Republika ng Pilipinas
PANGASIWAAN NG DAUNGAN NG PILIPINAS
(PHILIPPINE PORTS AUTHORITY)
Marsman Bldg 22 M de San Francisco
South Harbor Manila 1018

PHILIPPINE CENTENNIAL 1898 1998 100 KALAYAAN

SEP 04 1997

PPA ADMINISTRATIVE ORDER NUMBER 08 - 97

TO: **District Managers**
Port Managers
Private Port Operators
Port Users
All Others Concerned

SUBJ: **Code of Safe Handling, Storage and Transport of Dangerous Cargoes in Ports**

Pursuant to the provisions of Section 27 of Presidential Decree No. 857, otherwise known as the "Revised Charter of the Philippine Ports Authority", and in accordance with the resolution passed during the "Workshop on Dangerous Cargoes in ASEAN Ports" held in Jakarta, Indonesia on November 13-17, 1995 which was sponsored by the ASEAN Ports Association (APA) in coordination with the International Maritime Organization (IMO), this Code is hereby issued for the compliance and guidance by all port managers, private port operators, port users and others concerned.

CARLOS L. AGUSTIN
General Manager, PPA

Annex: Code of Safe Handling, Storage and Transport of Dangerous Cargoes in Ports

Published in the MANILA STANDARD
September 13, 1997
Effectivity Date - September 28, 1997

Telephone Nos 527-4844
527-8356

Facsimile Nos 527-4853
527-5855

822

TABLE OF CONTENTS

Republika ng Pilipinas
PANGASIWAAN NG DAUNGAN NG PILIPINAS
(PHILIPPINE PORTS AUTHORITY)
Marsman Bldg 22 M de San Francisco
South Harbor, Manila 1018

CODE OF SAFE HANDLING, STORAGE AND TRANSPORT OF DANGEROUS CARGOES IN PORTS

1. AUTHORITY

1.1 Section 27 of PD 857
1.2 MSC/Circ. 675, Jan. 30, 1995, Entitled "Recommendations on the Safe Transport of Dangerous Cargoes and Related Activities in Port Areas" of the International Maritime Organization
1.3 Article VI of PPA Administrative Order No. 13-77
1.4 Article XVII of the Dockwork Safety and Health Standards

2. PURPOSE

To monitor and control the presence, entry and movement of dangerous cargoes in the Philippine ports so as to ensure the general safety of the ports, the containment of the cargoes, the safety of all persons in or near the port premises and the protection of the environment.

3. SCOPE

3.1 This Order shall apply to the entry, movement and presence of dangerous cargoes in ports, both in domestic and foreign ships and on shore. The ships referred to exclude troopships and warships.

3.2 Refineries, chemical plants, factories, etc. although operating within the port shall not be covered by this Order except for jetties or wharves undertaking related activities.

4. DEFINITION OF TERMS

4.1 Authority - means the Philippine Ports Authority.

4.2 Port Users - refer to the bodies, organizations or persons, including those engaged in maritime, hauling ancillary, handling and other related services, who are authorized to work on board vessels, in terminals or in other work places within the jurisdiction of the Authority.

4.3 Port - means the territorial jurisdiction under the control, supervision, or ownership of the Authority over an area (land or sea), declared as such in accordance with Section 5 of the Presidential Decree No. 857.

4.4 PMO - means the Port Management Office of the Authority other than its principal office.

4.5 PDO - means the Port District Office of the Authority.

4.6 DCA - means the Dangerous Cargo Area.

4.7 Dangerous cargoes - means any of the following cargoes, whether in bulk, break-bulk or loose cargoes, or in freight container:

4.7.1 oils covered by Annex 1 of MARPOL 73/78;

4.7.2 gases covered by the Codes for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk;

4.7.3 noxious liquid substances/chemicals, including wastes covered by the Codes for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk and Annex II of MARPOL 73/78.

4.7.4 dangerous, hazardous and harmful substances, materials and articles including environmentally hazardous substances (marine pollutants) and wastes, covered by the International Maritime Dangerous Goods (IMDG) Code; and

4.7.5 solid bulk materials possessing chemical hazards and solid bulk materials hazardous only in bulk (MHBs), including wastes, covered by Appendix B of the Code of Safe Practice for Solid Bulk Cargoes.

4.7.6 The term dangerous cargoes includes any empty uncleaned packagings (such as tank-containers, receptacles, intermediate bulk containers (IBCs), bulk packagings, portable tanks or tank vehicles) which previously contained dangerous cargoes, unless the packagings have been sufficiently cleaned of residue of the dangerous cargoes and purged of vapours so as to nullify any hazard or has been filled with a non-dangerous substance.

4.8 Bulk - means a homogeneous cargo stored in bulk, that is to say, loose in the hold/storage and not enclosed in any container such as boxes, bags, casks, and so on. Bulk cargo may be composed of free flowing articles such as grain, coal, etc..

4.9 Break-bulk - means cargoes which are packed in drums, bags, crates, cartons, or case like but not contained in van or freight container.

4.10 Competent person - means a person, through his experience and/or training became qualified and has been authorized to perform a task or function or assume a responsibility in a manner that will prevent danger or accident as far as practicable.

4.11 Hot work - means the use of open fires and flames, power tools or hot rivets, grinding, soldering, burning, cutting, welding or any other repair work involving heat or creating sparks which may lead to a hazard because of the presence or proximity of dangerous cargoes.

4.12 Responsible person - means a person appointed by a shore side employer or the Master of a ship empowered to take all decisions relating to his specific task, having the necessary current knowledge and experience for that purpose and, where required, is suitably certified or otherwise recognized by any agency of the government.

4.13 Certificate of Fitness - means a certificate issued by or on behalf of an Administration in accordance with the relevant codes for the construction and equipment of a type of ship certifying that the construction and equipment of the ship are such that certain specified dangerous cargoes may be carried in that ship.

4.14 Master - means any person other than a pilot or a watchman, having charge of a ship.

4.15 Document of Compliance - means a document issued by or on behalf of an Administration to ships carrying dangerous cargoes in packaged form or in solid form in bulk under SOLAS regulation II-2/54.

4.16 IMDG - means the International Maritime Dangerous Goods Code.

4.17 Unstable substance - means a substance which, by nature of its chemical make-up, tends to polymerize or otherwise react in a dangerous manner under certain

conditions of temperature or in contact with a catalyst. Mitigation of this tendency can be carried out either by special transport conditions or by introducing adequate amounts of chemical inhibitors or stabilizers to the product.

4.18 IMO - means the International Maritime Organization

4.19 Flexible pipe - means a flexible hose and its end fittings, which may include means of sealing the ends, used for the purpose of transferring dangerous cargoes.

4.20 Pipeline - means all pipes, connections, valves and other ancillary plant, apparatus and appliances in a port provided or used for or in connection with the handling of dangerous cargoes, but does not include a flexible pipe, loading arm or any part of a ship's pipes, apparatus or equipment other than the termination of those parts of the ship's pipes apparatus or equipment to which a flexible pipe is connected.

4.21 Loading arm - means an articulated hard pipe system and its associated equipment, which may include quick release couplings, emergency release systems or hydraulic power pack, used for the purpose of transferring dangerous cargoes.

4.22 Ship's stores - materials which are on board a ship for the upkeep, maintenance, safety, operation or navigation of the ship (except for fuel and compressed air used for the ship's primary propulsion machinery or for fixed auxiliary equipment) or for the safety or comfort of the ship's passengers or crew. Materials which are intended for use in commercial operations by a ship are not considered as ship's stores (e.g. materials used for diving, surveying and salvage operations).

4.23 Stowage - means the positioning of packages, intermediate bulk containers (IBCs), freight containers, tank containers, portable tanks, bulk packagings, vehicles, shipborne barges, other cargo transport units and bulk cargoes on board ships, in warehouses, sheds or other areas.

4.24 Transport - means the movement by one or more modes of transport in the port.

5 WAREHOUSES, TERMINAL AREAS AND INFRASTRUCTURE FOR DANGEROUS CARGOES

5.1 General

5.1.1 This Section relates to jetties, pipelines, cargo sheds, container stacking areas, warehouses and terminal areas for dangerous cargoes, access and transport roads, rail links and waterways within the port.

5.2 Land Use Planning

5.2.1 When planning new facilities or upgrading existing facilities in a Port District, all concerned including the port users, the PDOs/PMOs and the Engineering Office of the Authority shall consider the following factors:

5.2.1.1 the protection of health, property and the environment;

5.2.1.2 the dangerous cargoes to be transported or handled;

5.2.1.3 other hazardous installations in the vicinity;

5.2.1.4 population density in the area under consideration including vulnerability of the population;

5.2.1.5 ease of evacuation or other measures which may need to be taken in the event of an accident;

5.2.1.6 emergency services and procedures available;

5.2.1.7 possibility and probability of an accident occurring and the effects on health, property and the environment, depending on the dangerous cargoes to be transported or handled;

5.2.1.8 the provision of repair and cleaning facilities for ships and cargo transport units; and

5.2.1.9 the requirements of MARPOL 73/78 with respect to reception facilities.

5.2.2 Land use planning decisions shall take into

account the cumulative risk of all hazardous installations and substances in the vicinity of ports.

5.2.3 Land use planning shall always take into account international guidelines, experience and recommendations available from the various international bodies.

5.3 Considerations for substances harmful to the aquatic environment

5.3.1 Where practicable, wherever such substances are present in the port, suitable means shall be used to prevent these substances entering into the soil, water areas or drainage systems. This also applies to pipe and conveyor bridges.

5.3.2 Whenever practicable, drainage systems shall be furnished with shut-off valves, sumps or basins and shore discharge facilities for contaminated water.

5.3.3 Whenever practicable, such areas shall be separated by containment walls, bunds or sills.

5.4 Dangerous cargo areas

5.4.1 All PMOs, except South Harbor and MICT where a Centralized Dangerous Cargo Area already exists, shall designate an area for storage of dangerous cargoes which shall separate dangerous cargoes from the general or ordinary cargoes. Such area shall have the facilities appropriate to the hazards emanating from the cargoes to be kept.

5.4.2 DCAs shall include the following facilities/considerations:

5.4.2.1 Separate ventilation, drainage, fire resisting walls, ceilings, explosive proof bulbs, etc.;

5.4.2.2 Enough space for the segregation of incompatible dangerous cargoes and for the separation of the various classes of dangerous cargoes;

5.4.2.3 Space for the hauling and handling equipment;

5.4.2.4 Adequate access in case of an emergency;

5.4.2.5 Container stacking areas; and

5.4.2.6 Appropriate number of fire fighting equipment.

5.4.3 Segregation requirements as provided for in the Segregation Table (Annex 1) shall be met in storing dangerous cargoes of different classifications.

5.5 Fumigation areas

5.5.1 Separate areas shall be provided or designated by the PMO for ships and.or cargo transport units to be fumigated.

5.5.2 Whenever practicable, these areas shall be fenced off to prevent the entry of unauthorized persons and shall have facilities for watchmen. The facilities shall include adequate means of communication.

5.6 Special areas for damaged dangerous cargoes and wastes contaminated with dangerous cargoes

5.6.1 Special areas for damaged dangerous cargoes and wastes contaminated with dangerous cargoes shall be provided by the Cargo Handling Contractor and/or the DCA Operator, where damaged dangerous cargoes may be repacked or contaminated wastes separated and kept until their disposal.

5.6.2 Such areas shall, where appropriate, be covered, have a sealed floor or ground, separate drainage systems with shut-off valves, sumps or basins and means to discharge contaminated water to special facilities in order to safeguard the port and the environment.

5.6.3 Such areas shall be fenced off to prevent the entry of unauthorized persons and shall have facilities for watchmen. The facilities shall include adequate means of communication.

5.7 Repair/cleaning facilties

5.7.1 Where repair or cleaning facilities for ships or cargo transport units are provided, these shall be situated well away from any area where dangerous cargoes are transported or handled.

5.7.2 Cleaning facilities shall be designed and constructed to protect the environment when environmentally hazardous substances are used or are otherwise involved in the cleaning process.

5.8 Tank storage and pipelines

5.8.1 Where the storage of liquid bulk dangerous cargoes, including pipelines, is located in the port, permanent installations shall be designed, constructed and maintained in accordance with the existing government safety regulations, taking into account the temperature, the development of pressure and the compatibility of substances.

6 TRAINING

6.1 Personnel required to attend

6.1.1 All personnel of the Authority, Cargo Handling Contractors, DCA Operators, Shipping Owners/Agents, Haulers/Truckers, Importers/ Exporters and other port users concerned involved, directly or indirectly, in the transport and handling of dangerous cargoes shall be adequately trained in the safe handling and transport of the same.

6.2 Training content

6.2.1 The training to be conducted for the safe handling and transport of dangerous cargoes shall be designed to provide the following:

6.2.1.1 familiarity with the general hazards of relevant dangerous cargoes and the regulations governing their safe handling and transport;

6.2.1.2 description of the classes of dangerous cargoes, marking, labelling, placarding, packaging and segregation requirements;

6.2.1.3 prevention of exposure to the hazards posed by dangerous cargoes and the use of personal protective clothing and equipment;

6.2.1.4 methods and procedures for accident avoidance, such as proper use of package handling equipment and appropriate methods of stowage and segregation of dangerous cargoes;

6.2.1.5 immediate procedures to be followed in an event of an unintentional release of dangerous cargoes, including any emergency response procedures for which

the person is responsible and the personal protection to be followed; and

6.2.1.6 necessary emergency response information and how to use it.

7. RESPONSIBILITY

7.1 PDOs and PMOs

7.1.1 All PDOs and PMOs shall:

7.1.1.1 ensure that this Order is enforced and that the compliance by all concerned is monitored;

7.1.1.2 in the implementation of this Order, coordinate, if necessary, with government agencies concerned;

7.1.1.3 issue specific implementing guidelines, procedures and instructions for certain provisions of this Order; and

7.1.1.4 review regularly the provisions of this Order and submit recommendations.

7.2 Port Operation and Services Department

7.2.1 The POSD shall regularly monitor the implementation of this Order and the compliance thereof, and formulate the necessary guidelines as appropriate.

7.2.1 The POSD shall establish guidelines for measures to be taken to ensure the safe transport and handling of dangerous cargoes, especially the packing, storage and segregation of incompatible cargoes. Reference is made to Sections 10, 14 and 15 of the General Introduction to the IMDG Code.

7.3 Facilities, Construction and Maintenance Department, Port Planning Department and Project Development Department

7.3.1 These Departments, as mentioned in 7.3, shall ensure that the relevant and technical provisions of this Order are considered particularly in the development, rehabilitation and construction of a port.

7.4 Philippine Ports Authority Training Center (PPATC)

7.4.1 PPATC shall continue to upgrade and make the training on the safe transport, storage and handling of dangerous cargoes an on-going training activity.

7.5 Port users concerned

7.5.1 Cargo Handling Contractors, DCA operators, Shipping owners/agents, Haulers/Trucking Companies and other port users concerned shall:

7.5.1.1 have the prime responsibility for carrying out the transport and handling of dangerous cargoes in a manner which safeguards the health and safety of their employees and others including the general public. who may be affected by the operations.

7.5.1.2 provide appropriate information, instruction, training and supervision to their employees to ensure that the safe operational procedures are followed in practice. Such supervision shall include procedures to verify that dangerous cargoes comply with the pertinent existing regulations and can be accepted for onward transport.

7.5.1.3 ensure that the safety of all aspects of the transport and handling of dangerous cargoes is regularly reviewed.

7.5.1.4 maintain close coordination with the PDO/PMO on matters pertaining to dangerous cargoes.

7.5.1.5 ensure that they are aware of the hazards posed by the dangerous cargoes they are transporting or handling.

7.5.1.6 ensure that the transfer, loading, unloading, stripping, stuffing, transporting and other movement of dangerous cargoes shall be covered by an appropriate Handling Permit issued by the Authority.

7.6 Cargo Handling Contractors

7.6.1 The Cargo Handling Contractor shall:

7.6.1.1 ensure that appropriate plans are made to

deal with all foreseeable emergencies. Such plans shall be coordinated with the port emergency plan and relate to incidents and their consequences in the area they control and in adjacent areas or premises.

7.6.1.2 ensure that all accidents involving dangerous cargoes, including those involving property, are properly investigated to identify their causes, reported as required, and that the necessary remedial action is taken promptly to correct any deficiencies and to prevent any recurrence.

7.7 Shipping Owners/agents, Shippers, Importers/Exporters, Trucking Companies

7.7.1 The companies mentioned in 7.7 shall ensure that the dangerous cargoes they forward by land or by sea comply with relevant regulations and requirements such as the proper labelling of packages/containers, the training of personnel involved in the handling of dangerous cargoes, the proper declaration using the technical name or shipping name of cargo in question, etc.

8 ACCEPTABILITY OF DANGEROUS CARGOES IN THE PORT

8.1 The PMOs shall determine the classes and quantities of dangerous cargoes which may be permitted to transit or enter the port/s within their area/s of jurisdiction by any mode of transport and the conditions under which they are to be handled, having regard to the facilities available for the reception and keeping of dangerous cargoes and the location of the port in relation to nearby installations and centers of population.

8.2 The PMOs shall have the right to refuse dangerous cargoes intended for keeping within, or transit through the port, if it is considered that their presence would endanger life or property because of their condition, the condition of their containment, the condition of their mode of conveyance, or the conditions of the port. Notwithstanding this provision, all reasonable effort shall be made to aid a ship in distress, particularly when the lives of its crew are in danger.

8.3 If any dangerous cargo within the port constitutes an unacceptable hazards, the PMO concerned shall be able to remove, or order the removal of any such cargo or ship, package, freight container, tank-container, portable tank, vehicle or other cargo transport unit

containing it.

8.4 An unstable substance shall not be accepted unless all conditions necessary to ensure its safe transport and handling have been specified and met.

9. ADVANCE NOTIFICATION

9.1 Shipping owners/agents of incoming foreign and domestic ship shall notify the Authority not less than 24 hours in advance of the arrival in the port of dangerous cargoes either in bulk, break-bulk or freight container. Such notification shall include the following items and informations:

9.1.1 Correct technical name (proper shipping name) of the dangerous cargo in accordance with the IMDG Code.

9.1.2 IMO class

9.1.3 United Nations Serial Number

9.1.4 Number and kind of packages, the total quantity of dangerous cargoes (gross weight)

9.1.5 Minimum flashpoint, in case of flammable liquid

9.1.6 Name and address of the consignee

9.2 Advance notification shall likewise be given by the Shipping owner/agent to the Authority when the ship or cargo transport unit arrives under fumigation. The notification shall contain the name of the fumigant and the date of application.

9.3 The advance notification shall include any deficiency of the ship, its equipment and/or the containment of dangerous cargoes which may affect the safety of the port and/or the ship.

9.4 The Ship owner/agent shall notify the Authority not less than 3 hours prior to the departure of a ship carrying dangerous cargoes on board.

9.5 The advance arrival shall be given by letter and the departure notification shall be given by letter or telefax.

9.6 For dangerous cargoes arriving by road, rail or inland watercraft, advance notification shall be given by the Shipper/Exporter or its Broker.

9.7 The information which shall be given is set at Annex 2.

10. EMERGENCY PLAN/PROCEDURES/INFORMATION

10.1 The Cargo Handling Contractors and DCA Operators shall, in coordination with the Authority and other government agencies concerned, prepare an emergency plan and response program to include the following:

10.1.1* an organization of Fire Brigade or a similar organization composed of a well-trained and appropriately equipped port personnel;

10.1.2 provision of appropriate emergency response alarm operating points;

10.1.3 procedures for notification of an incident or emergency to the appropriate emergency response services within and outside the port;

10.1.4 procedures for notification of an incident or emergency to the port users both on land and water;

10.1.5 the provision of emergency equipment appropriate to the hazards of the dangerous cargoes to be handled;

10.1.6 the formation of a local emergency respose team to coordinate action in the case of a major emergency and to deal with any day-to-day untoward incidents such as a minor leak or spillage of dangerous cargoes;

10.1.7 coordinated arrangements for the release of a ship in case of an emergency; and

10.1.8 arrangements to ensure adequate access/egress at all times.

10.2 PMOs, Cargo Handling Contractors and DCA Operators shall prepare and maintain records of the dangerous cargoes which are present in the area for use in an emergency.

10.3 Cargo Handling Contractors and DCA Operators shall make the emergency response information available and accessible at all times and shall consider the necessity of arrangements for a safe and quick emergency escape, taking into account the nature of the dangerous cargoes and any special conditions.

10.4 The Cargo Handling Contractors and DCA Operators shall:

10.4.1 ensure that a list of all dangerous cargoes in the warehouses, sheds or other areas, including

the quantities, correct technical names, UN Number, classification and exact location is held readily available for the emergency services. To ensure the availability of the information, electronic or other automatic data processing or transmission may be used.

10.4.2 ensure that the responsible person for a warehouse, shed or area, where dangerous cargoes are handled, is as far as possible aware of the status of occupancy with the dangerous cargoes in their area and this is available in case of emergencies.

10.4.3 ensure that the person responsible for the cargo handling operations involving dangerous cargoes has the necessary information on measures to be taken to deal with incidents involving dangerous cargoes and that it is available for use in emergencies.

10.4.4 ensure that the emergency response procedures and emergency telephone numbers are placed at prominent locations within or at warehouses, sheds or areas where dangerous cargoes are transported or handled.

10.4.5 ensure that fire-fighting and pollution-combating equipment and installations are clearly marked as such and notices drawing attention to them are clearly visible at all appropriate locations.

10.4.6 inform the Master of any ship carrying or handling dangerous cargoes of the emergency procedures in force and the services available at the berth.

11. FIRE PRECAUTIONS

11.1 Smoking and other sources of ignition shall be prohibited in areas where dangerous cargoes are handled and stored, and only electrical equipment of a type safe for use in a flammable atmosphere shall be used.

11.2 The carrying out of hot work and the use of any equipment or activity which may lead to a fire or explosion hazard shall be prohibited in areas where cartain dangerous cargoes are handled, unless authorized by the Authority.

11.3 In areas or spaces where a flammable atmosphere may exist or develop, electrical equipment shall be of a

type safe for use in a flammable atmosphere.

11.4 The Masters of ships, Cargo Handling Contractors and DCA Operators shall ensure that:

11.4.1 places where smoking is prohibit are designated and notices in a pictogram form prohibiting smoking are clearly visible at all locations and at a safe distance from places where smoking would constitute a hazard;

11.4.2 tools or equipment, when used in an area or space where a flammable atmosphere may exist or develop, are used in such a manner that no fire or explosion can be caused;

11.4.3 in areas or spaces in which a flammable atmosphere may occur, only portable electrical equipment, including any used for sampling or ullaging, of a type safe for use in a flammable atmosphere is used;

11.4.4 electrical equipment on a wandering electrical lead is not used in areas or spaces where a flammable atmosphere may occur; and

11.4.5 adequate and properly tested fire-fighting facilities and equipment, appropriate to the dangerous cargoes on board, are readily available and that the crew is trained and practised in the use of the fire-fighting equipment.

12. ENVIRONMENTAL PRECAUTIONS

12.1 Cargo Handling Contractors and DCA Operators shall provide wherever necessary, a special area for the holding and repacking of damaged dangerous cargoes and wastes contaminated with dangerous cargoes.

12.2 The PMOs shall ensure that damage packages, unit loads or cargo transport units are immediately and safely moved to the special area mentioned in 12.1. They shall ensure that damage packages, unit loads or cargo transport units do not leave the special area unless the dangerous cargoes have been properly repacked and are in all respects fit and safe for further transport and handling.

12.3 The Master of a ship having damaged packages, unit loads or cargo transport units of dangerous cargoes on board shall ensure that all necessary measures are taken to avoid accidental spillage of such cargoes into the water.

13 REPORTING OF INCIDENTS

13.1 Any person having charge of a dangerous cargo shall inform the Authority immediately of any incident relevant to such cargo that occurs within the port which may endanger life, property or the environment.

13.2 The Cargo Handling Contractors, DCA Operators, Shipping Agents/Owners and Masters of ships shall:

13.2.1 require every member of their personnel to report to the person having charge of the operation any of such incident mentioned in 13.1 and during the handling of dangerous cargoes.

13.2.2 ensure that any damaged or leaking package, unit load or cargo transport unit containing dangerous cargoes is reported immediately to the Authority and that suitable remedial action is taken.

14. INSPECTIONS

14.1 The PMOs, Cargo Handling Contractors and DCA Operators shall make regular inspections in their area/s of responsibility to ensure the implementation of and compliance with the safety precautions in the port and the regulations related to the safe transport and handling of dangerous cargoes. They shall:

14.1.1 inspect the required documents and certificates as provided for in the IMDG Code concerning the safe transport, handling, packing and stowage of dangerous cargoes in the port;

14.1.2 inspect packages, unit loads and cargo transport units containing dangerous cargoes to verify that they are packed, marked, labelled or placarded in accordance with the provisions of the IMDG Code and the existing government standards applicable for mode of transport; that unnecessary labels, placards and marks have been removed; and that the cargo transport units have been loaded, packed and secured in accordance with the IMO/ILO Guidelines for Packing Cargo in Freight Containers or Vehicles; and

14.1.3 check, by external examination, the physical condition of each freight container, tank-container, portable tank or vehicle containing dangerous cargoes for obvious damage affecting its strength or packaging integrity and for the presence of any sign of leakage of contents.

14.2 If any of the inspections or checks mentioned above reveal deficiencies which may affect the safe transport or handling of dangerous cargoes, the PMO concerned shall immediately advise all parties concerned and instruct them to rectify all deficiencies prior to any further transport or handling of the subject cargoes.

15. REPAIR OR MAINTENANCE WORK

15.1 The Master of a ship , after having consulted the Cargo Handling Operator, where appropriate, shall ensure that no repair or maintenance work resulting in the immobilization of the ship, its cargo handling equipment or the non-functioning of its safety appliances is carried out without prior permission of the Authority.

15.2 Prior to the conduct of any repair or maintenance work either on board a ship or ashore, the person or port user concerned shall secure a permit from the Authority in accordance with the existing regulations.

15.3 In case of hot work in or near tanks, a gas-free certificate, issued by a competent person approved by the Authority shall be pre-requisite. This certificate shall be renewed if circumstances alter and at least every 24 hours.

15.4 Minimum safety requirements for carrying out hot work are set out in Annex 3.

16. ENTRY INTO OR ENCLOSED SPACES

16.1 The Master of a ship shall ensure that no person enters a cargo space, cargo tank, void space around such tank, cargo handling space, or other confined or enclosed space which has contained or may contain dangerous vapours, unless the space is free of dangerous vapours, is not deficient in oxygen, and has been authorized by a competent person trained in the use of the relevant equipment and sufficiently knowledgable to interpret correctly the results obtained. This competent person shall record the measurements taken.

16.2 Where it is necessary for operational purposes to enter a space which cannot be freed of dangerous vapours within a reasonable time or it is unlikely that the space will remain free of dangerous vapours, then entry shall only be made by personnel wearing self-contained breathing apparatus, and any other necessary protective equipment and clothing. The entire operation shall be carried out under the direct supervision of the

competent person who shall be provided with self-contained breathing apparatus, protective equipment and rescue harness. The breathing apparatus, protective and rescue equipment shall not be of a type that could introduce a source of ignition into the space.

16.3 The Cargo Handling Contractors, Masters of ships, or the port users concerned shall ensure that entry into a space mentioned in 16.2 follows the carefully established procedures contained in international codes and guides.

16.4 The Masters of ships, the Cargo Handling Contractors and the port users concerned shall, within their respective areas of responsibility, ensure that before any personnel enter any confined or enclosed space, appropriate precautions shall be taken against the possible presence of dangerous vapours or oxygen depletion.

17. FUMIGATION OF SHIPS, WAREHOUSES/SHEDS OR CARGO TRANSPORT UNIT

17.1 Ship under fumigation or which has compartments under fumigation or fumigated cargo transport units on board shall be ensured by the Master of the ship that signs are displayed at a clearly visible position at the gangway or entrance to the compartment or cargo transport unit. The signs shall state the hazard to anyone entering the ship, compartment or cargo transport unit.

17.2 The Master of a ship shall ensure that no person enters the ship, compartment or cargo transport unit which has been fumigated unless it has been thoroughly ventilated and a competent person has certified that it is safe to enter.

17.3 Each PMO shall designate specific areas for ships or cargo transport units which arrive under fumigation or are to be fumigated. Entry into such areas shall be restricted. Appropriate signs shall be displayed in such areas ashore.

17.4 Prior to giving permission for access to ships, warehouses, sheds or cargo transport units under fumigation, the port user concerned shall require a certificate from a competent person that it is safe to do so.

17.5 PMOs and port users concerned shall ensure that fumigation of cargoes and cargo transport units is carried out only in areas designated by the Authority for that purpose.

17.6 The port users concerned shall ensure that fumigated warehouses, ships, or cargo transport units are conspicuously marked, informing anyone approaching them of the hazards involved.

18. CONTAMINATED BILGE WATER, WASTES, BALLAST AND SLOPS

18.1 All PMOs shall make a study in coordination with the Department of Environment and Natural Resources on the provision of a reception facilities and which shall require the collection into such facilities of contaminated bilge water, wastes, ballast and slops from ships prior to leaving the port.

18.2 The Cargo Handling Contractors and DCA Operators shall ensure that wastes contaminated with dangerous cargoes are immediately collected and disposed of in accordance with the requirements of the Authority and that of the Department of Environment and Natural Resources.

18.3 The Master of a ship shall ensure that:

18.3.1 bilge water, wastes, ballast or slops contaminated with dangerous cargoes are collected and kept on board while in the port either in the cargo space, or other designated spaces, or watertight receptacles to avoid accidental spillage, and

18.3.2 such contaminated bilge water, wastes, ballast or slops as mentioned in 18.3.1 are removed from the ship in accordance with the existing government requirements.

19. BUNKERING

19.1 The PMOs shall, in addition to the existing regulations for bunkering, implement the use of bunkering checklist reflecting local circumstances. Bunkering precautions including a bunkering checklist are set out in Annex 4.

19.2 Where bunkering is carried out simultaneously with the handling of dangerous cargoes, gas freeing, purging or tank cleaning, special permission shall be secured from the Authority by the port user concerned and special precautions shall be taken to avoid damage to connecting pipelines or flexible pipes or any other damage. The permission shall only be given when all the questions contained in the bunkering checklist have been answered affirmatively.

20 SIGNALS

20.1 Every ship with inflammables, toxic gases and explosives

either in bulk, break-bulk or freight container on board while in the port either the ship is moored, at anchor or under way shall exhibit by day, flag "B" of the International Code of Signals and by night, an all-round fixed red light.

21. COMMUNICATIONS

21.1 Every ship engaged in the transport of dangerous cargoes shall maintain effective communication with the Authority. When appropriate and practicable, such communications shall be carried out by VHF in accordance with the provisions of SOLAS regulation IV/7 and complying with the standards set out in IMO Assembly resolution A.609 (15) and the pertinent regulations issued by the Philippine government.

22. EXEMPTIONS

22.1 PMOs shall have the Authority to exempt certain dangerous cargoes from the provisions or coverage of this Order, as appropriate, taking into consideration the nature, class and amount of the dangerous cargoes involved and the specific circumstances of the port. As such, some products shall be subject to most provisions of this Order while others of minimal hazard may be exempted. In all cases it shall be ensured that the exemption shall not give rise to a significant risk to persons and pose threats to the port facilities, equipment and environment.

23. KNOWLEDGE OF RULES AND REGULATIONS

23.1 All PMOs, Cargo Handling Contractors, DCA Operators, Shipping owners/agents and Masters of ships shall appoint at least one responsible person who has adequate knowledge of the current national and international requirements and standards concerning the transport and handling of dangerous cargoes including the segregation of incompatible cargoes.

24. REFERENCES

24.1 All PDOs and PMOs and the Port Operation and Services Department shall ensure that all relevant national and international regulations, requirements, standards, guidelines, recommendations and/or other documents governing, referring or relating to the

24.1.1 transport and handling of dangerous cargoes,

24.1.2 ships carrying such cargoes, and

24.1.3 installations, handling, transporting, producing

quantity, packing and stowage of the dangerous cargoes and of any special conditions on board, afloat and ashore.

25.2.3 In organizing the watches, full account shall also be taken of the "Recommendations on Principles and Operational Guidance for Deck Officers in Charge of a Watch in Port" (resolution 3) and the "Recommendations on Principles and Operational Guidance for Engineer Officers in Charge of an Engineering Watch in Port" (resolution 4) adopted by the International Conference on Training and Certification of Seafarers, 1978.

25.3 Berthing

25.3.1 The Master of a ship shall ensure that the moorings used in securing the ship are of an appropriate type, and of sufficient strength and number for the size of the ship and the local conditions.

25.3.2 Unless exempted by the Authority, the Master of a ship which has to display the signals referred to in Section 20, shall at all times, and while the ship is berthed in the port:

25.3.2.1 provide towing wires of adequate size at the bow and the stern ready for immediate use. The towing eye shall be passed outboard and kept at about the water level by means of a rope stopper which will break under stress and release an adequate length of towing wire, stowed on deck for immediate use. The end of the wire shall be properly secured to mooring bits; and

25.3.2.2 ensure that the mooring arrangements are such that the ship can be released quickly in an emergency.

25.3.3 The Master of a ship shall ensure that machinery necessary for the safety of the ship or the handling of cargo or ballast is properly maintained, attended and always ready for use and that the funnel uptakes and boiler tubes are not blown without the permission of the Authority.

25.3.4 The Master of a ship shall ensure that adequate means of access is provided between the ship and the shore.

or otherwise using such cargoes,

are readily available at their respective offices for reference and are updated as appropriate.

25. SHIPS CARRYING DANGEROUS CARGOES

25.1 Entering the port

25.1.1 Prior to entering the port, the Master of a ship having dangerous cargoes on board shall:

25.1.1.1 familiarize himself and his crew, as appropriate with the safety requirements and regulations relating to ships carrying or handling dangerous cargoes in the port;

25.1.1.2 check the condition of his ship, its machinery, equipment and appliances, as appropriate;

25.1.1.3 check, wherever possible, the dangerous cargoes and their containments for any damage or leakage; and

25.1.1.4 inform the Authority of any relevant deficiency of the ship, its machinery, equipment or appliances or any damage or leakage of dangerous cargoes or containments which may endanger life, property or environment.

25.1.2 Unless exempted by the Authority, the Master of a ship shall ensure that upon entering the port proper communications are maintained with the Authority, and the signals referred to in Secton 20 are displayed.

25.2 Watchkeeping

25.2.1 The Master of a ship shall ensure that a safe deck and safe engine watch are maintained by the ready availability on board of a duly qualified officer or officers and ratings where appropriate, even when the ship is safely moored or at anchor in the port. The Master shall ensure that at all times there is sufficient crew available to operate the appropriate shipboard appliances in case of an emergency.

25.2.2 The Master of a ship shall, in organizing safe watchkeepings, take full account of the nature,

25.4 Emergency procedures

25.4.1 The Master of a ship shall, as appropriate, make himself, his officers and his crew familiar with the emergency response procedures established in the port and the facilities available at the berth.

25.4.2 The Master of a ship shall consider the necessity for arrangements for a safe and quick emergency escape, taking into account the nature of the dangerous cargoes and any special conditions on board.

25.4.3 The Master of a ship shall establish emergency response procedures on board the ship to deal with incidents involving dangerous cargoes carried or to be carried on board and shall ensure that the officers and crew are properly trained in carrying out such procedures.

25.5 Emergency information

25.5.1 The Master of a ship carrying dangerous cargoes shall ensure that in addition to the information provided in accordance with SOLAS regulation II-2/20.2, the following information is kept at the same place:

25.5.1.1 a list of all dangerous cargoes on board in transit in accordance with 9.10 of the General Introduction to the IMDG Code;

25.5.1.2 a list of all dangerous cargoes to be unloaded in the port. This list shall contain the same information as required under 25.6.1.1; and

25.5.1.3 a list of all dangerous cargoes to be loaded in the port, containing the information required by 9.3 of the General Introduction to the IMDG Code and the intended stowage on board the ship.

25.5.2 The Master of a ship shall ensure that the officer on duty has the necessary information on measures to be taken to deal with incidents involving dangerous cargoes and that it is available for use in emergencies.

25.5.3 The Master of a ship shall ensure that the Emergency Procedures for Ships Carrying Dangerous Goods (EmS) and the Medical First Aid

Guide for Use in Accidents Involving Dangerous Goods (MFAG) (in the IMDG Code Supplement) and/or comparable emergency response information are on board and readily accessible at all times.

25.6 Occurrence/Reporting of incidents

25.6.1 The Master of a ship, within his area of responsibility, shall ensure that, if an incident occurs during the handling of dangerous cargoes which may endanger life, property or the environment, the person having charge of the handling shall immediately stop the operation if it is safe to do so and shall prevent its resumption until adequate safety measures have been taken. The Master shall impose upon every member of his crew the obligation of reporting, to the person having charge of the operation, any such incident seen to occur during the handling of dangerous cargoes.

25.6.2 The Master of a ship shall ensure that:

25.6.2.1 any incident which may affect the safety of the port, the population or the environment, is immediately reported to the Authority. These may include incidents involving the ship, its crew, machinery, equipment or appliances, or to the dangerous cargoes or their containments which occur while in the port, or after notification in accordance with Section 9 has been given; and

25.6.2.2 any damaged or leaking package, unit load or cargo transport unit containing dangerous cargoes on board the ship is reported immediately to the Authority and to the Cargo Handling Contractor and that suitable remedial action is taken.

25.7 Inspections

25.7.1 The Master of a ship shall ensure that:

25.7.1.1 where practicable, regular inspections are carried out by the crew on the condition of the dangerous cargoes or their containments while on board and while the ship is in the port; and

25.7.1.2 all necessary support is given to the

Authority or any authorized agency when an inspection of dangerous cargoes and/or their containments on board the ship is carried out by them.

25.8 Documentation

25.8.1 Ships built on or after 1 September 1984 and carrying dangerous cargoes are required to carry on board a Document of Compliance in accordance with SOLAS 1974, regulation II-2/54.3 as evidence that the ship complies with the special requirements for ships carrying dangerous cargoes stipulated in SOLAS II-2/54.

25.8.2 The Document of Compliance furthermore provides information on the classes of dangerous cargoes that may be carried on deck and in each compartment.

25.8.3 Also, on board a ship carrying dangerous cargoes a list, a manifest or a detailed stowage plan detailing the dangerous cargoes and their location on board is required.

25.9 Specifics for Liquid Bulk Dangerous Cargoes

25.9.1 The PMOs shall prohibit:

25.9.1.1 the entry into the port of a ship carrying bulk oil, unless the Master is in possession of a valid International Oil Pollution Prevention (IOPP) Certificate, supplemented with form B - Record of Construction and Equipment for Oil Tankers;

25.9.1.2 the entry into the port of a ship carrying liquid bulk dangerous cargoes to which the Codes for the Construction and Equipment of Ships Carrying Dangerous Chemicals or Liquefied Gases in Bulk are applicable, unless the Master is in possession of a valid International Certificate of Fitness;

25.9.1.3 the entry into the port of a ship carrying liquid bulk dangerous cargoes and to which the Codes for the Construction and Equipment of Ships Carrying Dangerous Chemicals or Liquefied Gases are not applicable, unless the Master is in possession of a valid International Certificate for the

Prevention of Pollution by Noxious Liquid Substances Carried in Bulk (NLS Certificate); and

25.9.1.4 the loading and unloading of liquid bulk dangerous cargoes into or from ships referred to in 25.10.1.1 to 25.10.1.3 unless the Master is in possession of a valid IOPP Certificate, Certificate of Fitness or NLS Certificate, as appropriate, for that ship and those dangerous cargoes.

25.9.1.5 the loading and unloading of liquid bulk dangerous cargoes or compressed gases carried in tanker vessels at passenger and/or general cargo port terminals.

25.9.2 Vapour emission control

25.9.2.1 The PMOs may require that whenever certain liquid bulk dangerous cargoes are handled, suitable and safe measures are taken to prevent or control the emission of vapour into the atmosphere.

25.9.3 Information for operational and emergency purposes

25.9.3.1 The Master of a ship and the Cargo Handling Contractor, within their areas of responsibility shall have immediately available the following information with respect to each dangerous cargoes transported or handled:

25.9.3.1.1 the correct technical name of the cargo, the UN number (where available) and a description of the relevant physical and chemical properties (uncluding reactivity) necessary for the safe containment and handling of the cargo;

25.9.3.1.2 procedures for cargo transfer, slop transfer, gas-freeing, inerting, ballasting, de-ballasting and tank cleaning;

25.9.3.1.3 special equipment needed for the safe handling of a particular cargo; and

25.9.3.1.4 appropriate emergency response procedures, including the action to be taken in the event of a spillage or leak, countermeasures against accidental contact and fire fighting procedures and the suitable fire fighting media.

25.9.4 Compatibility

25.9.4.1 The Master of a ship shall, in cooperation with the Authority and the Cargo Handling Contractor, where appropriate, ensure that during the handling of liquid bulk dangerous cargoes, which may react in a hazardous manner (physically or chemically) with any other cargo carried or handled, every precaution is taken to prevent such hazard by selecting non-adjacent tanks with separate venting systems for their carriage and using separate pumping and piping systems for their handling.

25.9.4.2 The Master of a ship shall ensure that no liquid bulk dangerous cargoes comes into contact with any tank, pipe, valve or any other equipment in the ship which may cause a hazard by weakening, chemical reaction or any other means. He shall likewise be aware of the hazard associated with solidification of cargo in ship's vent lines and that of substances which react with water and oxidizing agents.

25.9.5 Handling

25.9.5.1 The Master of a ship shall ensure that:

25.9.5.1.1 precautions are taken at all times to prevent flammable and/or toxic vapour from entering a service or control station, accomodation or machinery space on the ship;

25.9.5.1.2 except for vents designed to prevent excess pressure or vacuum within a cargo space, all openings from cargo spaces are kept closed during handling of flammable and/or toxic cargoes, or ballast water contaminated

with such cargoes, except with the permission of the Authority and the Cargo Handling Contractor; and

25.9.5.1.3 any tools or equipment used, e.g. for sampling or ullaging are used in a manner so as not to cause ignition.

25.9.5.2 In case of flammable cargoes sighting and ullage ports shall be kept closed unless required to be opened for operational purposes, If, for design reasons, they are required to be opened, the openings shall be protected by a flame screen which may removed for a short period during ullaging, sighting, sounding and sampling. The flame screen shall be a good fit and be kept clean and in good condition.

25.9.5.3 The Master of ship shall cause the handling operation to stop should an incident occur during the handling of liquid bulk dangerous cargoes or ballast water contaminated with liquid bulk dangerous cargoes which necessitates a repair to the cargo piping system or connections, or which interferes in any way with the uninterrupted flow of liquid bulk dangerous cargoes or ballast water. The handling operation shall not be resumed until adequate safety measures have been taken with the approval of the Authority and where appropriate, the Cargo Handling Contractor.

25.9.6 Gas-freeing, tank cleaning and inerting

25.9.6.1 The Master of a ship carrying or having carried liquid bulk dangerous cargoes shall ensure that gas-freeing, tank cleaning (including crude oil washing), or purging with inert gas is carried out in accordance with the ship's operating manuals which lay down the correct procedure to be employed and shall incorporate the recommendations and guidelines of IMO or other organizations where they are appropriate.

25.9.6.2 No gas-freeing, tank cleaning or purging

shall be carried out without the permission of the Authority and the Cargo Handling Operator, where appropriate.

25.9.7 Containment of spillage

25.9.7.1 The Master of a ship shall ensure that during the handling operations, all scuppers are kept closed except to the extent that it is necessary to allow water to drain off, and that the scuppers are inspected regularly. Where corrosive liquids or refrigerated gases are being handled, the scuppers may be kept open if permitted by the Authority, provided that an ample supply of water is available at all times in the vicinity of the manifolds. Attention is however drawn to the requirements of Regulation 26 of Annex I of MARPOL 73/78 for shipboard oil pollution emergency plans.

25.10 Specifics for solid bulk dangerous cargoes

25.10.1 Emission of harmful dusts

25.10.1.1 Where the transport, handling or stowage of a solid bulk dangerous cargo may give rise to the emission of dust, all necessary practicable precautions shall be taken to prevent and minimize the emission of such dusts and to protect persons from contact with such dusts.

25.10.1.2 The precautions shall include the use of appropriate protective clothing, respiratory protection, and barrier creams, when needed; as well as personal washing and hygiene and laundering of clothing.

25.10.2 Emission of dangerous vapour/oxygen deficiency

25.10.2.1 Where the transport or handling of a solid bulk dangerous cargo may give rise to the emission of a toxic or flammable vapour, all necessary practicable precautions shall be taken to prevent and minimize the emission of such vapours and to protect persons

from toxic vapours.

25.10.2.2 Whenever a solid bulk dangerous cargo which may emit a toxic or flammable vapour is stowed or carried, an appropriate instrument for measuring the concentration of the toxic or flammable vapour shall be provided. Enclosed spaces used for such cargoes and adjacent spaces shall be provided with effective ventilation.

25.10.2.3 Except in an emergency, no person shall enter an enclosed space in which a solid bulk dangerous cargo that may emit toxic or flammable vapour is stowed or is deficient of oxygen unless the atmosphere in the space has been determined not to be hazardous to human health or safety. If entry is necessary during an emergency, a person who enters the space shall wear protective self-contained air breathing apparatus.

25.10.3 Emission of explosive dusts

25.10.3.1 Where the transport or handling of a solid bulk dangerous cargo may give rise to the emission of dust that is liable to explode on ignition, all necessary practicable precautions shall be taken to prevent such an explosion and to minimize the effects of an explosion if one should occur.

25.10.3.2 Precautions include ventilating an enclosed space to limit the concentration of dust in the atmosphere, avoiding sources of ignition, minimizing the heights of walls of materials, and hosing down rather than sweeping.

25.10.4 Spontaneously combustible substances and substances that react with water

25.10.4.1 A solid bulk dangerous cargo which, on contact with water, may evolve flammable or toxic vapours or become liable to spontaneous combustion, shall be kept as dry as reasonably practicable. Such cargoes shall be handled only during dry weather conditions.

25.10.5 Oxidizing substances

25.10.5.1 A solid bulk dangerous cargo that is an oxidizing substance shall be transported, handled and stowed in a manner that prevents, in so far as reasonably practicable, contamination with combustible or carbonaceous materials. Oxidizing substances shall be kept away from any source of heat or ignition.

25.10.6 Incompatible materials

25.10.6.1 Solid bulk dangerous cargoes shall be carried, handled and stowed in a manner that prevents any dangerous interaction with incompatible materials. This shall apply between bulk dangerous cargoes mutually as well as between solid bulk dangerous cargoes and dangerous cargoes in packaged form (break-bulk).

26. ALCOHOL AND DRUG ABUSE

26.1 The Cargo Handling Contractors, DCA Operators, Masters of ships and port users concerned, within their areas of responsibility, shall ensure that no person under the influence of alcohol or drugs to such extent that his judgement or actions are impaired, is allowed to participate in any operation involving the handling of dangerous cargoes and any such persons are kept clear of the immediate areas where dangerous cargoes are being transported or handled.

27 SHORE INSTALLATIONS

27.1 Berthing

27.1.1 The Cargo Handling Contractor or the Mooring Contractor shall ensure that:

27.1.1.1 adequate and safe mooring facilities are provided; and

27.1.1.2 adequate safe access is provided between the ship and the shore.

27.2 Supervision

27.2.1 The Cargo Handling Contractor/DCA Operator shall ensure that:

27.2.1.1 areas where packages are kept are properly supervised and packages are regularly inspected for leakage or damage. Any leaking package shall only be handled under the supervision of a competent person; and

27.2.1.2 no person, without reasonable cause, opens or otherwise interferes with any freight container, tank-container, portable tank or vehicle containing dangerous cargoes. When a freight container, tank-container, portable tank or vehicle is opened by a person authorized to examine its contents, the Cargo Handling Contractor/DCA Operator shall ensure that the person concerned is aware of the possible hazards arising from the presence of the dangerous cargoes.

27.3 Identification, packing, marking, labelling or placarding and certification

27.3.1 The Cargo Handling Contractors shall ensure that the dangerous cargoes entering their respective premises have been duly certified or declared by the Shipper/Importer/Exporter or the Shipping owner/agent as being properly identified, packed, marked, labelled or placarded so as to comply with the appropriate provisions of the IMDG Code or, alternatively, with appropriate local regulations applicable to the relevant mode of transport.

27.4 Fire Fighting

27.4.1 The Cargo Handling Contractors and DCA Operators shall:

27.4.1.1 ensure that adequate and properly tested fire-fighting equipment and facilities are provided and readily available in areas where dangerous cargoes are handled or transported in accordance with the requirements of the Authority's Dockwork Safety and Health Standards; and

27.4.1.2 ensure that personnel involved in the handling or transport of dangerous cargoes are trained and practised in the use of fire fighting equipment.

27.5 Pollution Combating

27.5.1 The Cargo Handling Contractors/DCA Operators shall:

27.5.1.1 ensure that adequate equipment is available to minimize the damage in case of a spillage of dangerous cargoes; and

27.5.1.2 ensure that personnel involved in the transport or handling of dangerous cargoes are trained and practised in the use of pollution combating equipment and facilities.

27.6 Specifics for liquid bulk dangerous cargoes

27.6.1 Warning notices

27.6.1.1 The Cargo Handling Contractor shall ensure that, before handling liquid bulk dangerous cargoes at any berth on the shore, appropriate warning notices, preferably pictograms, are placed at all entrances and approaches to the berth.

27.7 Compatibility

27.7.1 The Cargo Handling Contractor shall ensure that liquid bulk dangerous cargoes are handled and kept in such a manner so as to preclude the possibility of a dangerous interaction with incompatible cargoes or materials.

27.8 Communications

27.8.1 The Cargo Handling Contractor shall ensure that effective communication has been established between the personnel assigned on the shore (berth area) and installation from or into which such cargoes are being transferred. Communication equipment to be used shall be of a type safe for use in a flammable atmosphere.

27.9 Pipelines used for liquid bulk dangerous cargoes

27.9.1 The Cargo Handling Contractor shall ensure that a pipeline or flexible pipe:

27.9.1.1 is not used for cargoes other than those for which it is suitable, having regard to the temperature and compatibility of such cargoes;

27.9.1.2 is suitably protected if it is liable to be damaged by impact; and

27.9.1.3 is electrically continuous except for the inclusion of an insulating flange or non-conductive spool piece when used for the transfer of a flammable liquid. The pipeline on the seaward side of the insulating section shall be electronically continuous to the ship, and that on the landward side shall be electrically continuous to the jetty earthing system.

27.9.2 The Cargo Handling Contractor shall ensure that:

27.9.2.1 adequate precautions are taken to prevent a short-circuit of the insulation referred to in 27.9.1.3;

27.9.2.2 the insulating and earthing systems referred to in 27.9.1.3 are inspected and tested at appropriate intervals to ensure their effectives; and

27.9.2.3 any metallic connections between the berth and the ship are protected or arranged so as to ensure that there is no possibility of incendive sparking where a flammable atmosphere may be present.

27.10 Sources of ignition

27.10.1 The Cargo Handling Contractor shall ensure that the Master of a ship is notified of any conditions which may require precautions to be taken for avoidance of sources of ignition on the ship such as galley stoves or cooking appliances with non-immersed elements.

27.11 Containment of spillage

27.11.1 The Cargo Handling Contractor shall ensure that all drain holes and pipes and all other drains of any kind on the jetty, where liquid bulk dangerous cargoes might escape in case of an accident, are closed before handling commences and are kept closed during the whole of the period of the handling of liquid bulk dangerous cargoes.

27.11.2 In case of a spillage occurring, adequate

means of containment and disposal shall be available at short notice.

27.12 Shore electricity supply

27.12.1 The Cargo Handling Contractor shall ensure that:

27.12.1.1 any shore communication cables to a ship are of a type certified safe for use in hazardous areas;

27.12.1.2 no shore electrical supply is connected to a ship, except a supply of a type safe for use in a flammable atmosphere, or in an emergency; and

27.12.1.3 that no connection, cable or electrical supply is used near a ship carrying flammable cargoes at a berth where such cargoes are present or where a flammable atmosphere may be present, unless it is certified for use in such places.

27.13 Handling using flexible pipes

27.13.1 The Master of a ship and the Cargo Handling Contractor within their areas of responsibility shall ensure that:

27.13.1.1 no flexible pipe is used for cargoes other than those for which it is suitable, having regard to the temperature and compatibility of such cargoes, or at any working pressure for which it is suitable;

27.13.1.2 each type of flexible type complete with end fittings has been prototype tested and a certificate provided to show the bursting pressure. Prototype hoses must not be used in service;

27.13.1.3 before being placed in service, each flexible pipe supplied shall be hydraulically tested;

27.13.1.4 before being put into use on any day a flexible pipe, other than one being used at a monobuoy or other off shore facility, is visually inspected. Flexible pipes used at monobuoys and other off-shore facilities shall be inspected at frequent intervals;

27.13.1.5 a flexible pipe is permanently and legibly marked, showing the type of hose, its specified maximum working pressure and its month and year of manufacture;

27.13.1.6 there are adequate electrical insulation flanges;

27.13.1.7 the length of each flexible pipe is sufficient to satisfactorily operate within the defined operating envelope without overstressing the terminal connection;

27.13.1.8 a flexible pipe rigged for the handling of liquid bulk dangerous cargoes is kept under adequate supervision;

27.13.1.9 there are adequate procedures for the disconnection of the flexible pipe in the event of an emergency, to protect the environment, personnel safety and equipment; and

27.13.1.10 any flexible pipe after use is drained and purged of the liquid bulk dangerous cargo and that in cases where this is not possible or has not been carried out, the flexible pipe is provided at each free end with a suitable means to prevent the escape of vapour or admission of air. Such equipment shall always be provided on flexible pipes used for the handling of highly toxic liquids or liquefied gas.

27.14 Handling using loading arms

27.14.1 The Master of a ship and the Cargo Handling Contractor within their respective areas of responsibility shall ensure that:

27.14.1.1 there are adequate procedures for the operation, supervision and disconnection of loading arms in the event of an emergency, to protect the environment, personnel safety and equipment;

27.14.1.2 no loading arm is used for substances other than those for which it is suitable, having regard to the temperature and compatibility of such

substances and the working pressure or flow rate for which it is suitable;

27.14.1.3 in an emergency, there are adequate means for draining the inner and outer arms after normal use and before disconnection;

27.14.1.4 the operating envelope of the loading arm is suitable for the ship;

27.14.1.5 the manifold spacing is satisfactory when more than one loading arm is connected;

27.14.1.6 each loading arm has been periodically maintained and has a current certificate for its fitness for use; and

27.14.1.7 there are adequate electrical insulation flanges.

27.15 Preliminary precautions

27.15.1 The Master of ship and the Cargo Handling Contractor within their respective areas of operation shall ensure that cargo handling controls, gauging systems, emergency shut down and alarm systems where applicable, have been tested and found to be in satisfactory condition before cargo handling operations begin;

27.15.2 Before liquid bulk dangerous cargoes are pumped into or out of a ship from or into a shore installation, the Master of the ship and the Cargo Handling Contractor shall:

27.15.2.1 agree in writing on the handling procedures including the maximum loading or unloading rates taking into account:

27.15.2.1.1 the arrangement, capacity and maximum allowable pressure of the ship's cargo lines and the shore pipelines;

27.15.2.1.2 the arrangement and capacity of the vapour venting system;

27.15.2.1.3 the possible pressure increase

due to emergency shut down procedures;

27.15.2.1.4 the possibility of the accumulation of electrostatic charge; and

27.15.2.1.5 the presence of responsible persons during start up operations on board ship and ashore.

27.15.2.2 complete and sign an appropriate safety checklist showing the main safety precautions to be taken before and during such handling operations;

27.15.2.3 agree in writing on the action to be taken and the signals to be used in the event of an emergency during handling operations; and

27.15.2.4 ensure appropriate safety equipment and clothing are used.

27.16 Pumping operation

27.16.1 The Master of a ship and the Cargo Handling Contractor within their respective areas of responsibility shall ensure that:

27.16.1.1 frequent checks are made to ensure that the agreed back-pressures and loading or unloading rates are not exceeded;

27.16.1.2 all reasonable care is taken to prevent all relevant pipelines, loading arms, flexible pipes and associated equipment on board the ship and ashore from developing a leak, and that they are kept under adequate supervision during the handling of liquid bulk dangerous cargoes;

27.16.1.3 effective communication between the ship and the shore installation is maintained throughout the handling operations;

27.16.1.4 simultaneous working of ship's stores with the handling of dangerous cargoes, gas-freeing, purging or tank cleaning

is only carried out when permitted by the Authority and all applicable precautions are taken to avoid damage to connecting loading arms, flexible pipes or associated equipment or any other hazards;

27.16.1.5 during the handling of liquid bulk dangerous cargoes, arrangements are made for the gauging of ship's tanks and shore tanks to ensure that no tank is overfilled;

27.16.1.6 responsible persons are present during operations on board ship and ashore; and

27.16.1.7 appropriate safety equipment and clothing are used.

27.17 Completion of operation

27.17.1 The Master of a ship and the Cargo Handling Contractor within their respective areas of responsibility shall ensure that after the completion of every transfer of liquid bulk dangerous cargoes the valves of the discharging and receiving cargo spaces and tanks are closed and any residual pressure in the relevant pipelines, loading arms and flexible pipes is released, unless the same valves are required to be open for normal plant or ship operations. They shall also ensure that:

27.17.1.1 prior to the disconnection of the shore pipelines from the ship, the loading arms , flexible pipes and pipings are drained of liquids, the pressure relieved and the piping vented;

27.17.1.2 all safety precautions are taken, including the blanking off of the ship manifold connection and the shore pipeline; and

27.17.1.3 appropriate safety equipment and clothing are used.

27.18 Excess pressure in tanks containing liquefied gas

27.18.1 The Master of a ship and the Cargo Handling Contractor within their respective areas of

responsibility shall ensure that excess pressure does not develop in the tanks containing liquefied gas. Where appropriate, the surroundings shall be cooled by whatever means are available, including the use of water spray.

27.19 Refrigerated liquefied gas

27.19.1 The PMO concerned, Master of a ship and the Cargo Handling Contractor within their respective areas of responsibility shall ensure that the loading or unloading of liquefied gas at low temperature is only carried out if:

27.19.1.1 all relevant shore and ship tanks, pipelines, loading arms and relevant ship's piping are gradually and evenly cooled to prevent thermal stress;

27.19.1.2 all automatic controls, gas detectors and other associated instruments are in working order; and

27.19.1.3 suitable protective equipment and clothing are available and used as appropriate.

27.20 Combination carriers

27.20.1 A combination carrier which has previously carried crude oil or petroleum products having a flashpoint not exceeding 60 degrees Centigrade (closed cup) as a cargo, shall be subject to Section 27 of this Order unless it can proved that no liquid, solid or gaseous residues of such cargo remain in any of the ship's tanks, holds, void spaces, cargo or ballast lines, pumps or pump rooms.

27.20.2 When a combination carrier, referred to in 27.20.1, is moored in a port terminal other than an oil terminal and the ship is not gas-free:

27.20.2.1 the area 25 meters around the ship shall be regarded as a hazardous area where special precautions against fire shall be taken;

27.20.2.2 the tanks shall be inerted;

27.20.2.3 a ship/shore safety checklist shall be completed; and

27.20.2.4 the area shall be watched by a special shore safety guard in addition to the ship's deck watch.

28. SHIP TO SHIP TRANSFER

28.1 The ship to ship transfer of liquid and solid bulk dangerous cargoes including liquefied gas shall be subject to the approval of the Authority. If ship to ship transfer is to be allowed, the PMO concerned shall impose conditions such as special safety checklist and control of the place where the operation may be undertaken, taking into account the particular hazards involved.

29. WEATHER CONDITIONS

29.1 The Cargo Handling Contractors, DCA Operators and Masters of ships shall, within their areas of responsibility, shall not permit dangerous cargoes to be handled in weather conditions which may seriously increase the risk.

30 LIGHTING

30.1 The Cargo Handling Contractors, DCA Operators and Masters of ships, within their areas of responsibility, shall ensure that areas where dangerous cargoes are handled or where preparations are being made to handle dangerous cargoes and access to such areas are adequately illuminated.

31 HANDLING EQUIPMENT

31.1 The Cargo Handling Contractors, DCA Operators and Masters of ships, within their areas of responsibility, shall ensure that:

31.1.1 all the cargo handling equipment used in the handling of dangerous cargoes is suitable for such use and used only by skilled persons; and

31.1.2 the cargo handling is of an approved type, properly maintained, and tested in accordance with the existing government regulations.

32. PROTECTIVE EQUIPMENT

32.1 The Cargo Handling Contractors, DCA Operators, Shipping owners and other port users concerned, within their areas of responsibility, shall, when necessary, provide

a sufficient quantity of appropriate protective equipment and clothing for their personnel involved in the handling of dangerous cargoes.

32.2 Such equipment and clothing shall provide adequate protection against the hazards specific to the dangerous cargoes handled and shall, where appropriate, be of an approved type or made in conformity with an approved standard.

33 TRANSPORTING DANGEROUS CARGOES

33.1 Documents and Certificates

33.1.1 The Importers/Exporters, Shippers, Forwarders and Truckers shall ensure that all documents and necessary certificates concerning dangerous cargoes for transport are issued in accordance with the IMDG Code and existing government regulations.

33.2 Identification, packing, marking, labelling or placarding and certification

33.2.1 The Importers/Exporters, Shippers, Forwarders and Truckers shall ensure that dangerous cargoes are properly identified, packed, marked and labelled or placarded so as to comply with the appropriate provisions of the IMDG Code or alternatively with appropriate government regulations applicable to the relevant mode of transport and that unnecessary placards, marks and labels have been removed.

33.3 Freight containers, tank-containers, portable tanks and vehicles

33.3.1 The Importers/Exporters, Shipping owners/agents, Truckers shall ensure that:

33.3.1.1 freight containers, tank-containers, portable tanks and vehicles used for the carrying dangerous cargoes have a current safety approval plate in accordance with the International Convention for Safe Containers (CSC), 1972, as amended, when appropriate, or have been approved in accordance with the relevant provisions of sections 12, 13 or 17 of the General Introduction to the IMDG Code, or by a certification or approval system of an appropriate agency of the government;

33.3.1.2 cargo transport units are packed with dangerous cargoes in accordance with the IMO/ILO Guidelines for Packing Cargo in Freight Containers or Vehicles or any other existing government regulations applicable to the mode of transport so as to ensure the safe transport and handling of such units in the port.

34. GENERAL HANDLING REQUIREMENTS

34.1 The Masters of ships, Cargo Handling Contractors, DCA Operators and Truckers, within their areas of responsibility, shall ensure that:

34.1.1 every person engaged in the handling of dangerous cargoes is well trained and exercises reasonable care to avoid damage to packages, unit loads and cargo transport units;

34.1.2 while dangerous cargoes are being handled, precautions are taken to prevent unauthorized access to handling areas; and

34.1.3 if there is any loss of containment of dangerous cargo, every practical step is taken to minimize risks to persons and adverse effects to the environment.

34.2 As soon as practicable, after the berthing of the ship the Master and the Cargo Handling Contractor, within their areas of responsibility shall ensure that a responsible person is appointed to supervise the handling of dangerous cargoes. The responsible person shall be aware of the risks involved and the steps to be taken in an emergency and who maintains any necessary contact with the Master and the Cargo Handling Contractor.

35 TRANSPORT AND HANDLING OF EXPLOSIVES

35.1 General

35.1.1 Explosives in freight containers or in break-bulk shall not be stored inside the port.

35.1.2 All Class 1.1 explosives, either in freight container or in break-bulk, of more than 50 kilos in weight shall be discharged or loaded at the explosive achorage.

35.1.3 Explosive cargoes other than Class 1.1 may be allowed to discharge or load at the pier or wharf upon the favorable recommendation of the

Safety Officer of the Authority taking into consideration the cargoes' condition and their containment, the condition of their mode of conveyance, or the condition of the port. Provided further that the cargoes are for direct shipment to the carrying vessel or direct delivery to the consignee's storage area located outside the port.

35.2 Loading and unloading of explosvies

35.2.1 No explosives shall be brought to a berth for loading into a ship unless the ship is ready to receive them. Likewise, no explosives shall be unloaded from a ship at a berth, unless the delivery permit and other necessary documents are ready and the means of transport by which they are to be removed from the port is ready to receive the explosive cargoes.

35.2.2 The area of the berth where the explosives are being handled shall be clearly marked out as a protected area. The limits of the area shall extend at least 10 meters from the immediate handling area.

35.2.3 The space in the ship or cargo transport unit in which explosives are to be loaded shall be carefully cleaned and maintained in a clean condition.

35.2.4 Explosives shall not be handled during the hours of darkness unless prior consent has been obtained from the Authority which shall take into account all relevant considerations, including the standard of illumination, security, safety, fatigue of workers and weather conditions.

35.2.5 Equipment for handling explosives shall be of the approved type, properly maintained and tested in accordance with national and international standards.

35.3 Radio or radar transmitting

35.3.1 During the handling of explosives, no radar or radio transmitter shall be used within 50 meters of the cargo handling area, except under such conditions, including power outlet limitations, frequency and other factors, as may be established by any authorized government agency.

35.4 Handling of deteriorated explosives

35.4.1 Because of the sensitivity of many explosives, special conditions shall be considered and agreed before any explosives, which for any reason may have deteriorated or undergone a change of condition that may materially increase the hazards depending upon their transport or handling, are removed from the port.

35.5 Damaged packages

35.5.1 If in the course of handling explosives in the port, any package of explosives, or the seal of any such package, appears to be damaged, that package shall be set aside for examination and repair or for safe disposal.

35.5.2 If any explosives are spilled or escape from a package, the responsible person supervising the handling shall ensure that such spillage is immediately collected and safe arrangements are made for its repacking or disposal. Every such incident shall be reported to the Authority.

35.6 Completion of loading

35.6.1 When loading is completed, the loaded ship or vehicle shall depart from the port as soon as is reasonably practicable.

35.7 Security

35.7.1 As the safety of the handling of explosives is affected by the degree of security attained, consideration shall be given to all measures necessary to prevent unauthorized access to explosives including appropriate check that all packages are received in good order and condition at all stages of the handling operation.

35.7.2 Explosives for transport to or from the port shall be supervised and escorted by personnel from the Firearms and Explosive Division of the Philippine National Police.

36 HANDLING OF RADIOACTIVE MATERIALS

36.1 Radioactive materials shall only be permitted to enter the port for direct shipment or delivery.

36.2 No radioactive materials shall be brought to a berth

for loading into a ship unless the ship is ready to receive them. Also, no radioactive materials shall be unloaded from a ship at a berth unless the delivery permit and other necessary documents are ready and the means of transport by which they are to be removed from the port is ready to receive such materials.

36.3 Packaged of radioactive materials shall not be brought into the port unless they are in conformity with the International Atomic Energy Agency's (IAEA) Regulations for the Safe Transport of Radioactive Materials, as reflected in the IMDG Code, and the requirements and regulations of the Philippine National Research Institute.

36.4 Packages containing radioactive materials shall be stowed as to prevent harmful effects to persons and possible interaction between packages. Segregation distances on board sea-going ships shall be in accordance with Class 7 and Section 15 of the General Introduction to the IMDG Code.

36.5 In the event of any accident involving radioactive materials or packages of radioactive materials or any theft or loss of any such materials or packages, the Authority and the Philippine National Research Institute shall be notified immediately.

37 SEPARABILITY CLAUSE

If, for any reason, any section or provision of this Order is declared unconstitutioanl or invalid, the other sections or provisions which are not affected thereby shall continue in full force and effect.

38 OTHER LAWS

The International Maritime Dangerous Goods (IMDG) Code and the pertinent provisions of the Dockwork Safety and Health Standards, PPA Administrative Order No. 13-77, PPA Memorandum Circular No.28-85 and other related issuances of the Authority, not inconsistent with the provisions of this Code, shall be deemed to be in full force and effect and shall form part of this Code.

39 PENALTIES

39.1 Violation of any of these rules and regulations shall subject the person, involved to the penalties under Section 43 of PD 857 (Revised Charter of the Philippine Ports Authority) promulgated on December 23, 1975, to wit.

a) Any person who violates any of the provisions

of Presidential Decree 857 or any of the rules and regulations issued or promulgated by the Authority shall be punished by imprisonment for not less than one (1) day but not more than six (6) years, and pay a fine of not less than two hundred (200) pesos but not more than one hundred thousand (100,000) pesos.

If the offender is a government official or employee he shall in addition to imprisonment and fine be perpetually disqualified to hold any public office.

If the offender is a juridical person, the penalty of imprisonment and fine shall be imposed upon the manager, director, representative or employee thereof responsible for the violation.

If the offender is an alien, he shall be deported immediately without further proceedings, after serving his sentence and paying the fine.

39.2 Any license, franchise, or authority to exercise any right or privilege which may have been issued by the Authority in accordance with Presidential Decree 857 or the rules and regulations issued or promulgated pursuant thereto, shall be deemed withdrawn and revoked upon conviction of the holder thereof.

40 ADMINISTRATIVE FINES

The Authority shall have the power to exact reasonable administrative fines in such specific amount and for such specific violations arising out of the use of the port, and shall be prescribed in the rules and regulations which the Authority is hereby authorized to issue for the purpose.

41 EFFECTIVITY

This Code shall take effect 15 days after publication in any newspaper of general circulation.

ANNEX 1

(Section 5.4.3)

SEGREGATION TABLE FOR DANGEROUS CARGOES IN PORT AREAS

Classes		2.1	2.2	2.3	3	4.1	4.2	4.3	5.1	5.2	6.1	8	9
Flammable Gases	2.1	O	O	O	S	A	S	O	S	S	O	A	O
Non-toxic non-flammable gases	2.2	O	O	O	A	O	A	O	O	A	O	O	O
Poisonous gases	2.3	O	O	O	S	O	S	O	O	S	O	O	O
Flammable liquids	3	S	A	S	O	O	S	A	S	S	O	O	O
Flammable solids	4.1	A	O	O	O	O	A	O	A	S	O	A	O
Spontaneously combustible substances	4.2	S	A	S	S	A	O	A	S	S	A	A	O
Substances which are dangerous when wet	4.3	O	O	O	A	O	A	O	S	S	O	A	O
Oxidizing Substances	5.1	S	O	O	S	A	S	S	O	S	A	S	O
Organic Peroxides	5.2	S	A	S	S	S	S	S	S	O	A	S	O
Poisons (liquids & solids)	6.1	O	O	O	O	O	A	O	A	A	O	C	C
Corrosives (liquids and solids)	8	A	O	O	O	A	A	A	S	S	O	O	O
Miscellaneous dangerous	9	O	O	O	O	O	O	O	O	O	O	O	O

O = no segregation necessary

A = away from, minimum of 3 meters separation required

S = separated from, in open areas, minimum 6 meters separation required, in sheds/warehouses, min. 12 m separation required unless separated by an approved fire wall

ANNEX 2

ADVANCE NOTIFICATION
(Section 9.7)

The information provided to the Authority before dangerous cargoes are brought into or moved out of the port shall include :

1. ARRIVAL BY WATER

1.1 Packaged (break-bulk) dangerous cargoes:

1.1.1 the name of the ship and the ship's IMO number, agent and estimated time of arrival (ETA), normally not less than 24 hours before the arrival;

1.1.2 a list showing the proper shipping name of the dangerous cargoes, the UN number, the IMDG Code classification (if applicable), any subsidiary risk, number and type of packages, packaging group, the flashpoint or flashpoint range (as appropriate), the quantity and in the case of dangerous cargoes of Classes 1,2,6.2 and 7, such additional information as specified in Section 9 of the General Introduction to the IMDG Code;

1.1.3 the precise stowage of the dangerous cargoes on board, indicating those to be unloaded and those to be left on board;

1.1.4 the condition of the dangerous cargoes if any undue hazard is likely to arise; and

1.1.5 any known defect which may substantially affect the safety of the port or the ship.

1.2 Bulk Dangerous Cargoes

1.2.1 name of the ship and ship's IMO number, agent and estimated time of arrival (ETA), normally not less than 24 hours before the arrival;

1.2.2 a list showing the proper shipping name of the dangerous cargoes, the UN number, the MARPOL NLS category, the flashpoint of flashpoint range (if appropriate) and the quantity;

1.2.3 whether a valid International of Fitness, International Certificate for the Carriage of Noxious Liquid Substances in Bulk or International Oil Pollution Prevention Certificate, as appropriate, is held for the

cargo;

1.2.4 stowage of the dangerous cargoes on board, indicating those to be unloaded and those to be left on board;

1.2.5 the condition of the dangerous cargoes and any known defect in the cargo containment and handling system, equipment or instrumentation related to the cargo carried in bulk which may lead to any undue hazard; and

1.2.6 any known defect which may substantially affect the safety of the port or the ship.

2. ARRIVAL BY LAND

2.1 Packaged dangerous cargoes and bulk dangerous cargoes:

2.1.1 name of the shipper and date of delivery to the port, normally not less than 24 hours before arrival;

2.1.2 the proper shipping name of the dangerous cargoes, the UN number, the IMDG Code calssification (if applicable), subsidiary risk, the flashpoint range (as appropriate), the quantity and, in the case of packaged dangerous cargoes Class 1,2,6.2 and 7, such additional information as specified in Section 9 of the General Introduction to the IMDG Code;

2.1.3 the number and type of packages and packaging group (if applicable); and

2.1.4 the name of the ship into which the dangerous cargoes are to be loaded (if available), the ship's agent and the berth.

3. DEPARTURE BY WATER

3.1 Packaged (break bulk) dangerous cargoes

3.1.1 the name of the ship and ship's IMO number, agent and estimated time of departure (ETD), normally not less than 3 hours before sailing;

3.1.2 a list showing the proper shipping name of the dangerous cargoes, the UN number, the IMDG Code classification (if applicable), any subsidiary risk, number and type of packages, packaging group, the flashpoint or flashpoint range (if appropriate), the quantity and, in the case of dangerous cargoes of Class 1,2,6.2 and 7, such

additional information as specified in Section 9 of the General Introduction to the IMDG Code; and

3.1.3 the precise stowage of the dangerous cargoes on board.

3.2 Bulk dangerous cargoes

3.2.1 the name of the ship and ship's IMO number, agent and estimated time of departure (ETD), normally not less than 3 hours before sailing;

3.2.2 a list showing the proper shipping name of the dangerous cargoes, the UN number, the MARPOL NLS category, the flashpoint range (if appropriate) and the quantity;

3.2.3 whether a valid International Certificate of Fitness, Internatioanl Certificate for the Carriage of Noxious Liquid Substances in Bulk or International Oil Pollution Prevention Certificate, as appropriate, is held by the ship for the cargo; and

3.2.4 the stowage of the dangerous cargoes on board.

4. The Master of a ship involved in bunkering shall ensure that the conditions described in paragraphs 2 and 3 remain fulfilled during the entire bunkering procedure.

5. Both, the Master of a ship and the Master of a bunker vessel shall ensure, that a constant visual watch is maintained throughout the whole transfer operation.

6. Both, the Master of ship and the Master of a bunker vessel have to ensure that all scuppers are closed and that sufficient absorbing materials are available in case of an accidental spillage.

7. If it cannot be ensured during the whole bunkering operation that the requirements laid down in this Annex are fulfilled, the Master of a ship and/or the bunker vessel shall immediately cease the bunkering operation.

8. In this Annex, bunkering is taken to mean of bunker oil, that is a flammable liquid intended for the propulsion and or the auxiliary operation of a ship or liquid intended for lubricating the ship's engine or her other machinery.

ANNEX 3

MINIMUM SAFETY REQUIREMENTS FOR CARRYING OUT HOT WORK
(Section 15.4)

1. Before starting any hotwork, or board a ship or on a berth, the responsible person of the company to carry out the hotwork must be in possession of written authorization to carry out such hot work issued by the Authority. Such authorization shall include details of the specific location of the hot work as well as safety precautions to be followed.

2. In addition to the safety precautions required by the Authority, before starting any hotwork, the responsible person of the company to carry out the hot work together with the responsible person(s) of the ship and/or berth (terminal), shall add any additional safety precautions/procedures required by the ship and/or berth/terminal.

   These shall include:

   2.1 the examination, and frequency of re-examination of local areas and adjacent areas, including tests to ensure the areas are free, and continue to be free, of flammable and/or explosive atmospheres and, where appropriate, are not deficient in oxygen;

   2.2 the removal of dangerous cargoes and other flammable substances and objects away from the working and adjacent areas. This include scale, sludge, sediment and other possible flammable material;

   2.3 efficient protection of flammable structural members, e.g. beams, wooden walls, floors, doors, wall and ceiling coverings against accidental ignition; and

   2.4 the sealing of open pipes, pipe lead-throughs, valves, joints, gaps and open parts to prevent the transfer of flames, sparks and hot particles from the working areas to adjacent or other areas.

3. A duplicate of the hot work authorization and safety precautions shall be posted adjacent to the work area as well as at each entrance to the work area. The authorization and safety precautions shall be readily visible to, and clearly understood by, all persons engaged in the hot work.

4. While carrying out hot work, it is essential that:

4.1 Checks are carried out to ensure that conditions have not changed; and

4.2 at least one suitable fire extinguisher, or other suitable fire extinguishing equipment is readily available for immediate use at the location of the hot work.

5. During hot work and after completion of such work, an effective fire watch shall be maintained for a sufficient time in the area of the hot work as well as adjacent areas where a hazard resulting from the transfer of heat may be created.

6. Reference shall also be made to the appropriate publications listed in the bibliography where additional valuable guidance on hot work procedures may be found. In particular, the International Safety Guide for Oil Tankers and Terminals (ISGOTT) shall be consulted.

ANNEX 4

BUNKERING PRECAUTIONS, INCLUDING BUNKERING CHECKLIST (Section 19.1)

1. The Master of a ship involved in bunkering shall ensure that bunkering shall only take place if:

   1.1 notification of the intention to bunker is given to the Authority well in advance, stating the place, type of bunker oil to be transhipped and the expected time that bunkering will commence; and

   1.2 the questions on the attached bunkering checklist are answered truthfully and affirmatively.

2. The Master of a ship shall not begin bunkering unless he has ensured that:

   2.1 the scuppers are firmly closed;

   2.2 bunker pipes which are not in use are well blanked;

   2.3 the bunker hoses are properly supported;

   2.4 the bunker hoses have sufficient play;

   2.5 the bunker connection has been provided with a good seal;

   2.6 there is well tightened bolt in every bolt hole in the bunker pipe connection flanges;

   2.7 there is sufficiently large overflow basin under the bunker pipes connection(s); and

   2.8 any cargo handling operations in progress shall not pose hazard to the bunker operations.

3. The Master of a bunker vessel shall not begin bunkering operations unless he has ensured that:

   3.1 the bunker vessel is securely moored;

   3.2 the bunker hoses are in good condition;

   3.3 the bunker hoses have sufficient play;

   3.4 the bunker connection has been provided with a good seal; and

   3.5 there is well-tightened bolt in every bolt hole of the bunker pipe connection flanges.

PRE-TRANSFER BUNKER CHECK LIST

Name of bunker barge ..... Name of Vessel Taking Bunker .....
License Plate..... Master's Name.....
Master's/Driver's Name Date of Transhipment
....
Time of Transhipment..... Place of Transhipment.....

1. Bunker Barge/Truck

1.1 How much bunker oil will be transhipped?

Fuel..... m/tons actual .....cbm
Gas oil..... m/tons actual .....cbm
Lube oil..... m/tons actual .....cbm

1.2 What are the means of communication between the barge/ truck and the vessel taking bunkers?
.....

1.3 Who is responsible for communications with the vessel taking bunkers?
Name.....
Position.....

1.4 Who is in charge of supervising the operation and taking immediate action in case of malfunction?
Name.....
Position.....

1.5 (a) Is there an emergency stop facility?
Yes / No
Where.....

(b) Has the emergency stopping procedure been discussed and agreed with the vessel taking bunkers?
Yes / No

1.6 Nominated volume to be transhipped?

Grade	Volume
Marine Gas Oil	m/tons.....cbm
LFO	m/tons.....cbm
LFO	m/tons.....cbm
LFO	m/tons.....cbm
Lube oil	m/tons.....cbm

1.7 Agreed maximum pumping rates and line pressures:

Grade	Pumping rate in tons/hr.	Line pressure in psi/bar*

.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

I confirm that I shall not exceed above volumes pumping rates and line pressures* and that my crew will remain on duty close to the hose connection in order to oversee the safe bunker operation and to be able to respond to an emergency throughout the delivery.

_____

Barge Master/Truck Driver

*if applicable

2. Vessel Taking Bunker

2.1 Who measured the contents of the bunker tanks?
Name.....
Position.....

2.2 The measures were:

Tank	Actual contents	Free space(up to 98% filling)
No.	.....m/tons	.....cbm
No.	.....m/tons	.....cbm
No.	.....m/tons	.....cbm
No.	.....m/tons	.....cbm

2.3 How often will the contents of the bunker tanks be checked during the bunker operations?
Every ..... minutes

2.4 Who is responsible for taking the measurements referred to in point 3?
Name.....
Position.....

2.5 How much bunker oil will be transhipped?

Fuel	..... m/tons actual	.....cbm
Gas oil	..... m/tons actual	.....cbm
Lube oil	.....m/tons actual	.....cbm

2.6 What are the means of communication between the barge /truck and the vessel taking bunkers?
.....

2.7 Who is responsible for communications with the vessel

taking bunkers?

Name.....
Position.....

2.8 Who is in charge of supervising the operation and taking immediate action in case of malfunction?
Name.....
Position.....

2.9 Accepted volume to be transhipped:

Grade	Volume	
Marine Gas Oil.....	m/tons	.....cbm
LFO.....	m/tons	.....cbm
LFO.....	m/tons	.....cbm
LFO.....	m/tons	.....cbm
Lube oil.....	m/tons	.....cbm

3.0 Agreed maximum pumping rates and line pressures:

Grade	Pumping rate in tons/hr.	Line pressure in psi/bar*
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

I confirm that I am able to receive the above volumes at the pumping rates and line pressures* agreed to above that the ship's engineers in charge of the receiving operation will not close any valve which will restrict the flow of the product without adequate notice to the barge or truck personnel, and that my crew will remain on duty clopse to the hose connection in order to oversee the safe bunker operation and to be able to respond to an emergency throughout the delivery.

_____
Master/Chief Engineer

*if applicable