



**Progetto di realizzazione del nuovo sealine e del campo boe per lo scarico
di gasolio e benzina da navi petroliere al largo del Porto di Pescara**

**Relazione tecnica - Chiarimenti volontari del Proponente nell'ambito della
Procedura Istruttoria VIA**

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ISGOTT

International Safety Guide for Oil Tankers and Terminals
Fifth Edition



International Chamber of Shipping
Oil Companies International Marine Forum • International Association of Ports and Harbors



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Introduction to Fifth Edition

Safety is critical to the tanker industry. The International Safety Guide for Oil Tankers and Terminals, or ISGOTT as it is now widely known, has become the standard reference work on the safe operation of oil tankers and the terminals they serve. To remain so, the Guide must keep abreast of changes in vessel design and operating practice and reflect the latest technology and legislation.

In this Fifth Edition, account has been taken of latest thinking on a number of issues including the generation of static electricity and stray currents; the use of mobile phones and pagers which are now ever present but which did not warrant a mention in the Fourth Edition; the use of new materials for mooring lines as emergency towing off pennants; the toxicity and the toxic effects of benzene and hydrogen sulphide; and the introduction of the International Safety Management (ISM) Code. The Ship/Shore Safety Check List has been completely revised to better reflect the individual and joint responsibilities of the tanker and the terminal.

The Guide is now divided into four sections: General Information; Tanker Information; Terminal Information and the Management of the Tanker and Terminal Interface. Care has been taken to ensure that where the guidance given in previous editions was still relevant and fit-for purpose it has not been changed or deleted in moving to the new format.

We believe that ISGOTT continues to provide the best technical guidance on tanker and terminal operations. All operators are urged to ensure that the recommendations in this guide are not only read and fully understood, but also followed.

PURPOSE AND SCOPE

This Guide makes recommendations for tanker and terminal personnel on the safe carriage and handling of crude oil and petroleum products on tankers and at terminals. It was first published in 1978 by combining the contents of the 'Tanker Safety Guide (Petroleum)' published by the International Chamber of Shipping (ICS) and the 'International Oil Tanker and Terminal Safety Guide' published on behalf of the Oil Companies International Marine Forum (OCIMF). In producing this Fifth Edition, the content has again been reviewed by these organisations, together with the International Association of Ports and Harbours (IAPH), to ensure that it continues to reflect current best practices and legislation. The scope has been extended by increasing the amount of information on terminal safety systems and activities. This has been achieved, in part, by incorporating information from the OCIMF publication 'Guide on Marine Terminal Fire Protection and Emergency Evacuation'.

This latest edition takes account of recent changes in recommended operating procedures, particularly those prompted by the introduction of the International Safety Management (ISM) Code, which became mandatory for tankers on 1st July 1998. One of the purposes of the Guide is therefore to provide information that will assist companies in the development of a Safety Management System to meet the requirements of the ISM Code.

This guide does not provide a definitive description of how tanker and terminal operations are conducted. It does provide guidance and examples of how certain aspects of tanker and terminal operations may be managed. Effective management of risk demands processes and controls that can quickly adapt to change. Therefore the guidance given is, in many cases, intentionally non prescriptive and alternative procedures may be adopted by some operators in the management of their operations. These alternative procedures may exceed the recommendations contained in this guide. Where an operator has adopted alternative procedures, they should follow a risk based management process that must incorporate systems for identifying and assessing the risks and for demonstrating how they are managed. For shipboard operations, this course of action must satisfy the requirements of the ISM Code.

It should be borne in mind that, in all cases, the advice in the guide is subject to any local or national terminal regulations that may be applicable, and those concerned should ensure that they are aware of any such requirements.

It is recommended that a copy of the guide be kept — and used — on board every tanker and in every terminal to provide advice on operational procedures and the shared responsibility for port operations.

Certain subjects are dealt with in greater detail in other publications issued by IMO or by ICS, OCIMF or by other maritime industry organisations. Where this is the case an appropriate reference is made, and a list of these and other related publications is given in the bibliography.

It is not the purpose of the guide to make recommendations on design or construction. Information on these matters may be obtained from national authorities and from authorised bodies such as Classification Societies. Similarly, the guide does not attempt to deal with certain other safety related matters — e.g. navigation, helicopter operations, and shipyard safety — although some aspects are inevitably touched upon. It should also be noted that the guide does not relate to cargoes other than crude oil that is carried in oil tankers and combination carriers and petroleum products that are carried in oil tankers,

chemical tankers, gas carriers and combination carriers certified for the carriage of petroleum products. It therefore does not cover the carriage of chemicals or liquefied gases, which are the subject of other industry guides. Finally the guide is not intended to encompass offshore facilities including FPSOs and FSUs. Operators of such units may, however, wish to consider the guidance given to the extent that good tanker practice is equally applicable to their operations.

Comments and suggestions for improvement are always welcome for possible inclusion in future editions. They may be addressed to any of the three sponsoring organisations, as follows: -

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- 21.4 Training and Drills**

PART 4 – OPERATIONS CONTROLLED UNDER SHIP/SHORE INTERFACE MANAGEMENT

22 COMMUNICATIONS

- 22.1 Procedures and Precautions**
 - 22.1.1 Communications Equipment
 - 22.1.2 Communications Procedures
 - 22.1.3 Compliance with Terminal and Local Regulations
- 22.2 Pre-Arrival Exchange of Information**
 - 22.2.1 Exchange of Security Information
 - 22.2.2 Tanker to Appropriate Competent Authority
 - 22.2.3 Tanker to Terminal
 - 22.2.4 Terminal to Tanker
- 22.3 Pre-Berthing Exchange of Information**
 - 22.3.1 Tanker to Terminal and/or Pilot
 - 22.3.2 Terminal and/or Pilot to Tanker
- 22.4 Pre-Transfer Exchange of Information**
 - 22.4.1 Tanker to Terminal
 - 22.4.2 Terminal to Tanker
- 22.5 Agreed Loading Plan**
- 22.6 Agreed Discharge Plan**
- 22.7 Repairs**
 - 22.7.1 Repairs on the Tanker
 - 22.7.2 Repairs on the Terminal
 - 22.7.3 Use of Tools on the Tanker or Terminal

23 MOORING

- 23.1 Personnel Safety**
- 23.2 Security of Moorings**
- 23.3 Preparations for Arrival**
 - 23.3.1 Tanker's Mooring Equipment
 - 23.3.2 Use of Tugs
 - 23.3.3 Emergency Use of Tugs

- 23.4 Mooring at Jetty Berths**
 - 23.4.1 Type and Quality of Mooring Lines
 - 23.4.2 Management of Moorings at Alongside Berths
- 23.5 Berthing at Buoy Moorings**
 - 23.5.1 Mooring at Conventional Multi Buoy Moorings
 - 23.5.2 Mooring at Single Point Moorings (SPM)
 - 23.5.3 Management of Moorings at Buoy Berths
 - 23.5.4 Additional Moorings

- 24 PRECAUTIONS DURING CARGO HANDLING**
 - 24.1 External Openings in Superstructures**
 - 24.2 Central Air Conditioning and Ventilation Systems**
 - 24.3 Openings in Cargo Tanks**
 - 24.3.1 Cargo Tank Lids
 - 24.3.2 Sighting and Ullage Ports
 - 24.3.3 Cargo Tank Vent Outlets
 - 24.3.4 Tank Washing Openings
 - 24.4 Inspection of Ship's Cargo Tanks Before Loading**
 - 24.5 Segregated Ballast Tank Lids**
 - 24.6 Ship and Shore Cargo Connections**
 - 24.6.1 Flange Connections
 - 24.6.2 Removal of Blank Flanges
 - 24.6.3 Reducers and Spools
 - 24.6.4 Lighting
 - 24.7 Accidental Oil Spillage and Leakage**
 - 24.7.1 General
 - 24.7.2 Sea and Overboard Discharge Valves
 - 24.7.3 Scupper Plugs
 - 24.7.4 Spill Containment
 - 24.7.5 Ship and Shore Cargo and Bunker Pipelines not in Use
 - 24.8 Fire Fighting Equipment**
 - 24.9 Proximity to Other Vessels**
 - 24.9.1 Tankers at Adjacent Berths
 - 24.9.2 General Cargo Ships at Adjacent Berths
 - 24.9.3 Tanker Operations at General Cargo Berths
 - 24.9.4 Tugs and Other Craft Alongside
 - 24.10 Notices**
 - 24.10.1 Notices on the Tanker
 - 24.10.2 Notices on the Terminal
 - 24.11 Manning Requirements**
 - 24.12 Control of Naked Flames and Other Potential Ignition Sources**
 - 24.13 Helicopter Operations**

- 25 BUNKERING OPERATIONS**
 - 25.1 General**
 - 25.2 Bunkering Procedures**
 - 25.3 The Bunkering Operation**
 - 25.4 The Bunkering Safety Check List**
 - 25.4.1 General
 - 25.4.2 Guidelines for Use
 - 25.4.3 Bunkering Safety Check List

- 26 SAFETY MANAGEMENT**
 - 26.1 Climatic Conditions**

- 26.1.1 Terminal Advice of Adverse Weather Conditions
- 26.1.2 Still Wind Conditions
- 26.1.3 Electrical Storms (Lightning)

26.2 Personnel Safety

- 26.2.1 Personal Protective Equipment (PPE)
- 26.2.2 Slip and Fall Hazards
- 26.2.3 Personal Hygiene
- 26.2.4 Clothing Made of Synthetic Materials

26.3 The Ship/Shore Safety Check List

- 26.3.1 General
- 26.3.2 Guidelines for Use
- 26.3.3 Ship/Shore Safety Check List
- 26.3.4 Example Safety Letter

26.4 Guidelines for Completing the Ship/Shore Safety Check List

26.5 Emergency Procedures

- 26.5.1 Fire or Explosion on a Berth
- 26.5.2 Fire on a Tanker at a Terminal
- 26.5.3 International Shore Fire Connection
- 26.5.4 Emergency Release Procedures