MINISTRY OF SURFACE TRANSPORT

(Shipping Wing)

New Delhi, the 27th December, 1995

G.S.R. 811(E).—Whereas a draft of Merchant Shipping (Carriage of Cargo) Rules, 1995 was published as required by sub-sections (1) and (2) of Section 330, Section 331 and sub-section (5) of Section 332, read with Section 457, of the Merchant Shipping Act, 1958 (44 of 1958) and in supersession of the Merchant Shipping (Carriage of Dangerous Goods) Rules, 1978, the Merchant Shipping Deck Cargo (including Timber Cargo) Rules, 1980 and the Merchant Shipping (Carriage of Grain) Rules, 1991 in the Gazette of India, Part-II, Section 3, Sub-section (i) dated the 16th January, 1995 under notification of the Government of India vide No. G.S.R. 43 dated the 28th January, 1995 as required under Sections 330 and 332 of the Merchant Shipping Act for the information of all person likely to be affected thereby inviting their objections and suggestions in respect of the said draft rules till a period of thirty days from the date on which copies of the notification as published in the Gazette of India are made available to the public:

And, whereas the said Gazette was made available to the public on 28th January, 1995:

And, whereas no objection or suggestions have been received :

Now, therefore, in exercise of the powers conferred by Section 330, 331 and 332 with Sections 457 and 458 of the Merchant Shipping Act, 1958 (44 of 1958), the Central Government hereby makes the following rules, namely:-

- 1. Short title, commencement and application.—(1) These rules may be called Merchant Shipping (Carriage of Cargo) Rules, 1995.
- (2) They shall come into force on the date of their publication in the Official Gazette.
 - (3) They shall apply to :-
 - (a) every Indian ship carrying or about to carry cargos specified in these rules anywhere, and
 - (b) every ship other than Indian ship carrying or about to carry cargoes specified in these rules in port of places in India;

Provided that where such cargoes are to be carried on Indian ships of less than 500 tons gross tonnage the Director General may permit other effective measures to ensure safety of the ship taking into account the nature and conditions of the voyage.

- (4) These rules shall not apply to carriage of ship's stores and equipment.
 - 2. Definition.—In these rules, unless the context otherwise requires:
 - (a) "Act" means the Merchant Shipping Act, 1958 (44 of 1958):

- (b) "administration" as mentioned in the various International Maritime Organisation Codes means the Directorate General of Shipping;
- (c) "BC Code" means the code of safe practice for solid bulk cargoes adopted by the International Maritime Organisation as amended from time to time.
- (d) "BCH code" means the Code for the construction and equipment of ships carrying dangerous chemicals in bulk for ships built before 1st July, 1986 by the International Maritime Organisation as amended from time to time.
- (e) "cargo units" means a vehicle, container, flat pallet portable tank, packaged unit, or any other entity and loading equipment or part thereof which may belong to the ship but is not fixed to the ship;
- (f) 'cargo stowage code" means the code of safe practice for cargo stowage and securing adopted by the International Maritime Organisation as amended form time to time:
- (g) "chemical tanker" mean a cargo ship constructed or adopted and used for the carriage of dangerous liquid chemicals in bulk in listed in International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (IBC) Code for the Construction and Equipment of Ship Carrying Dangerous Chemicals in Bulk (BCH) code;
- (h) "Chief Surveyor" means the Chief Surveyor with the Government of India or the Deputy Chief Surveyor in the Directorate General of Shipping:
- (i) "container" means as article of transport equipment :-
 - (a) of a permanent character and accordingly strong enough to be suitable for repeated use.
 - (b) specially designed to facilitates the transport of goods, by one or more modes of transport, without intermediate reloading.
 - (c) designed to be secured and/or readily handled, having corner fittings for the purposes.
 - (d) of such size that the area enclosed by the four outer bottom corners in either:-
 - (i) at least 14 square metre (150 square feet), or
 - (ii) at least 7 square metre (75 square feet) if it is fitted with top corner fittings
 - (e) complying with the requirement of the International Convention for sale containers. The term "container" includes, neither vehicles nor packaging; however, containers when carried on chassis are included:
 - (j) "dangerous cargoes" include dangerous goods in packaged form, explosive as defined in Explosives Act, 19884 and the International Maritime Dangerous Goods (IMDG) code, noxious or

dangerous chemicals liquid in bulk, solid bulk cargoes, liquefied gas, harmful substances identified as marine pollutants in the International Maritime Dangerous Goods (IMDG) code. Deck cargoes including timber cargo and other such cargoes, which by reasons of their nature, quantity or mode of stowages are either singly or collectively liable to endanger the life of health of persons on or near the ship or liable to imperil the safety of the ship;

- (k) "dangerous goods" means dangerous cargoes carried in packaged form or solid form in bulk and includes harmful substances identified as marine pollutants in the International Maritime Dangerous Goods (IMDG) code;
- (I) "documents" in the context of these rules includes information submitted through electronic data processing (EDP) and electronic data interchange (EDI) transmission techniques as an aid to paoer documentation;
- (m) "gas garrier" means a cargo ship constructed or adapted and used for the carriage on bulk of any liquefied gas or other product listed in the International Code for the Construction and Equipment of ships carrying Liquified Gases in Bulk (IGC)/GAS code.
- (n) "gas code" means the Code for construction and equipment of ships carrying liquefied gases in bulk applicable to ships constructed on or after 31st December, 1976 but prior to 1_{st} July 1986 adopted by the International Maritime Organisation as amended from time to time ;
- (o) "grain includes wheat, maize (corn) oats, rye, barley, rice, pulses, seed and processed from thereof whose behaviour is similar to that of grain in its natural state;
- (p) "grain code" means the international code for the safe carriage of grain in bulk adopted by the International Maritime Organisation as amended from time to time;
- (q) "International Code for the Construction and Equipment of ships carrying Dangerous Chemicals in Bulk (IBC) Code" means the International code for constructions and equipment of ships carrying dangerous chemicals in bulk applicable to ships constructed on or after 1st July, 1986 adopted by the International Maritime Organisation as amended form time to time;
- (r) "International Code for the Construction and Equipment of ships carrying liquefied gases in Bulk (IGC) code" means the International code for constructions and equipment of ships carrying liquefied gases in bulk applicable to ships, constructed on or after 1st July, 1986 adopted by the International Maritime Organisation as amended from time to time;
- (s) "International Maritime Dangerous Goods (IMDG) code" means the International Maritime Dangerous Goods code adopted

by the International Maritime Organisation as amended from time to time :

- (t) "liquefied gases" means gases having a vapour pressure exceeding 2.8 bar absolute at a temperature of 37.8₀C and includes other product prescribed in the International Code for the Construction and Equipment of Ships carrying Liquified Gases in Bulk (IGC) code;
- (u) 'MARPOL Convention" means the International Convention for prevention of pollution from ships in force including its protocol adopted by the International Maritime Organisation and as amended from time to time;
- (v) "Nautical Advisor" means the Nautical Adviser to the Government of India or the Deputy Nautical Advisor in the Directorate General of Shipping;
- (w) "Schedule" means Schedules to these rules;
- (x) "SOLAS Convention" means the International Convention for Safety of Life at Sea in force including its protocols adopy adopted by the International Maritime Organisation and as amended from time to time;
- (y) "timer code" means the code for safe practice for ships carrying timber deck cargo adopted by the International Maritime Organisation as amended from time to time;
- (z) "timber deck cargo" means the deck cargo consisting of timber;
- (za) "U.N. number" means a serial number assigned to a dangerous substance in the International Maritime Dangerous Goos (IMDG) code;

PART II

- 3. General.—(1)Every ship, when carrying dangerous cargo in bulk which is liable to emit a toxic or flammable gas or cause oxygen depletion in the cargo space, shall be provided with an appropriate instrument for measuring the concertration of gas or oxygen in the air or in such spaces. Detailed instruction for use shall be provided with every such instrument and the crew on very such ship shall be trained in the use of such instrument within two weeks of their joining such ship for the first time.
- (2) Every Master when using pesticides for fumigation of the cargo of accommodation spaces shall take appropriate precaution of ensure safety of ship's crew and those engaged in fumigation.
- (3) Every ship loading dangerous cargoes under these rules shall be provided with comprehensive information on the ship' stability and the distribution of cargo in various standard loading condition. Information as provided under Merchant Shipping (Loadline) Rules, 1979 shall be considered adequate.

- 4.Cargo information.—(1) The shipper shall provided the master or his representative with appropriate information on the cargo sufficiently in advance of loading to enable the precautions which may be necessary for proper stowage and safe carriage of the cargo to be put in to effect. Such information shall be confirmed in writing and by appropriate shipping documents prior to loading the cargo on the ship.
 - (2) The cargo information shall include:
 - (a) in the case of general cargo and of cargo carried in cargo units, a general description of the cargo, the gross mass of the cargo or of the cargo units, any any relevant special properties of the cargo:
 - (b) in the case of a bulk cargo, information on the stowage factor of the cargo, the trimming procedures and, in the case of a concentrate or other cargo which may liquefy, additional information in the form of a certificate on the moisture content of the cargo and its transportable moisture limit;
 - (c) in the case of a bulk cargo not classified in accordance with the provisions of sub-rule (1) of rule 10 but which has chemical properties that may create a potential hazard, in addition to the information required by this rules, information on its chemical properties.
- (3) Prior to loading cargo units on board ship, the Shipper shall ensure that the gross mass of such units is in accordance with gross mass declared on the shipping documents.
- 5. International Maritime Organisation codes.—Every ship shall be provided with the appropriate codes referred to in these rules and adopted by the International Maritime Organisation relating to specific cargoes intended to be carried on board.
- 6. Stowage and securing.—When stowing and securing any cargo on board ship the Master shall comply with the provisions specified in cargo stowage code and in particular ensure that:
 - (1) Cargo and cargo units carried on or under deck are so loaded, stowed and secured as to prevent as far as practicable, throughout the voyage, damage or hazard to the ship and the persons on board and loss of cargo overboard.
 - (2) cargo carried in a cargo unit is so packed and secured within the unit as to prevent, throughout the voyage, damage or hazard to the ship and the persons on board.
 - (3) Appropriate precautions are taken during loading and transport of heavy cargoes or cargoes with abnormal physical dimensions to ensure that no structural damage to the ship occurs and to maintain adequate stability throughout the voyage.
 - (4) Appropriate precautions are taken during loading and transport of cargo units on board ro-ro ships, especially with regard to the securing arrangements on board such ships and on the cargo units and with regard to the strength of the securing points and lashings.

- (5) Containers are not loaded to more than the maximum gross weight indicated on the Safety Approval Plate fixed thereon under the International Convention for Safe Containers (CSC).
- (6) A ship carrying cargo units and other entities covered in the cargo stowage code shall carry a cargo securing manual duly prescribed and approved by the Nautical Advisor.
- 7. Reporting of incidents involving dangerous cargoes.—(1) When an incident taken place involving the loss or likely loss overboard of dangerous cargo including packaged dangerous goods, dangerous cargo in bulk, the Master, or other person having charge of the ship, shall report the particulars of such an incident without delay and to the fullest extent possible to the nearest coastal State. The report shall be based on the "General principle for ship reporting systems and ship reporting requirements including guidelines for reporting incident involving dangerous goods, harmful substances and/or marine pollutants" approved by the International Maritime Organisation.
- (2) In the event of the ship referred to in sub-rule (1) being abandoned, on in the event of a report from such a ship being incomplete or unobtainable the owner, character, manager or operator of the ship, or their agents shall, to the fullest extent possible, assume the obligations placed upon the master by this rule.
- (3) Every such ship when carrying dangerous cargo shall carry special emergency equipment including protective clothing as specified in the Schedule to International Maritime Dangerous goods (IMDG) code (Em Schedule) in compliance with emergency procedures for ship carrying dangerous goods. such protective clothing and equipment shall be kept in readiness as long as such cargo is carried on board or it being loaded or discharged. Master of every such ship shall ensure that the crew is familiar with the use of such equipment.
- (4) In every accident involving dangerous goods Master shall be guided by the International medical guide for ship adopted by International Maritime Organisation, the medical first and guide for use in accidents involving dangerous goods annexed to IMDG code and the list of medicines specified in Merchant Shipping (Carriage of Medicines) rules.

PART III

- 8. Application—This part applies to carriage of
 - (i) dangerous goods in packaged form
 - (ii) solid bulk cargoes, and
 - (iii) deck cargoes including timber deck cargo.
- 9. Dangerous goods in packaged form (1) Unless expressly provided otherwise, every ship carrying dangerous goods in packaged from as classified in sub-rule (1) of rule 10 shall comply with the requirements of the International Maritime Dangerous Goods (IMDG) code.
- (2) Every such ship constructed after 1_{st} July, 1986 shall, in addition, comply with the requirements of the first Schedule and on such compliance shall be issued with a document of compliance by the Principal Officer as prescribed in the Second Schedule.
- (3) Such certificate of compliance shall be in force for a period of 5 years from the date of issue or such short period as specified in the certificate.

- 10. Classification, identification and documentation—(1) For the purpose of these rules dangerous goods shall be classed as follows:-
 - Class 1- Explosives
 - Class 2- Gases: compressed, liquified or dissolved under pressure
 - Class 3- Flammable/liquids.
 - Class 4- Flammable/solids.
 - Class 4.2- substances liable to spontaneous combustion.
 - Class 4.3- Substances which in contact with water emit flammable gases.
 - Class 5.1- Oxidizing substances.
 - Class 5.2- Organic Feroxides.
 - Class 6.1- Poisonous (toxic) substances.
 - Class 6.2- Infectious substances.
 - Class 7- Radioactive materials.
 - Class 8- Corrosives
 - Class 9- Miscellaneous dangerous substance, that in any other substance which experience has shown, or may show, to be of such a dangerous character that the provisions of this part shall apply to it.
- (2) In all documents relating to the carriage of dangerous goods by sea where the goods are named, the correct technical name of the goods and the U.N. number allotted to it in the IMDG code shall be used (trade names along shall not be used) and the correct description given in accordance with the classification set out in sub-rule (1). In case of harmful substances identified as marine pollutant the document shall further identify the substance by the addition of words "marine pollution".
- (3) The shipping documents prepared by the shipper shall include, or be accompanied by a signed declaration on a form specified in the Third Schedule, indicating that the shipment offered for carriage is properly packaged and marked, labeled or placarded, as appropriate, and in proper condition for carriage, and where applicable, to minimize the hazard to the marine environment.
- (4) The person responsible for the packing of dangerous goods in a freight container or load vehicle shall provide a signed container packing declaration or vehicle packing declaration stating that the cargo in the unit has been properly packed and secured and that all applicable transport require (3) or where a container packing certificate or vehicle packing be combined with the document referred to in sub-rule (3) of this rule.
- (5) Where there is due cause to suspect that is freight container or road vehicle in which dangerous goods are packed is not in compliance with the requirements of sub-rule (2) or

- (3) or where a container packing certificate or vehicle packing declaration is not available, the freight container or vehicle shall not be accepted for shipment.
- (6) Every ship carrying dangerous goods shall be special list or manifest getting with the dangerous goods on board and the location thereof in accordance with the classification set out in sub-rule (1) of this rule. A detailed stowage plan, which identified by class and sets out the location of all dangerous goods on board, may be used in place of such a special list or manifest. In either case clear distinction shall be made between harmful substances identified as marine pollutants and other dangerous goods. A copy of one of these documents shall be submitted before departure, to the Mercantile Marine Department in India or to the person or if any, organization designated by the port State authority in a port outside India.
- 11. Packaging, making, labeling and placarding (1) The packaging of dangerous goods shall be:
 - (a) well made and in good condition;
 - (b) of such a character that any interior surface with which the contents may come in contact is not dangerous affected by the substance being conveyed; and
 - (c) capable of withstanding the ordinary risks of handling and carriage by men.
- (2) Where the use of absorbent or cushioning material is customary in the packaging of liquids in receptacles, that material shall be :
 - (a) capable of minimizing the dangers to which the liquid may give rise :
 - (b) no disposed as to prevent movement and ensure that the receptacle remains surrounded; and
 - (c) where reasonably possible of sufficient quantity to absorb the liquid in the event of breakage of the receptacle.
- (3) Receptacles containing dangerous liquids shall have an ullage at the filling temperature sufficient to allow for the highest temperature during the course of normal carriage.
- (4) Package containing dangerous goods shall be durably marked with the correct technical name; trade names along shall not be used.
- (5) Packages containing dangerous goods shall be provided with distinctive labels or stencils of the labels, or placards as appropriate, so as to make clear the dangerous properties of the goods contained therein.
- (6) The method of marking the correct technical name and of affixing labels or applying stencils of labels, or of affixing placards on package containing dangerous goods, shall be such that this information will still be identifiable on packages surviving at least three month's immersion in the sea. In considering suitable marking labeling and placarding methods, account shall be taken of the durability of the materials used end of the surface of the package.
- (7) Packages containing dangerous goods shall be marked and labelled as specified in this rule provided that the Nautical Advisor may exempt the following from the marking requirement:

- 1 package containing dangerous goods of a low degree of hazard or packages containing small quantities of dangerous goods or.
- 2 packages that are stowed and handled in units that are identified by labels or placards.
- 12. Stowage requirements –(1) Dangerous goods shall be stowed safety and appropriately in accordance with the nature of the goods. Incompatible goods shall be aggregated from one another.
- (2) Explosive (except ammunition) which present a action risk shall be stowed in a magazine which shall be kept securely closed while at sea. Such explosives shall be segregated from detonators. Electrical apparatus and cables in any compartment in which explosive are carried shall be so designed and used as to minimize the risk of fire or explosion.
- (3) Dangerous goods in packaged form which give off dangerous vapours shall be stowed in a mechanically ventilated space or on deck. Dangerous goods in solid form in bulk which give off dangerous vapours shall be stowed in well ventilated spaces.
- (4) In ships carrying flammable liquids or gases special precautions shall be taken where necessary against fire or explosion.
- (5) substance which are liable to spontaneous heating or combustion shall not be carried unless adequate precautions have been taken to minimize the likelihood of the outbreak of fire.
- (6) Harmful substances identified as marine pollutants shall be properly stowed and secured so as to minimize the hazards to the marine environment. Jettisoning or any such substances in packaged form and washing overbased of any leakage of such substance is prohibited except where necessary for the purpose of securing the safety of the ship or saving life at seas.
- 13. Carriage explosives.—(1) Divisions of explosives and compatibility groups specified in this rule have the same meaning as those specified in IMDG code.
- (2) Explosives in division 1.4 of the IMDG code, and the comparability group may be carried in any amount in passenger ships. No other explosives shall be carried except any one of the following:
 - (i) explosive articles for life-saving purpose, if the total net explosives mass of such articles does not exceed 50% per ship; or
 - (ii) explosives in compatibility groups C, F and E, if the total net explosives mass does not exceed 10 per cent per ship; or
 - (iii) explosive articles in compatibility group O other than those requiring special stowage, if the total net explosives mass does not exceed 10% per ship; or
 - (iv) explosive articles in compatibility group B, if the total net explosives mass does not exceed 5% per ship.
- (3) Notwithstanding the provisions of sub-rule (2) of this rule additional quantities or types of explosives may be carried in passenger ships in which special safety measures approved by the Nautical Adviser are taken.

- 14. Carriage of solid bulk cargoes other than grain—(1) Every ship loading solid bulk cargoes other than grain shall comply with the general requirements of the EC code and the particular requirement or precaution specified in appendix A, B and C of that code.
- (2) Bulk cargoes shall be loaded and trimed reasonably level, as necessary, to the boundaries of the cargo space as to minimize the risk of shifting and to maintain adequate stability throughout the voyage.
- (3) When bulk cargoes are carried in "Tween-docks" the hatchways of such "Tween-docks" shall be closed in those cases where the loading information indicates an unacceptable level of stress on the bottom structure if the hatchways are left open. The cargo shall be trimmed reasonably level and shall either extend from side to side or be secured by additional longitudinal divisions of sufficient strength. The safe load-carrying capacity of the "twin-docks" shall be observe to ensure that the dock-structure is not overloaded.
- (4) Concentrates or other cargoes which may liquefy shall only be accepted for loading when the actual moisture content of the cargo is less than its transportable moisture limit;

Provided that such concentrates and other cargoes may be accepted for loading even when their moisture content exceeds the above limit, where the safety arrangements including adequate stability in case of an assumed shift of cargo and adequate structural integrity are to the satisfaction of the Nautical Advisor.

- (5) Prior to loading a bulk cargo which is not a cargo classified in accordance with the provisions if sub-rule (1) of rule 10 but which has chemical properties that may create a potential hazard, special precautions fro its safe carriage shall be taken.
- (6) Every ship carrying cargoes specified in Appendices A, B, and C of B.C. Code shall be issued with a certificate of compliances as specified in the Second Schedule. Such certificate shall be issued only after such ship complies with the requirements of these rules and the Code of safe Practice for Solid Bulk Cargoes (B.C. code.
 - (7) Such certificate of compliance referred to in Sub-rule.
- (8) shall be in force for a period to 5 years from date of issue or such short period as specified in the certificate.
 - 15. Carriage of deck cargoes including timber deck cargo.--
 - (1) When cargoes are carried on deck the master shall comply with the provisions of rule 6 of these rules.
 - (2) Every vessel carrying timber deck cargo shall comply with the provisions of the timber code and the requirements of part V of Merchant Shipping (load Line) Rules, 1978.

PART IV

- 16. Application.—This part applies to carriage of grain in bulk.
- 17. Carriage of grain.—(1) Every ship carrying grain shall comply with the requirement of grain code.
 - (2) Every such ship shall not load grain unless:

- (a) The ship holds a document of authorization as required by the grain code duly issued by the chief surveyor.
- (b) The Master of such ship satisfies the Chief Surveyor or any other authority at the port of loading authorized by the Chief Surveyor that the ship shall comply with the requirements of the grain code in its proposed loading condition.

PART V

- 18. Application.—This part applies to carriage of;
- (a) liquified gases, and
 - (b) dangerous or noxious liquid substance sin bulk.
- 19. Carriage of dangerous liquid chemicals in bulk (1) Dangerous or noxious liquid substance in bulk shall be carried in accordance to the requirements of:
 - (a) The IBC code for chemicals tankers constructed on or after 1st july, 1986; or
 - (b) the code for the Construction and Equipment of ships carrying Dangerous Chemicals in Bulk (BCH) code for all other chemical tankers.
- (2) Every chemical tanker, irrespective of the date of construction, which is converted or adopted for carriage of dangerous or noxious liquid substances shall be treated as a chemical tanker constructed on the date on which such conversion commenced
- (3) Every chemical tanker, in addition to the certificates specified in Section 299A, 300, 301 and 316 of the Act shall be issued with :
 - (a) International certificate of fitness for the carriage of dangerous chemicals in bulk specified in the Fourth Schedule after such chemical tanker has undergoes surveys as specified in the International Code for the Construction and Equipment of ships carrying Dangerous Chemicals in Bulk (IBC) code; or
 - (b) a certificate of fitness for the carriage of dangerous chemicals in bulk as specified in the Fifth Schedule after such chemical tanker has undergone surveys as specified in the Code for the Construction and Equipment of ships carrying Dangerous Chemicals in Bulk (BCH) code.
- (4) Certificate of fitness referred to in sub-rule (3) shall be in force for a period of five years form date of issue or for such shorter period as specified in the certificate.
- 20. Carriage of liquified gases in bulk : (1) Dangerous obnoxious liquid substances in bulk shall be carried in accordance to the requirements of :
 - (a) the IGC code for chemical tankers constructed on or after 1st July, 1986, or
 - (b) the gas code for all other chemical tankers.

- (2) Every gas carrier, irrespective of the date of constructions, which is converted or adopted for carriage of liquified gas shall be treated as a gas carrier constructed on the date on which such conversion commenced.
- (3) Every gas carrier, in addition to the certificates specified in sections 299A, 300, 301, and 316 of the Act shall be issued with :
 - (a) International certificate of fitness for the carriage of liquified gases in bulk as specified in the Sixth Schedule after such gas carrier has undergone surveys as specified in the IGC code: or
 - (b) A Certificate of fitness for the carriage of liquified gases in bulk as specified in the Seventh Schedule after such gas carrier has undergone surveys as specified in the gas code.
- (4) Every certificate of fitness referred to in sub-rule (3) shall be in force for a period of five years from the date of issue or for such shorter periods as may be specified in the certificate.

PART VI

MISCELLANEOUS

- 21.(1) The Director General may request the Government of a country to which the safety convention applies to issue an appropriate certificate of fitness specified in these rules. A certificate issued in pursuance of such a request and containing a statement that it has been so issued on behalf of the Government of India shall have the same effect as one issued by the Central Government.
- (2) The Director General may, at the request of the Government of a country to which the safety Convention applied cause an appropriate certificate of fitness to be issued in respect of a ship registered in that country, if it is satisfied that as in the case of an Indian ship that such a certificate can appropriately be issued and where a certificate is issued at such request it shall contain a statement that it has been so issued.
- 22(1) The Director General may in addition to the surveyors appointed under section 7 of the Act authorize any person or a body of person in any port hereinafter called a surveyor, to inspect for the purpose of seeing that the dangerous cargoes are labeled, packed, marked and loaded in compliance with these rules.
- (2) If such surveyor finds that the dangerous cargoes are not labeled, packaged, marked or loaded in compliance with these rules or that the dangerous goods are in such conditions that the safety of ship and lives on board are likely to be adversely affected, he shall issue a notice pointing out the deficiencies and also pointed out what in his opinion is requisite to remedy the same.
- (3) Every such notice shall be communicated to the Custom Collector at the port from which the ship may seek to obtain port clearance. No Custom Collector to whom such communication is made shall grant such ship a port clearance. The ship shall be detained until a certificate signed by such surveyor is produced to the effect that the dangerous cargo is labeled packaged, marked and loaded in compliance with these rules.
 - 23. Penalities.—Every owner. Master or Agent of a ship who:
 - (a) contravences any provision of these rules relating to carriage of dangerous goods or fails to comply with any provisions thereof which it is his duty to comply shall be punishable with imprisonment which may

extend to two years or with fine which may extend to ten thousand Rupees or with both and if the offence is a continuing one with further fine which may extend to fifty rupees for every day after the first during which the contravention continues.

(b) Every Owner, Master or Agent of a ship who to one thousand rupees and if the offence is a continuing one with further fine which may extend to fifty rupees for every day after the first during which the breach continues.

FIRST SCHEDULE

[See rule 9(2)]

Special fire protection requirements for ships carrying dangerous goods.

- 1.0 The following requirements are additional to the requirements specified in Merchant Shipping (Fire Appliances) Rules, 1990, (hereinafter specified as "FFA Rules").
 - 1.1 Table I and Table II annexed hereto are applicable to the following ship types.
 - 1. Ship and cargo spaces not specifically designed for the carriage of freight containers but intended for the carriage of dangerous goods in packaged form including goods in freight containers and portable tanks.
 - 2. Purpose built container ships and cargo spaces intended for the carriage of dangerous goods in freight containers and portable tanks.
 - 3. Ro/ro ships and ro/ro cargo spaces intended for the carriage of dangerous goods.
 - 4. Ships and cargo spaces intended for the carriage of solid dangerous goods in bulk.
 - 5. Ships and cargo spaces intended for carriage of dangerous goods other than liquids and gases in bulk in ship borne barges.
- 2.0 Special requirements: The following requirements shall be complied with to stowage of dangerous goods both "on deck" and "under deck". Tables I, II, III indicate this requirements by the sub-paragraphs numbers. Whenever "X" appears in the tables applicability of the relevant sub-paragraph is indicated against the ship types as specified in para 1.1 and/or class of dangerous goods specified in rule 10 of these rules.
 - 1. Water Supply.
 - 1.1 Arrangements shall be made to ensure immediate availability of a supply of water from the fire main at the required pressure either by permanent pressurization or by suitably placed remote starting arrangements for the fire pumps.

The quantity of water delivered shall be capable of supplying four nozzles of a size and at pressure as specified in FFA Rules, capable of being trained on any part of the cargo space when empty.

Means of effectively cooling the designated under deck cargo space by copious quantities of water, either by a fixed arrangements of spraying nozzles, or flooding the cargo space with water, shall be provided. Houses may be used for this purpose in small cargo spaces and in small areas of larger cargo spaces. In any event the drainage and pumping arrangements shall be such as to prevent the build up of free surfaces. If this is not possible the adverse effect upon stability of the added weight and free surface of water shall be taken into account to the extent deemed necessary in the approved stability information.

Provision to flood as designated under deck cargo space with suitable specified medical may be substituted for the requirements in paragraph 1.1.3.

Sources of ignition

Electrical equipments and wiring shall not be fitted in enclosed cargoes spaces, closed vehicle deck spaces or open vehicle deck space unless it is essential for operational purposes in the opinion of the chief surveyor. However, if electrical equipments is fitted in such spaces, it shall be of a certified safe type for use in the dangerous environments to which it may be exposed unless it is possible to completely isolate the electrical system (by removal of links in the system other than fuses). Cable penetrations of the decks and bulkheads shall be sealed against the passage of gas or vapour. Through runs of cables and cable within the cargo spaces shall be protected against damage from impact. Any other equipment which may constitute a source of ignition of flammable vapour shall not be permitted.

Detection system

An approved fire detection and fire alarm system shall be fitted to all enclosed cargo spaces including closed vehicle deck spaces. Where the detection system utilizes samples of atmosphere drawn from such cargo spaces provisions shall be made to prevent, in the event of cargo leakage, the discharge of contaminated atmosphere through the sampling system into the space in which the detection apparatus is situated. A notice stating that the sampier shall be discharged to the open air when cargoes giving off toxic fumes are beign carried shall be permanently exhibited at the equipment.

Ventilation

Adequate power ventilation shall be provided in enclosed cargo spaces. The arrangement shall be such as to provide for at least six air changes per hour in the cargo space based on an empty cargo space and for removal of vapour from the upper or lower parts of the cargo space, as appropriate.

The fans shall be such as to avoid the possibility of ignition of flammable gas air mixtures. Suitable wiremesh guards shall be fitted over inter and outlet ventilation openings.

Bilge pumping

Where it is intended to carry flammable or toxic liquids in enclosed cargo spaces the bilges pumping system shall be designed to ensure against inadvertent pumping of such liquids through machinery space piping of pumps. Where large quantities of such liquids are carried, consideration shall be given to the provisions of additional means of draining those cargo paces. These means shall be to the satisfaction of the Chief Surveyor.

Personnel protection

Four sets of full protective clothing resistant to chemical attach shall be provided in addition to the firemen's outfits required by Fire Fighting. Appliances rule. The protective clothing shall cover al skin, so that no part of the body is unprotected.

At least two self-contained breaching apparatuses in addition to these required by Fire Fighting Appliances rules shall be provided.

Portable fire extinguishers

Portable fire extinguishers with a total capacity of at least 12% of dry power or equivalent shall be provided for the cargo spaces. These extinguishers shall be in addition to any portable fire extinguishers required under FFA rules.

Insulation of machinery space boundaries.

Bulkheads forming boundaries between cargo spaces and machinery spaces of category A shall be insulated to "A-60" standard, unless the dangerous goods are stowed at least 3 m horizontally away from such bulkheads, other boundaries between such spaces shall be insulated "A-60" standard.

Water spray system

Each open ro/ro cargo space having a deck above it and each space deemed to be a closed ro/ro cargo space not capable of being sealed shall be fitted with an approved fixed pressure water spraying system for manual operation which shall protect all parts of any deck and vehicle platform in such space, except that the Chief Surveyor may permit the use of any other fixed fire-extinguishing system that has been shown by full scale test to be no less effective. In any event the drainage and pumping arrangements shall be such as to prevent the build-up of free surfaces. If this is not possible the adverse effect upon stability of the added weight and free surface of water shall be taken into account to the extent deemed necessary.

SECOND SCHEDULE

[See Rule 9(3), 14(6)]

CERTIFICATE OF COMPLIANCE FOR THE CARRIAGE OF DANGEROUS GOODS

•	in pursuance of the provisions of paragraph 3 of regulation 54 of Chapter 11-2 of ent to the International Convention for Safety of Life at Sea, 1974.)
-	Distinctive Number Port of Gross
Name of Ship	or Letters Registry Tonnage
This is to Cer	ify:
	1. That the construction and equipment of the above mentioned ship have been found to comply with the provisions of Regulation 54 of Chapter 11-2 of 1981 Amendments to the International convention for the Safety of Life at Sea, 1974.
	 That the ship is suitable for carrying dangerous goods as specified on page
	3. In respect of dangerous solid bulk cargoes, the cargo list also includes cargoes designated class MHB in the code of safe Practice for Solid Bulk cargoes for which the vessel is suited.
This Certificat	e is valid until
ssued at	
	(place of incur of contificate)
	(place of issue of certificate)
(Date of issue)	Principal Officer
	Mercantile Marine Department
	THIRD SCHEDULE

[See Rule 10(3)]

DANGEROUS GOODS DECLARATION

This form meets the requirements of SOLAS 74 Chapter VII regulation 5; MARPOL73/78 ANNEX III regulation 4 and the IMDG Code. General Introduction, Section 9

Shipper	1	Reference number (s)	2	
Consignee	3	Carrier	4	
	3		5	_

Containing packing certificate/ vehicle declaration Name/status, company/organization of signatory

DECLARATION

It is declared that the packing of the container/vehicle has been carried out in accordance with the

Signature on behalf of

general Instruction IMDG Code, Packer

Paragraph 12.3.7 or 17.7.7

TO BE COMPLETED FOR SHIPMENTS IN CONTAINERS OR VEHICLES

Ship's name and Port of (Reserved for text. Voyage No. instructions or other matter) loading Port of discharge 8 Marks & Nos. 11 Number and kind of packages Gross Goods proper shipping name/correct mass (-) delivered applicable identification or technical name, IMO hazard net registration class /division, UN number, quantity Break bulk number (s) of the packaging group, flash point bulk cargo mass Unit. (in C c.c) control and Utilised emergency temperature cargo identification of the goods as Bulk MARINE POLLUTANT, Ems No. packages and MFAG Table Nos. Type of Unit (container trailer, tank Vehicle etc. Open closed

Proprietary/trade names along are not sufficient If applicable : (1) the word "WASTE" should precede the name:

"Insert "X" in appropriate

(2) EMPTY UNCLEANED or RESIDUE LAST CONTAINED should be added
(3) LIMITED QUANTITY" should be added
"when required in 9.3 of the general introduction to the IMDG CODE when required

box (This column
may be left apart
From the heading in
in which case insert
appropriate description)

_

ADDITIONAL INFORMATION

In certain circumstances special information/ certificate are required. See IMDG Code/ General Introduction, Paragraphs 9.7.1/9.7.2

Name/status/company/ organization of signatory

DECLARATION

PLACE AND DATE

I hereby declare that the contents of this consignment are fully and accurately described above by the correct technical name (s), proper shipping name (s) and are classified packaged, marked and labeled/placed and are in all respect in proper condition for transport according to the applicable international and national government regulations.

Signature of shipper

_

FOURTH SCHEDULE

[See rule 19(3)(a)]

INTERNATIONAL CERTIFICATE OF FITNESS FOR THE CARRIAGE OF DANGEROUS CHEMICALS IN BULK

Issued under the provisions of the

INTERNATIONAL CODE FOR CONSTRUCTION AND EQUIPMENT OF SHIP CARRYING DANGEROUS CHEMICALS IN BULK

[resolutions MBC. 4(48) and MSPC 19(22)]

Under the authority of the Government of India

by The Principal Officer, Mercantile Marine Dept.

Name of ship	Distin Number of Letters	ctive Po Registry	ort of Gros		Ship type Code Paragraphs
				-	vas at a similar stage of constructions or (in n to chemical tanker was commenced:
			FIF	TH SCHED	ULE
				ee rule 19(3	
CEF	RTIFICATE O	F FITNESS	FOR THE C	CARRIAGE	OF DANGEROUS CHEMICALS IN BULK
Issued in	pursuance	of the			
INTERN					IISATION CODE FOR THE CONSTRUCTION PANGEROUS CHEMICALS BULK
Under th	e authority o	f the Gover	nment of Ir	ndia	
		(full official	designatio	n of country)
by the Pr	rincipal Offic	er, Mercant	ile Marine I	Dept.	
– Name of ship	Distin Number o Letters		ort of Gross Tonn		Ship type Code Paragraphs 2.2.4)
	which keel	was laid o	r in the ca	se of a coi	nverted ship date of conversion to Chemical
5		certificate y of		in in forc	e, unless previously cancelled, until the

Issued at	19	
	(place of issue of certificate)	
	undersigned declares that he is dul	y authorized by the said Government to issue this
		Principal Officer Mercantile Marine Dept.
Note	es on completion of Certificate:	
	recommendations e.g. an entry prescribed by the Code. This c	under this column must relate to all relevant "Type II" should mean Type II in all respects olumn would not usually apply in the case of an should be noted "See Paragraph 2(b)".
	2. Paragraph 2(ii)(b) : Insert ship in relation to the recommend	1.7.3(a), (b), (c), (d) according to the status of the dations of this paragraph.
	been evaluated by the Adminis	cts listed in Chapter VI of the Code, or which have tration in accordance with paragraph 1.8 of the spect of the letter "now" products, any special cribed should be noted.
		Periodical Surveys
	is to certify that at a periodical insp und to comply with the relevant prov	pection required by paragraph 1.6 of the Code, this isions of the code.
(a) Insp	ection related to the safety equipmer	nt provisions
Place		_ date
Signature a	nd/or seal of issuing authority	
Place		_ date
Signature a	nd/or seal of issuing authority	
Place		_ date
Signature a	nd/or seal of issuing authority	
Place		_ date
Signature a	nd/or seal of issuing authority	
(b) Insp	ection related to the constructional p	provisions

SIXTH SCHEDULE

Place_____ date____

Signature and/or seal of issuing authority

[See rule 20(3)(a)]

INTERNATIONAL CERTIFICATE OF FITNESS FOR THE CARRIAGE OF LIQUEFIED GASES IN BULK (Official seal)

ISSUED UNDER THE PROVISIONS OF THE INTERNATIONAL CODE FOR THE CONSTRUCTION AND EQUIPMENT OF SHIPS CARRYING LIQUEFIED GASES IN BULK

					(Resolut	ion M.S.C.5(48) an	d FKPC 19(22)
Unde	r the a	uthority of Gover	nment of Inc	dia				
by the	e PRIN	CIPAL OFFICER,	MERCANTII	LE MARINE	DEPARTMENT	, BOMBAY		
Name ships		Distinctive ship Number	Port of Ca Registry	rgo Capacity(ma	Ship type s) (Sec	tion 2.1.of the cod	de) V	
				-		r stage of constru was commenced	ction or (in	– the
This Code		nip complies	-		following	amendments	to	the
This s	-	exempted from o	-			ns of the code		
THIS	IS TO	CERTIFY :						
	1.(1) of th	That the ship e code.	has been s	urveyed in a	accordance wi	th the provisions	of Section	1.5
	(2)		ship and th	ne condition	s thereof are	ment fitting, arra in all respects sa he Code.	-	
2.	That	the following de	sign criteria	have been	used :			
	(1)	ambient temp	erature		0C2/			

		Attachment
		SURVEYS
		rtify that at a survey required by section 1.6 of the code, this ship was found to vant provisions of the Code.
Intermediate s	urvey	
Place		Date
Signature and	seal c	of issuing authority
Place		Date
Signature and	seal c	of issuing authority
Place		Date
Signature and	seal c	of issuing authority
Place		Date
Signature and	seal c	of issuing authority
Endors Liquified Gase		ts in accordance with paragraph 1.2.3 of the Code for Existing Ships Carrying ulk.
		Attachment
		THIS IS TO CERTIFY
		1. That the above mentioned ship is
	*(i)	a ship as defined in 1.2.2 of the Code
	**(ii)	a ship as defined in 1.2.3 of the Code.
	2.(i) secti	That the ship has been surveyed in accordance with the provisions of on 1.6 of the Code.
	(ii)	That the survey showed that the structure, equipment, fittings, arrangements and materials of the ship and the conditions thereof are in all respect satisfactory and that the ship complies with the relevant provisions of the Code.
3.	That	the following design criteria have been used
	(a)	ambient air temperature0C2/
	(b)	ambient water temperature0C2/

(2)

ambient water temperature.....0C2/

Tank type	Stress	factors		Materi		MARVA	
and number		Α	В	С	D		
Cargo piping							
N.B. Tank num		ed to in	this li	ist are ide	entified	on the annexed signed and dated tank	
	(d) at	Mecha			n of th	e cargo tank material were determined	
4. The that all relevant of	-				_	bulk of the following products, provided erved 05s/	
Products			Cond	ditions of	carriag	je	
			-			imum temperature maximum pressure, nk loading conditions)	
N.B. continued	on the ann	exed, si	gned a	and dated	sheet	(s) number 1A	
N.B. Tank num plan numbered 2.		ed to in	this I	list are id	entified	d on the annexed signed and dated last	
* Delete as appro	priate						
Attachment							
5. m						1.5/2.7 the provisions of the Code are ing manner :	
This certi	ficate is vali	d until t	he	da	te of	19	
Issued at				e of issue			
The unde certificate.	rsigned dec	lares th	at he	is duly au	thorize	ed by the said Government to issue their	

(Signature of official issuing the certificate and/or seal of issuing authority)

(Seal or Stamp of the issuing

authority as appropriate)

Notes on completion of Certificate:

- 1. "Ship Type": Any entry under this column must relate to all relevant recommendations e.g. an entry "Type IIG" should mean Type IIG in all respects prescribed by the Code.
- 2. Paragraph 3(a) and 3(b): The ambient temperatures accepted or required by the Administration for the purposes of 4.5.1 of the Code to be inserted.
- 3. Paragraph 3(c): Stress factors and material as accepted or required by the Administration for the purpose of 4.5.1 (d)(i) and 4.51(c) of the Code to be inserted.
- 4. Paragraph 3(d): Room temperature or other temperature accepted by the Administration for the purpose of 4.5.1(f) to be inserted.
- 5. Paragraph 4: Only products listed in Chapter XIX of the Code or which have been evaluated by the Administration in accordance with paragraph 1.7.2 of the Code, whould be listed. In respect of the latter "new products, any special Requirements provisionally prescribed should be noted.

SEVENTH SCHEDULE

[See Rule 20(3)(b)]

CERTIFICATE OF FITNESS FOR THE CARRIAGE OF LIQUIFIED GASES IN BULK

(Official Seal)

Issued in pursuance of the

INTERNATIONAL MARITIME CONSULTATIVE ORGANISATION CODE FOR THE CONSTRUCTION AND EQUIPMENT OF SHIPS CARRYING LIQUIFIED GASES IN BULK

and International Maritime Consultative Organisation Resolution A. 329 (ix)

Under the authority of the Government of

RUPUBLIC OF INDIA

(full official designation of the country)

by The Principal Officer, Mercantile Marine Department.

Name of Distinctive Port of Cargo Ship type ship Number or Registry Capacity (m₃) (Section letter 2.5 of the code)

^{*}Delete as appropriate

Date of building or major	or conversion contr	act						
Date on which keel was of construction or on who commenced	nich major convers	ion was						
The certificate should be drawn up in the official language of the issuing country. If the anguage used is neither English nor French the next should include 3 translation into one of these languages. ATTACHMENT 1 TO THE INTERNATIONAL CERTIFICATE OF FITNESS FOR THE CARRIAGE OF LIQUIFIED GASES IN BULK								
 Products		Conditions of (tank numbers	_					
_								
DATE (as for Certificati	ion)							
			PRINCIPAL OF MERCANTILE MARINE DEPAR					
— Tank type S	tress factors/	Materials (3)	MARVA					
	Tress factors/	Materials (3)	IVIARVA					

Cargo	piping
N.B.	Tank numbers referred to in this list are identified on attachment 2, signed and dated tan
	4. Mechanical properties of the cargo tank material were determined a0C4/
	5. That the ship is suitable for the carriage in bulk of the following products provided that all relevant operational provisions of the Code are observed (5)
Produ	ucts Conditions of carriage 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 tan plan.
	4. That in accordance with section 1,4/2,8,2 the provisions of the Code are modified i respect of the ship in the following manner:
	*1 In accordance with the loading conditions provided in the approved loadin monual, stamped and dated cognized by the administration:

In accordance with the loading limitations appended to this certificate.

*2

^{*}Delete an appropriate

	e is valid until
	(place of issue of Certificate)
	19
Date of issue	
	PRINCIPAL OFFICER MERCANTILE MARINE DEPARTMENT, BOMBAY,
	(Seal or Stamp or issuing authority, as appropriated)
	Notes on completion of Certificate
	(1) "Ship type", Any entry under this column must be related to all relevant recommendations, e.g. any entry "type 20" should mean type 20 in all respects prescribed by the Code.
	(2) Paragraphs 2.1 and 2. The appoint temperatures accepted or required by the administration for the purposes of 1.8.1 of the Code to be inserted.
	(3) Paragraphs 2.3 Stress factors and materials be accepted or required by the administration for the purposes of 4.5.1.4 and 4.5.1.6 of the Code to be inserted.
	(4) Paragraph 2.1 temperature accepted by the administration for the purposes of 4.5.1.7 to be inserted.
	(5) Paragraph 3. Only products listed in Chapter 19 of the Code or which have been evaluated by the Administration in accordance with paragraph 1.1.6 of the Code should be listed. In respect of the letter "new" products, any special requirements provisionally prescribed should be noted.
International C	to certify that at a mendatory annual survey required by paragraph 1.5.2.1.4 of the Code for the Construction and Equipment of Ships Carrying Liquified Gases in Bulk, bund to comply with the relevant provisions.
	Signed(Signature of Authorised Official)
	Place:
	Date
	(Seal or stamp of the Authority, as appropriate
	Signed
	(Signature of Authorised Official)
	Place:
	Date

(Seal or stamp of the Authority, as appropriate
Signed
(Signature of Authorised Official)
Place:
Date
(Seal or stamp of the Authority, as appropriate
Signed
(Signature of Authorised Official)
Place:
Date
(Seal or stamp of the Authority, as appropriate
NOTE: An intermediate survey may take the place of a mandatory annual survey where the relevant provisions of 1.5.2.1.3 and 1.5.2.1.4 are complied with.
Annual Surveys due on+ 3 months
Intermediate Survey due on+ 6 months.
This is to certify that at intermediate survey required by 1.5.2.1.3 of the International Code for the Construction and Equipment of ships Carrying Liquified Gases in Bulk, the ship was found to comply with the relevant
Signed
(Signature of Authorised Official)
Place:
Date
(Seal or stamp of the Authority, as appropriate)
Annual Surveys due on+ 3 months
Intermediate Survey due on+ 6 months.

[F.No.SR-11013/7/93-MA]
O.P. MAHEY, Under Secy.