


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.


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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

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**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 facilities

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 hazard, 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 response 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 certain 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 prohibited 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.