RESOLUTON A.673(16)

Adopted on 19 October 1989
Agenda item 10

GUIDELINES FOR THE TRANSPORT AND HANDLING OF LIMITED AMOUNTS OF HAZARDOUS AND NOXIOUS LIQUID SUBSTANCES IN BULK ON OFFSHORE SUPPORT VESSELS

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety and the prevention and control of marine pollution from ships,

NOTING the current practices of the offshore industry for servicing and resupplying mobile offshore drilling units and offshore platforms, including those employed in the search for and recovery of hydrocarbons from the sea-bed,

NOTING ALSO the continuing and increasing need for offshore support vessels to carry limited quantities of noxious and hazardous liquids in bulk in the normal course of their operations,

NOTING FURTHER that regulation 13(4) of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, calls for guidelines to be developed by the Organization on the basis of which Administrations shall establish appropriate measures in respect of ships other than chemical tankers carrying noxious liquid substances of category A, B or C in bulk,

RECOGNIZING that full application of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk and the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk, in accordance with the International Convention for the Safety of Life at Sea, 1974, as amended and the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, to cover safety and pollution aspects is not necessary for offshore support vessels, having regard to the limited quantities of chemicals permitted to be carried, and to the modified requirements of the said instruments as contained in the Guidelines in the Annex to this resolution,

HAVING CONSIDERED the recommendations of the Maritime Safety Committee, at its fifty-seventh session, and the Marine Environment Protection Committee, at its twenty-sixth session,

1. ADOPTS the Guidelines for the Transport and Handling of Limited Amounts of Hazardous and Noxious Liquid Substances in Bulk on Offshore Support Vessels, the text of which is contained in the Annex to this resolution;

2. INVITES all Governments concerned:

   (a) to take appropriate steps to give effect to the Guidelines as early as possible;

   (b) to inform the Organization on measures taken to apply the Guidelines;

3. AUTHORIZES the Maritime Safety Committee and the Marine Environment Protection Committee to amend the Guidelines as may be necessary.

ANNEX

GUIDELINES FOR THE TRANSPORT AND HANDLING OF LIMITED AMOUNTS OF HAZARDOUS AND NOXIOUS LIQUID SUBSTANCES IN BULK ON OFFSHORE SUPPORT VESSELS

CONTENTS

PREAMBLE

1 These Guidelines have been developed for the design, construction and operation of offshore support vessels which transport limited amounts of hazardous and noxious liquid substances in bulk for the servicing and resupplying of offshore platforms, mobile offshore drilling units and other offshore installations, including those employed in the search for and recovery of hydrocarbons from the sea-bed.

2 These Guidelines have been developed in accordance with the provisions set forth in regulation 13(4) of Annex II to MARPOL 73/78 and in recognition of the need for standards which provide an alternative to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk and the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk for these types of vessels.

3 The Guidelines are intended to permit limited quantities of these hazardous and noxious liquid substances to be transported in bulk in offshore support vessels with minimum risk to the vessel, its crew and the environment.

4 The basic philosophy of the Guidelines is to apply standards contained in the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk and the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk to the extent that that is practicable and reasonable taking into account the unique design features and service characteristics of these vessels, as well as the limitation placed on amounts to be carried.

5 The Guidelines for the Design and Construction of Offshore Supply Vessels (resolution A.469(XII)) adopted on 19 November 1981 are also applicable to offshore support vessels subject to these Guidelines.

6 It is recognized that the technology of the offshore industry is complex and subject to continued evolution as is evidenced by the growing need for specialized vessels such as well-stimulation vessels. To meet the needs of the industry the Guidelines should not remain static. Therefore the Organization will periodically review the Guidelines, taking into account both experience and technical development. Amendments to the Guidelines involving requirements for new cargoes will be circulated periodically as new cargoes are proposed for carriage and the requirements are developed.

CHAPTER 1 – GENERAL

1.1 Application

1.1.1 The Guidelines apply to offshore support vessels, regardless of size or voyage, that, while not constructed or adapted primarily to carry in bulk cargoes subject to these Guidelines, carry, in limited quantities, the substances identified in 1.2.2. The Guidelines apply when these cargoes are carried.

1.1.2 For an offshore support vessel the keel of which is laid or which is at a similar stage of construction on or after 19 April 1990, the requirements in chapters 1 to 6 apply in full. For an offshore support vessel the keel of which is laid or which is at a similar stage of construction prior to 19 April 1990, the Guidelines apply as indicated in chapter 7.

1.1.3 A vessel irrespective of the date of construction, which is converted for the carriage of bulk liquids subject to these Guidelines on or after the date specified in 1.1.2 should be treated as a vessel constructed on the date on which such conversion commences. An existing offshore support vessel which transports a cargo subject to these Guidelines and undergoes modification for the transport of additional cargoes falling under these Guidelines should not be considered as a vessel which has undergone a conversion.

1.1.4 For the purpose of these Guidelines, "limited quantities" means that the aggregate quantity of bulk liquids identified in 1.2.2 that is carried is any amount not exceeding a maximum which is the lesser of 800 m^3 or a volume in cubic metres equal to 40% of the vessel's deadweight calculated at a cargo density of 1.0. For ships referred to in 1.3.4.2, such as well-stimulation vessels, the Administration may permit carriage of more than the maximum amount specified above.

1.1.5 For other ships, the Administration may permit carriage of more than the relevant maximum amount specified above, provided that the survival capability requirements of chapter 2 of the International Bulk Chemical Code or the International Gas Carrier Code are complied with.

1.1.6 The Guidelines apply only in the case of bulk carriage involving transfer of the cargo to or from its containment which forms part of the vessel or remains on board.

1.1.7 Carriage and handling of dangerous goods and marine pollutants in packaged form should be in accordance with the recommendations of the International Maritime Dangerous Goods Code.

1.1.8 These Guidelines apply in addition to the Guidelines for the Design and Construction of Offshore Supply Vessels (resolution A.469(XII)). Where the present Guidelines set forth alternative safety standards to those contained in resolution A.469(XII), the standards in the present Guidelines should be followed.

1.2 Scope

1.2.1 The provisions of the Guidelines have been developed so that limited quantities of cargoes regulated under these Guidelines may be carried in bulk with minimum risk to the offshore support vessel, its crew, and to the environment.

1.2.2 Products which may be carried subject to the Guidelines are:

.1 those hazardous and noxious liquids listed in appendix 1 and those other products which may be assigned to appendix 1 based on the following criteria:

.1.1 products which for safety reasons may be assigned for carriage on a type 3 ship as defined by the International Bulk Chemical Code and which are not required to meet the requirements for toxic products in section 15.12 of that Code,

.1.2 category A, B and C noxious liquid substances which would be permitted for carriage on a type 3 ship;

.2 flammable liquids.

1.2.3 Additives which are considered to fall outside the scope of products in 1.2.2 may be carried in limited amounts in accordance with requirements acceptable to the Administration. The aggregate amount of such additives which may be transported should not exceed 10% of the vessel's maximum authorized quantity of products subject to these Guidelines. An individual tank should contain not more than 10 m^3 of these additives. The discharge of these additives into the sea from offshore support vessels is prohibited.

1.2.4 Carriage of products not listed in appendix 1 should be undertaken only in accordance with suitable preliminary carriage conditions prescribed by the Administration, having regard to the criteria for hazard evaluation of bulk chemicals as approved by the Organization and the limitation referred to in 1.2.2. The Organization should be notified of the preliminary evaluation and conditions so that the hazardous material may be considered for inclusion in appendix 1.

1.3 Definitions

Unless expressly provided otherwise, the definitions contained in chapters 1 and 4 of the International Bulk Chemical Code apply.

1.3.1 *Cargo area* is that part of the offshore support vessel where cargo and cargo vapours are likely to be present and includes cargo tanks, cargo pump-rooms, hold spaces in which independent tanks are located, cofferdams surrounding integral tanks and the following deck areas:

.1 within 3 m of a cargo tank installed on deck;

.2 within 3 m of a cargo tank outlet in case of independent tanks installed below deck;

.3 within 3 m of a cargo tank outlet in case of integral tanks installed below deck and separated from the weather deck by a cofferdam;

.4 the deck area above an integral tank without an overlaying cofferdam plus the deck area extending transversely and longitudinally for a distance of 3 m beyond each side of the tank;

.5 within 3 m of any cargo liquid or vapour pipe, flange, cargo valve, gas or vapour outlet, or entrance or ventilation opening to a cargo pump-room.

1.3.2 *Deadweight* means the difference in metric tons between the displacement of an offshore support vessel in water of a density of 1.025 at the load waterline corresponding to the assigned summer freeboard and the lightweight of the ship.

1.3.3 *Lightweight* means the displacement of an offshore support vessel in metric tons without cargo, fuel, lubricating oil, ballast water, fresh water and feed water in tanks, consumable stores, and passengers and crew and their effects.

1.3.4 *Offshore support vessels* are:

.1 vessels which are primarily engaged in the transport of stores, materials and equipment to and from mobile offshore drilling units, fixed and floating platforms and other similar offshore installations; or

.2 vessels, including well-stimulation vessels, but excluding mobile offshore drilling units, derrick barges, pipelaying barges and floating accommodation units, which are otherwise primarily engaged in supporting the work of offshore installations.

1.3.5 *Hazardous substance* is any substance either listed in chapter 17 of the International Bulk Chemical Code or having a hazard more severe than one of the minimum hazard criteria given in criteria for hazard evaluation of bulk chemicals as approved by the Organization.

1.3.6 *Noxious liquid substance* is any substance listed as a category A substance, a category B substance, a category C substance, a category D substance, and any substance provisionally listed in such categories.

1.3.7 *Pollution hazard only substance* means a substance having an entry only of "P" in column d in chapter 17 of the International Bulk Chemical Code.

1.3.8 *Safety hazard substance* means a substance having an entry of "S" or "S/P" in column d in chapter 17 of the International Bulk Chemical Code.

1.3.9 *Flammable liquid* is any liquid having a flashpoint not exceeding 60°C (closed cup test).

1.3.10 *International Bulk Chemical Code* means the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (resolutions MSC.4(48) and MEPC.19(22)).

1.3.11 *International Gas Carrier Code* means the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (resolution MSC.5(48)).

1.3.12 *MARPOL 73/78* means the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto.

1.3.13 *1974 SOLAS Convention, as amended*, means the International Convention for the Safety of Life at Sea, 1974, as amended.

1.4 Equivalents

1.4.1 When these Guidelines require that a particular fitting material, appliance, apparatus, item of equipment or type thereof should be fitted or carried in an offshore support vessel, or that any particular provision should be made, or any procedure or arrangement should be complied with, the Administration may allow any other fitting, material, appliance, apparatus, item of equipment or type thereof to be fitted or carried, or any other provision, procedure or arrangement to be made in that ship, if it is satisfied by trial thereof or otherwise that such fitting, material, appliance, apparatus, item of equipment or type thereof or that any particular provision, procedure or arrangement is at least as effective as that required by the Guidelines. However, the Administration may not allow operational methods or procedures to be made an alternative to a particular fitting, material, appliance, apparatus, item of equipment, or type thereof, which are prescribed by these Guidelines, unless such substitution is specifically allowed by these Guidelines.

1.4.2 When the Administration so allows any fitting, material, appliance, apparatus, item of equipment, or type thereof, or provision, procedure, or arrangement, or novel design or application to be substituted thereafter, it should communicate to the Organization the particulars thereof together with a report on the evidence submitted so that the Organization may circulate the same to other Contracting Governments to the 1974 SOLAS Convention, as amended, and Parties to MARPOL 73/78, for the information of their officers.

1.5 Survey and certification

1.5.1 Following a satisfactory initial survey of an offshore support vessel, the Administration or its duly authorized organization should issue a certificate, the model form of which is set out in appendix 2, suitably endorsed to certify compliance with the provisions of the Guidelines. The certificate should indicate the cargoes regulated by these Guidelines that the vessel is permitted to carry with any relevant carriage conditions and should have a period of validity not to exceed five years.

1.5.2 The certificate issued under these Guidelines should have the same force and receive the same recognition as the certificate issued under regulation 11 of Annex II of MARPOL 73/78 and regulations VII/10 and VII/13 of the 1974 SOLAS Convention, as amended.

1.5.3 When the vessel is constructed to carry substances having only a marine pollution hazard, then the International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk required under MARPOL 73/78, Annex II may be suitably endorsed and serve the purpose of 1.5.1.

1.5.4 The validities of the certificates referred to in 1.5.1 and 1.5.3 should be subject to the periodical, intermediate, annual, and additional surveys required by the International Bulk Chemical Code, the International Gas Carrier Code and MARPOL 73/78, Annex II.

CHAPTER 2 – STABILITY AND CARGO TANK LOCATION

2.1 Stability

2.1.1 Offshore support vessels built in accordance with these Guidelines should be designed to meet the requirements for intact stability and for subdivision and damage stability contained in the Guidelines for the Design and Construction of Offshore Supply Vessels (resolution A.469(XII)).

2.1.2 Well-stimulation vessels which are permitted to carry more than the maximum amounts specified in 1.1.4 should be designed to meet the requirements for intact stability and for subdivision and damage stability contained in the Guidelines for the Design and Construction of Offshore Supply Vessels, but with the damage given in 3.2.1 of those Guidelines occurring anywhere in the ship's length at any transverse watertight bulkhead.

2.2 Cargo tank location

Cargo tanks containing products subject to the provisions of the Guidelines should be located at least 760 mm measured inboard from the side of the vessel perpendicular to the centreline at the level of the summer load waterline.

CHAPTER 3 – SHIP DESIGN

3.1 Cargo segregation

3.1.1 Tanks containing cargo or residues of cargo subject to the provisions of the Guidelines should be segregated from machinery spaces, propeller shaft tunnels, if fitted, dry cargo spaces, accommodation and service spaces and from drinking water and stores for human consumption, by means of a cofferdam, void space, cargo pump-room, empty tank, oil fuel tank, or other similar space. On-deck stowage of independent tanks or installing independent tanks in otherwise empty hold spaces should be considered as satisfying this requirement.

3.1.2 Cargoes which react in a hazardous manner with other cargoes or oil fuels should:

.1 be segregated from such other cargoes or oil fuels by means of a cofferdam, void space, cargo pump-room, pump-room, empty tank, or tank containing a mutually compatible cargo;

.2 have separate pumping and piping systems which should not pass through other cargo tanks containing such cargoes, unless encased in a tunnel; and

.3 have separate tank venting systems.

3.1.3 Cargo piping should not pass through any accommodation, service or machinery space other than cargo pump-rooms or pump-rooms.

3.1.4 Pumps, ballast lines, vent lines and other similar equipment serving permanent ballast tanks should be independent of similar equipment serving cargo tanks.

3.1.5 Bilge pumping arrangements for cargo pump-rooms or for hold spaces in which independent cargo tanks are installed should be situated entirely within the cargo area.

Segregation requirements for integral tanks

3.1.6 Where not bounded by bottom shell plating, fuel oil tanks, a cargo pump-room or a pump-room, the cargo tanks should be surrounded by cofferdams. Tanks for other purposes (except fresh water and lubricating oils) may be accepted as cofferdams for these tanks.

3.1.7 For access to all spaces, the minimum spacing between cargo tank boundaries and adjacent ship's structures should be 600 mm.

3.1.8 Cargo tanks may extend to the deck plating, provided dry cargo is not handled in that area. Where dry cargo is handled on the deck area above a cargo tank, the cargo tank may not extend to the deck plating unless a continuous, permanent deck sheathing of wood or other suitable material of appropriate thickness and construction is fitted to the satisfaction of the Administration.

3.1.9 Cargoes subject to the Guidelines should not be carried in either the fore or aft peak tanks.

3.1.10 For pollution hazard only substances having a flashpoint exceeding 60°C (closed cup test) the Administration may waive the arrangements referred to in 3.1.1 and 3.1.3 provided that the segregation requirements for accommodation spaces, drinking water and stores for human consumption are observed. Additionally, 3.1.6 and 3.1.7 need not be applied.

3.2 Accommodation, service and machinery spaces and control stations

3.2.1 Accommodation or service spaces, or control stations should not be located within the cargo area.

3.2.2 Unless they are spaced at least 7 m away from the cargo area containing flammable products, entrances, air inlets and openings to accommodation, service and machinery spaces and control stations should not face the cargo area. Doors to spaces not having access to accommodation, service and machinery spaces and control stations, such as cargo control stations and store-rooms, may be permitted by the Administration within the 7 m zone specified above, provided the boundaries of the spaces are insulated to A-60 standard. When arranged within the 7 m zone specified above, windows and sidescuttles facing the cargo area should be of a fixed type. Such sidescuttles in the first tier on the main deck should be fitted with inside covers of steel or equivalent material.

3.2.3 In order to guard against the danger of hazardous vapours, due consideration should be given to the location of air intakes and openings into accommodation, service and machinery spaces and control stations in relation to cargo piping and cargo vent systems.

3.2.4 For pollution hazard only substances having a flashpoint exceeding 60°C, the arrangements referred to in 3.2.1 to 3.2.3 may be waived.

3.3 Access to spaces in the cargo area

Access to spaces within the cargo area should meet the requirements of 3.4 of the International Bulk Chemical Code.

3.4 Cargo tank construction

3.4.1 Cargo tanks should be at least of the type required for the cargo by the International Bulk Chemical Code or the International Gas Carrier Code, as applicable.

3.4.2 Portable tanks meeting the requirements of section 13 of the General Introduction to the International Maritime Dangerous Goods Code for the cargo concerned or other portable tanks specifically approved by the Administration may be used, provided that they are properly located and secured to the vessel.

3.4.3 Except for the tank connections to cargo pump-rooms, all tank openings and connections to the tank should terminate above the weather deck and should be located in the tops of the tanks. Where cofferdams are provided over integral tanks, small trunks may be used to penetrate the cofferdam.

3.4.4 The greater of the following design pressures (gauge) should be used for determining scantlings of independent pressure tanks:

.1 0.7 bar;

.2 the vapour pressure of the cargo at 45°C;

.3 the vapour pressure of the cargo at 15°C above the temperature at which it is normally carried; or

.4 the pressure which occurs in the tank during the loading or unloading.

The design of the tanks should comply with standards acceptable to the Administration taking into account the carriage temperature and relative density of cargo. Due consideration should also be given to dynamic forces and any vacuum pressure to which the tanks may be subjected.

3.4.5 Integral and independent gravity tanks should be constructed and tested according to standards of the Administration taking into account the carriage temperature and relative density of cargo.

3.4.6 For pollution hazard only substances having a flashpoint exceeding 60°C, the requirements of 3.4.3 need not be applied.

3.5 Materials of construction

Materials of construction for tanks, piping, fittings and pumps should be in accordance with chapter 6 of the International Bulk Chemical Code, or chapter 6 of the International Gas Carrier Code, as applicable.

3.6 Cargo tank vent systems

3.6.1 Independent pressure tanks should be fitted with pressure relief devices that are so designed as to direct the discharge away from personnel and that have a set pressure and capacity which is in accordance with standards acceptable to the Administration taking into account the design pressure referred to in 3.4.4.

3.6.2 Cargo tank vent systems of integral or independent gravity tanks should meet the requirements of the International Bulk Chemical Code, except that the height specified in 8.2.2 of the Code may be reduced to 2 m.

3.6.3 The location of cargo tank vent outlets for independent pressure tanks and for cargo tanks used to carry pollution hazard only substances with a flashpoint exceeding 60°C (closed cup test) should be to the satisfaction of the Administration.

3.6.4 Cargo tank vent systems of portable tanks allowed under 3.4.2 should be to the satisfaction of the Administration, taking into account the requirements of 3.6.

3.7 Cargo transfer

3.7.1 The cargo transfer system should comply with the requirements of chapter 5 of the International Bulk Chemical Code or chapter 5 of the International Gas Carrier Code when considered applicable and practical by the Administration, taking into account existing industry standards and practices.

3.7.2 The remote shutdown devices for all cargo pumps and similar equipment, required by 5.6.1.3 of the International Bulk Chemical Code, should be capable of being activated from a dedicated cargo control location which is manned at the time of cargo transfer and from at least one other location outside the cargo area and at a safe distance from it.

3.8 Electrical installations

Electrical installations should meet the requirements of chapter 10 of the International Bulk Chemical Code.

3.9 Fire-fighting requirements

3.9.1 For the carriage of flammable liquids identified in appendix 1, the requirements for tankers in chapter II-2 of the 1974 SOLAS Convention, as amended, should apply to vessels covered by the Guidelines, irrespective of tonnage, including vessels of less than 500 tons gross tonnage, except that:

.1 regulations 60, 61, 62 and 63 should not be applied;

.2 regulation 56.1 (i.e., positioning of machinery spaces aft of cargo tanks, slop tanks, cargo pump-rooms and cofferdams), regulation 56.2 (i.e, the requirements for location of the main cargo control station), regulations 56.4 and 56.8 need not be applied. Additionally, regulation 56.7 need not be applied provided that the exterior boundaries of superstructures and deckhouses enclosing accommodation and including any overhanging decks which support such accommodation are spaced at least 7 m away from the cargo area. The insulation of such boundaries should however be to the satisfaction of the Administration;

.3 with regard to regulation 57.1, the Administration may permit use of a method other than IC as defined in regulation 42.5.1 where considered appropriate;

.4 the requirements of regulation 44 may be applied in lieu of those in regulation 58, where considered appropriate by the Administration;

.5 the provisions of regulation 59 need be applied only where considered appropriate by the Administration, taking into account the requirement in 3.6.2 of the Guidelines that cargo tank vent systems should meet the relevant requirements of the International Bulk Chemical Code;

.6 regulation 4, as applicable to cargo ships, and regulation 7 should apply as they would apply to tankers of 2,000 tons gross tonnage and over;

.7 the provisions of 3.9.2.3 should be applied in lieu of regulation 61; and

.8 the provisions of 3.9.2.5 should be applied in lieu of regulation 63.

3.9.2 The following provisions also apply for the carriage of flammable liquids identified in appendix 1:

.1 During cargo transfer, water pressure should be maintained on the fire main system.

.2 Fire hoses, fitted with approved dual-purpose nozzles (i.e. spray/jet type with a shutoff), should be attached to each fire hydrant in the vicinity of the flammable liquid to be carried.

.3 Either a fixed deck foam system or a fixed fire-extinguishing system of the dry chemical type complying with the following should be provided:

.3.1 the system should be located to protect the deck within the cargo area;

.3.2 the system should be capable of covering the deck within the cargo area without being moved;

.3.3 when a fixed deck foam system is provided, it should comply with the requirements of 11.3.3 to 11.3.12 of the International Bulk Chemical Code. Only foam suitable for the products carried should be used.

.3.4 Administrations may approve a fixed fire-extinguishing system provided that:

.3.4.1 on a deck area of 45 m^2 or less, there are two or more dry chemical extinguishers whose total capacity is not less than 135 kg;

.3.4.2 on a deck area of more than 45 m^2, there are three or more dry chemical extinguishers whose total capacity of extinguishing agent is not less than:

$C = 3A$ kg

where A is the deck area (in square metres);

.3.4.3 the minimum rate of supply of the extinguishing agent is not less than 3 kg/min per square metre.

.4 An alternative to the systems required in 3.9.2.3 above may be approved in accordance with the procedures contained in regulation II-2/22 of the 1974 SOLAS Convention, as amended.

.5 The cargo pump-room where flammable liquids are handled should be provided with a fixed fire-extinguishing system in accordance with 11.2 of the International Bulk Chemical Code.

3.9.3 For vessels which carry only liquids identified as non-flammable in appendix 1, the fire-fighting requirements should be to the satisfaction of the Administration.

3.10 Acid spill protection

3.10.1 Floors or decks under acid storage tanks and pumps and piping for acid should have a lining or coating of corrosion-resistant material extending up to a minimum height of 500 mm on the bounding bulkheads or coamings. Hatches or other openings in such floors or decks should be raised to a minimum height of 500 mm; however, where the Administration determines that this height is not practicable a lesser height may be required.

3.10.2 Flanges or other detachable pipe connections should be covered by spray shields.

3.10.3 Portable shield covers for connecting the flanges of the loading manifold should be provided. Drip trays of corrosion-resistant material should be provided under loading manifolds for acids.

3.10.4 Spaces for acid storage tanks and acid pumping and piping should be provided with drainage arrangements of corrosion-resistant materials.

3.10.5 Deck spills should be kept away from accommodation and service areas by means of a permanent coaming of suitable height and extension.

3.11 Ventilation of spaces in the cargo area

The requirements of chapter 12 of the International Bulk Chemical Code apply. The Administration may, however, grant relaxations concerning the distances required in 12.1.5 of the Code.

3.12 Vapour detection

3.12.1 Vapour detection for the cargoes carried should be provided in accordance with the requirements contained in the International Bulk Chemical Code.

3.12.2 Enclosed and semi-enclosed spaces containing installations for acid should be fitted with fixed vapour detection and alarm systems which provide visual and audible indication. The vapour detection systems should be capable of detecting hydrogen except that, in the case where only hydrochloric acid is carried, a hydrogen chloride vapour detection system should be provided.

3.12.3 At least two portable instruments for detecting flammable vapour concentrations should be provided when cargoes subject to these Guidelines with a flashpoint not exceeding 60°C (closed cup test) are carried.

3.12.4 At least two portable instruments suitable for measuring the concentration of oxygen in atmospheric air should be provided.

3.13 Special requirements – General

The special requirements for the cargo as referred to in chapter 17 of the International Bulk Chemical Code or chapter 19 of the International Gas Carrier Code are applicable; however, the requirement in 15.19.6 of the International Bulk Chemical Code for a visual and audible high-level alarm may be waived by the Administration taking into account the cargo carriage arrangements and cargo loading procedures.

3.14 Special requirements for the carriage of liquefied gases

3.14.1 Each enclosed space used for handling or storage of a liquefied gas should be fitted with a sensor continuously monitoring the oxygen content of the space and an alarm indicating low oxygen concentration. For semi-enclosed spaces portable equipment may also be acceptable.

3.14.2 Drip trays resistant to cryogenic temperatures should be provided at manifolds transferring liquefied gases or at other flanged connections in the liquefied gas system.

3.14.3 For the carriage of liquid nitrogen the requirements of 17.19 of the International Gas Carrier Code should apply.

3.14.4 The construction of cargo tanks and cargo piping systems for liquefied nitrogen and liquid carbon dioxide should be to the satisfaction of the Administration.

3.14.5 Emergency shutoff valves should be provided in liquid outlet lines from each liquefied gas tank. The controls for the emergency shutoff valves should meet the requirements given in 3.7.2 for remote shutdown devices.

3.15 Gauging and level detection

Each cargo tank should have a level gauging system acceptable to the Administration. As a minimum the system should meet relevant requirements of the International Bulk Chemical Code and the International Gas Carrier Code. The systems for process tanks on board well-stimulation vessels should be to the satisfaction of the Administration.

3.16 Emergency remote shutdown

In the case of transfer operations involving pressures in excess of 50 bar gauge, arrangements for emergency depressurizing and disconnection of the transfer hose should be provided. The controls for activating emergency depressurization and disconnection of the transfer hose should meet the requirements given in 3.7.2 for remote shutdown devices.

CHAPTER 4 – POLLUTION REQUIREMENTS

4.1 Each ship certified to carry a noxious liquid substance should be provided with a Cargo Record Book and a Procedures and Arrangements Manual developed for the ship in accordance with the provisions of the Standards for Procedures and Arrangements for the Discharge of Noxious Liquid Substances (resolution MEPC.18(22)) and approved by the Administration.

4.2 Discharge into the sea of category A, B, and C noxious liquid substances or ballast water, tank washings, or other residues or mixtures containing such substances, is prohibited. Any discharges of residues and mixtures containing noxious liquid substances should be to reception facilities in port. As a consequence of this prohibition, the Administration may waive the requirements for efficient stripping and underwater discharge arrangements in MARPOL 73/78, Annex II.

4.3 Residues of category D substances, tank washings, other mixtures or ballast water containing such substances may be discharged into the sea provided that the discharge is in accordance with the relevant conditions as required under MARPOL 73/78, Annex II.

4.4 In the case of cargoes regulated by MARPOL 73/78, Annex I, the requirements of that Annex should apply as appropriate.

CHAPTER 5 – PERSONNEL PROTECTION

5.1 Decontamination showers and eyewashes

Except in the case of pollution hazard only substances, a suitably marked decontamination shower and eyewash should be available on deck in a convenient location. The shower and eyewash should be operable in all ambient conditions.

5.2 Protective and safety equipment

Protective and safety equipment should be kept on board in suitable locations as required by chapter 14 of the International Bulk Chemical Code or the International Gas Carrier Code for products to be carried.

CHAPTER 6 – OPERATIONAL REQUIREMENTS

6.1 Deck cargo and products covered by these Guidelines should not be loaded or unloaded simultaneously.

6.2 Only personnel engaged in the transfer of cargo covered by these Guidelines should be permitted to be in the cargo area and the adjacent open main deck during loading or unloading operations.

CHAPTER 7 – APPLICABILITY OF THE GUIDELINES TO EXISTING OFFSHORE SUPPORT VESSELS

The provisions of the Guidelines should apply to offshore support vessels the keels of which are laid or which are at a similar stage of construction before the date specified in 1.1.2 as follows.

7.1 The provisions of chapter 1 of these Guidelines should apply except that, with reference to 1.1.4:

.1 larger quantities of bulk liquids may be permitted by the Administration on an individual vessel basis;

.2 the survival capability requirements of chapter 2 of the International Bulk Chemical Code and the International Gas Carrier Code need not be applied to vessels referred to in 1.3.4.2.

7.2 The provisions of chapters 2 and 3 of the Guidelines should be applied where deemed reasonable and practicable by the Administration taking full account of the present arrangements and equipment of the vessel. Recognizing that existing vessels may not meet many of the requirements of these chapters, relaxations may be granted.

7.3 The provisions of chapters 4 to 6 of the Guidelines should be applied.

APPENDIX 1

TABLE OF PERMITTED CARGOES

	Annex II, MARPOL 73/78 pollution category	Flammability
Acetic acid (aqueous solution)	C(D)	Yes
Formic acid (aqueous solution)	D	Yes
Hydrochloric acid	D	No
Hydrochloric-hydrofluoric mixtures containing 3% or less hydrofluoric acid	D	No
Sulphuric acid	C	No
Toluene	C	Yes
Xylene	C	Yes
Zinc bromide brine	(A)	No
Liquid carbon dioxide	N/A	No
Liquid nitrogen	N/A	No

APPENDIX 2

Model form of Certificate of Fitness

CERTIFICATE OF FITNESS

(Official seal)

Issued under the provisions of the

GUIDELINES FOR THE TRANSPORT AND HANDLING OF LIMITED AMOUNTS OF HAZARDOUS AND NOXIOUS LIQUID SUBSTANCES IN BULK ON OFFSHORE SUPPORT VESSELS (resolution A.673(16))

under the authority of the Government of

.....
(full official designation of country)

by .....
(full official designation of the competent person or organization recognized by the Administration)

Name of vessel	Distinctive number or letters	Port of registry	Gross tonnage	Deadweight

Date on which keel was laid or on which the vessel was at a similar stage of construction or (in the case of a converted vessel) date on which conversion for the carriage of bulk liquids subject to these Guidelines was commenced:

.....

The vessel also complies fully with the following amendments to the Guidelines:

.....

.....

The vessel is exempted from compliance with the following provisions of the Guidelines:

.....

.....

The Certificate should be drawn up in the official language of the issuing country. If the language used is neither English nor French, the text should include a translation into one of these languages.

THIS IS TO CERTIFY:

1 .1 That the vessel has been surveyed in accordance with the provisions of 1.5 of the Guidelines;

.2 that the survey showed that the construction and equipment of the vessel

*.2.1 complied with the relevant provisions of the Guidelines applicable to "new" vessels

*.2.2 complied with the provisions of the Guidelines in respect of "existing" vessels;

2 That the vessel has been provided with a manual in accordance with the standards for procedures and arrangements as called for by regulations 5, 5A and 8 of Annex II of MARPOL 73/78, and that the arrangements and equipment of the vessel prescribed in the manual are in all respects satisfactory and comply with the applicable requirements of the said Standards;

3 That the vessel is suitable for the carriage in bulk of the following products, provided that all relevant operational provisions of the Guidelines are observed:

Products[1,2]	Conditions of carriage (tank numbers, etc.)
* Continued on attachment 1, additional signed and dated sheets. Tank numbers referred to in this list are identified on attachment 2, signed and dated tank plan.	

4 That, in accordance with *1.4 of the Guidelines and *2.8.2 of the IBC Code, the provisions of the Guidelines and the Code are modified in respect of the vessel in the following manner:

.....

* Delete as appropriate.

5 That the vessel must be loaded:

*.1 in accordance with the loading conditions provided in the approved loading manual, stamped and dated ..... and signed by a responsible officer of the Administration, or of an organization recognized by the Administration;

*.2 in accordance with the loading limitations appended to this Certificate.

Where it is required to load the vessel other than in accordance with the above instructions, then the necessary calculations to justify the proposed loading conditions should be communicated to the certifying Administration who may authorize in writing the adoption of the proposed loading condition.**

This certificate is valid until .....
subject to surveys in accordance with 1.5 of the Guidelines.

Issued at ....19...
(*place of issue of Certificate*)

The undersigned declares that he is duly authorized by the said Government to issue this Certificate.

.....
(*signature of official issuing the Certificate and/or seal of issuing authority*)

Notes on completion of Certificate:

1 Products: products listed in appendix 1 to the Guidelines or which have been evaluated by the Administration in accordance with 1.2.4 of the Guidelines should be listed. In respect of the latter "new" products, any special requirements provisionally prescribed should be noted.

2 Products: The list of products the vessel is suitable to carry should include the noxious liquid substances of category D which are not covered by the Guidelines and should be identified as "IBC Code chapter 18 category D".

* Delete as appropriate.
** Instead of being incorporated in the Certificate, this text may be appended to the Certificate if duly signed and stamped.

ENDORSEMENT FOR ANNUAL AND INTERMEDIATE SURVEYS

THIS IS TO CERTIFY that at a survey required by 1.5 of the Guidelines for the Transport and Handling of Limited Amounts of Hazardous and Noxious Liquid Substances in Bulk on Offshore Support Vessels, the vessel was found to comply with the relevant provisions of the Guidelines.

Annual survey:

Signed: .....
(*signature of duly authorized official*)

Place: .....

Date: .....

(*seal or stamp of the Authority, as appropriate*)

Annual*/Intermediate* survey:

Signed: .....
(*signature of duly authorized official*)

Place: .....

Date: .....

(*seal or stamp of the Authority, as appropriate*)

Annual*/Intermediate* survey:

Signed: .....
(*signature of duly authorized official*)

Place: .....

Date: .....

(*seal or stamp of the Authority, as appropriate*)

Annual survey:

Signed: .....
(*signature of duly authorized official*)

Place: .....

Date: .....

(*seal or stamp of the Authority, as appropriate*)

---

* Delete as appropriate.

ATTACHMENT 1 TO THE CERTIFICATE OF FITNESS

Continued list of products to those specified in section 3, and their conditions of carriage.

Products	Conditions of carriage (tank numbers etc.)

Date .....
(as for Certificate)

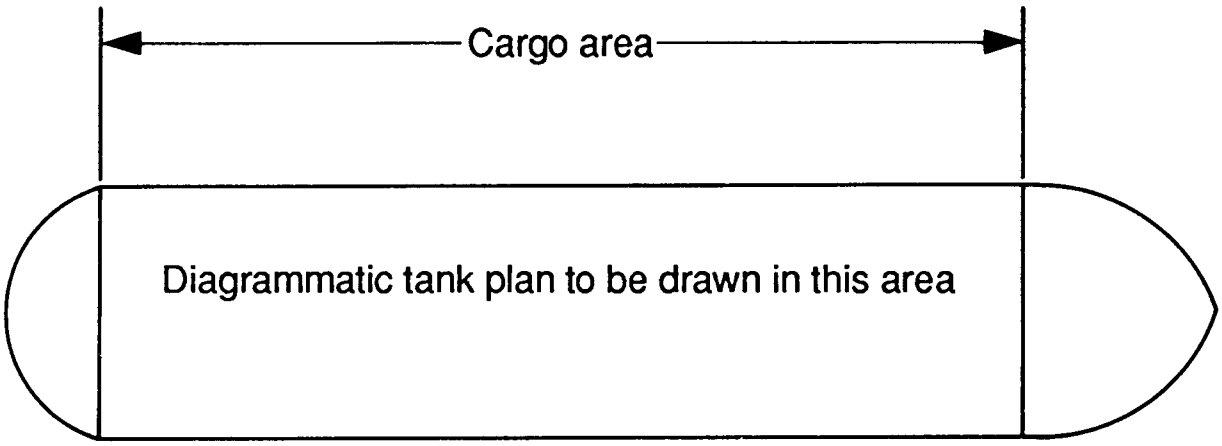
.....
(signature of official issuing the Certificate and/or seal of issuing authority)

ATTACHMENT 2 TO THE CERTIFICATE OF FITNESS

TANK PLAN (specimen)

Name of vessel: .....

Distinctive number or letters: .....



Diagrammatic tank plan to be drawn in this area

Date .....
(as for Certificate)

.....
(signature of official issuing the Certificate and/or seal of issuing authority)