The objectives of the Code are to ensure safety at sea, prevention of human injury or loss of life, and avoidance of damage to the environment, in particular, to the marine environment, and to property. Under the Code every Company should develop, implement and maintain a Safety Management System (SMS) which includes the following functional requirements:

- .1** a safety and environmental protection policy;
- .2** instructions and procedures to ensure safe operation of ships and protection of the environment in compliance with relevant international and flag State legislation;
- .3** defined levels of authority and lines of communication between, and amongst, shore and shipboard personnel;
- .4** procedures for reporting accidents and non-conformities with the provisions of this Code;

- .5 procedures to prepare for and respond to emergency situations; and
- .6 procedures for internal audits and management reviews.

2.1.12 The Code addresses the need for a link between the company and those on board by providing that every company, as appropriate, should designate a person or persons ashore that have direct access to the highest level of company management. The responsibility and authority of the designated person ashore (DPA) should include monitoring the safety and pollution prevention aspects of the operation of each ship and ensure that adequate resources and shore-based support are available, as required.

2.1.13 The Code provides for the establishment of procedures for the preparation of plans and instructions for key shipboard operations concerning the safety of the ship and the prevention of pollution (section 7). The various tasks are to be defined and assigned to qualified personnel.

2.1.14 The Code also provides for the establishment of procedures to identify and respond to potential emergency shipboard situations, including a programme for drills and exercises to prepare for emergency actions and measures ensuring that the company's organization can respond at any time to hazards, accidents and to that ship (section 8). In the ISM Code, the company means "the owner of the ship or any other organization or person such as the manager, or the bareboat charterer, who has assumed the responsibility for operation of the ship from the shipowner and who, on assuming such responsibility, has agreed to take over all duties and responsibility imposed by the Code".

Notification and reporting

2.1.15 Reporting is obliged under both MARPOL (Article 8 and Protocol I) and the OPRC-HNS Protocol (Article 3), and may also be obliged by other international (e.g. bilateral or regional) agreements and applicable national law, to ensure relevant authorities are aware of any HNS marine pollution emergency which has arisen. The master of the ship is expected to make such reports. However, if the ship has been abandoned, or if the master's report is incomplete, then the need to report falls on the owner, charterer, manager or operator.

Pollution response and clean-up

2.1.16 The obligation of a shipowner to undertake HNS pollution response and clean-up measures depends upon applicable domestic law, for example of the State where the pollution occurs. Execution of pollution response