

MINISTRY OF SHIPPING, ROAD TRANSPORT AND HIGHWAYS

(Department of Shipping)

(Ports Wing)

NOTIFICATION

New Delhi, the 20th March, 2007

G.S.R. 209(E).—In pursuance of Sub-section (1) of Section 124 of the Major Port Trusts Act, 1963 (38 of 1963), the Central Government hereby approves the Dangerous Goods (Arrival, Receipt, Transport, Handling and Storage) in Jawaharlal Nehru Port Regulations, 2007 made by the Board of Trustees of Jawaharlal Nehru Port, in exercise of the powers conferred on them by clauses (k) to (n) of section 123 of the said Act and published in the Maharashtra State Government Gazette vide number A/PE/R-01/05/3021 dated the 7th September, 2006 and number A/PE/R-01/05/3021 dated the 14th September, 2006 as specified in the Schedule annexed to this notification.

2. This said regulations shall come into force from the date of publication in the Official Gazette.

SCHEDULE-I

Dangerous Goods (Arrival, Receipt, Transport, Handling and Storage) in Jawaharlal Nehru Port Regulations, 2007

1. Short title and commencement.—(1) These regulations may be called "Dangerous Goods (Arrival, Receipt, Transport Handling and Storage), in Jawaharlal Nehru Port Regulations, 2007".

(2) These regulations come in to force on expiry of 30 days from the date of their publication in the official gazette.

(3) Nothing contained in these regulations shall be deemed to be derogatory to the provisions of the Merchant Shipping Act, 1958, the Explosives Act, 1884, the Petroleum Act 1934, the Inflammable Substance Act, 1952, the Environment Protection Act, 1986, the Dock Workers (Safety, Health and Environment) Act, 1986, the Insecticides Act, 1968, the Atomic Energy Act, 1962, Public Liability Act, 1991, Central Motor Vehicle Act, 1988, and the rules, regulations made thereunder or any other statutory rules and regulations.

2. Definitions.—In these Regulations, unless the context otherwise requires,—

- (a) "Act" means the Major Port Trust Act 1963 (Act No. 35 of 1963)
- (b) "Board" means the Board of Trustees of the Jawaharlal Nehru Port Trust,
- (c) "Chairperson" means the Chairperson of the Board of Trustees of the Jawaharlal Nehru Port and any person appointed to act in his or her place,
- (d) "Chief Manager (Operations)" means the Head of the Operations Department appointed by the Central Government and includes any other officer acting under his authority,

- (e) "competent authority" for the purpose of these regulations means an Officer duly appointed by the Board of the Jawaharlal Nehru Port to administer the provisions of these regulations,
- (f) "dangerous goods" means any cargo which due to its explosiveness, inflammability, radioactivity, toxic or corrosive properties, or other similar characteristics, may cause injury, adversely affect the human system, loss of life or property while handling, transporting, shipping or storing and which is classified as such by any international or national standards and also includes any other goods, which the competent authority may specify as dangerous goods and also includes any empty uncleaned packagings (such as tank containers, receptacles intermediate bulk containers, bulk packagings, portable tanks or tank vehicles) which previously contained dangerous goods, unless packagings have been sufficiently cleaned of residue of dangerous goods and purged of vapours so as to nullify any hazard or have been filled with a non-dangerous substance,
- (g) "Deputy Chairperson" means the Deputy Chairperson of the Board of the Port and includes any person appointed to act in his or her place,
- (h) "Deputy Conservator" means the Head of the Marine Department appointed by the Central Government and includes any other officer acting under his authority,
- (i) "destuffing" means removal of cargo from the container,
- (j) "EmS" means Emergency Procedures for Ship carrying dangerous goods,
- (k) "handling" means the operation of loading and unloading of dangerous goods to and from a vessel or board, railway wagon or vehicle, transfer to and or from or within a storage area or within a vessel and transshipment between vessel and any ancillary operations in the port area and includes stuffing and destuffing of freight container,
- (l) "hazardous cargo or goods" means dangerous goods,
- (m) "hot work" means any work which involves welding, burning, soldering, brazing, blasting, chipping by spark-producing tools, use of certain power driven tools, non-flame proof electrical equipment or equipment with internal combustion engines and including any other work which is likely to produce sufficient heat, capable of igniting inflammable gases or a flammable substance,

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- (n) "IMDG Code" means latest edition of 'International Maritime Dangerous Goods Code' issued by 'International Maritime Organisation, London',
- (o) "IMO" means 'International Maritime Organisation, London',
- (p) "Inspector of dangerous goods" means a person appointed by the Board responsible to the competent authority to ensure compliance with these regulations with regard to any handling or transport or storage of dangerous goods,
- (q) "marine pollutants" means substances which, because of their potential to bioaccumulate in seafood or because of their high toxicity to aquatic life, are subject to the provisions of Annex III of MARPOL 73/78, as amended,
- (r) "Master" means any person having charge or command of a vessel and does not include a Pilot, Dock Master, Senior Dock Master, Harbour Master or Deputy Conservator,
- (s) "MFAG" means Medical First Aid Guide for use in accidents involving dangerous goods,
- (t) "owner" in relation to goods includes any consignor, consignee, shipper or agent for the sale, custody, loading or unloading of such goods,
- (u) "owner" in relation to a vessel includes the person to whom the vessel or share in the vessel belongs, a charterer, consignee or mortgagee in possession thereof,
- (v) "Pilot" means a person authorised to pilot the vessels,
- (w) "port approaches" in relation to the Port means those parts of the sea and channels leading to the ports of Jawaharlal Nehru and Mumbai,
- (x) "rate" includes any toll, dues, rent, fee or charges leviable under the Major Port Trust Act, 1963 and Indian Ports Act, 1908, as amended from time to time,
- (y) "responsible person" means a person appointed by the owner of the goods or Master and empowered to take all decisions relating to the tasks of transport, handling and storage of dangerous goods and having necessary knowledge and experience for that purpose,
- (z) "stuffing" means filling up of the container with cargo,
- (za) "tank container" means container specially built for transporting and distributing liquids and gases in bulk in accordance with such conditions as may be required,
- (zb) "tanker" means a vessel designed to carry liquid petroleum cargo in bulk including a combination carrier when being used for this purpose and includes chemical carriers carrying liquid chemicals in bulk,
- (zc) "terminal" means a place where vessels are berthed or moored for the purposes of loading cargo and discharging of cargo, etc.
- (zd) "terminal manager" means the Manager in-charge of a terminal or berth and includes any other officer acting under his authority,
- (ze) "transport" means the movement of dangerous goods by one or more modes of transport in Port,
- (zf) "transporter" when used in relation to movement of goods includes any person owing goods carriage, supervisor, or in-charge of such transport,
- (zg) "unstable substance" means a substance which, by nature of its chemical make-up, tends to polymerise or otherwise react in a dangerous manner under certain conditions of temperature or in contact with a catalyst,
- (zh) "vessel" includes every description of watercraft including non-displacement craft and seaplanes on water, used or capable of being used as a means of transportation on water,
- (zi) The words and expressions used but not defined in these regulations shall have the meanings as respectively defined in the Major Port Trust Act, 1963.

3. Classification of dangerous goods in Jawaharlal Nehru Port.—(1) Classification.—For the purpose of these regulations dangerous goods will be classified in accordance with the International Maritime Dangerous Goods Code issued by 'International Maritime Organisation, London'.

Classification of dangerous goods :—

IMDG Class	Description
1	Explosives
2.1	Gases—Flammable
2.2	Gases—Non-flammable
2.3	Gases—Poisonous
3	Flammable liquids
4.1	Flammable solids
4.2	Solids liable to spontaneous combustion
4.3	Solids which in contact with water emit inflammable gases.
5.1	Oxidising substances
5.2	Organic peroxides

- 6.1 Poisonous or toxic substances
- 6.2 Infectious substances
- 7 Radioactive substances
- 8 Corrosive substances
- 9 Miscellaneous dangerous goods, i.e. other substances which experience have shown or may shown to be of such dangerous character, are to be treated as dangerous goods.

(2) **Evaluation of the hazards.**—The shipper or consignee shall be advised to apply to the Directorate General of Shipping, Government of India for the evaluation of the hazards of the harmful substances under the provisions of Merchant Shipping (Dangerous Goods) Rules, if not notified by International Maritime Organisation, London.

4. Handling restriction for dangerous goods in Jawaharlal Nehru Port.—(1) Cargoes of all classes will be handled through Jawaharlal Nehru Port, except cargoes of Class I, that is Explosives.

(2) Cargoes of Classes 6.2 and 7 that is Infectious Substances and Radioactive Substances respectively will be allowed into the Jawaharlal Nehru Port for direct shipment or delivery only.

5. Procedure for authorization for dangerous goods.—(1) Arrival of the vessel—Advance notification:—

- (a) The owner or agent of a vessel shall apply to discharge or load dangerous goods to the competent authority with the following documents at least 48 hours (forty eight hours) in advance before the vessel's arrival in Port :
 - (i) Application for discharging or loading dangerous goods as specified in Form-I of Schedule-I.
 - (ii) Dangerous goods declaration as specified in Form-II of Schedule-I.
 - (iii) Multimodal dangerous goods as specified in Form III of Schedule-I.
 - (iv) Dangerous goods declaration Form IV-in case of import of gas cylinder as specified in Schedule-I.
 - (v) A detailed stowage plan dealing with dangerous goods and their location on board shall be given.
 - (vi) Container packing certificate for export cargo only if required.
 - (vii) Transport Emergency Card (TREM CARD).
- (b) Advance notification should also be given for in-transit dangerous goods.
- (c) Advance notification should also be given when a ship or a container arrives under fumigation containing the name of the fumigant and the date of application.

(d) Advanced notification shall be given to Deputy Conservator, Terminal Authority, Safety Section, and Inspectorate Dock Safety.

(2) **Deposit.**—The port shall collect a refundable deposit from owner or agent to cover an estimated cost of handling, storage escort and disposal of goods and amount so deposited shall be refundable after cargo is duly discharged or loaded or handled as per instruction in the permit issued under sub Regulations 3 of 5.

(3) **Grant of Permit.**—The competent authority or an officer authorised to act on his behalf on receipt of the requisite documents and the deposit shall give instructions to the owner or agent specifying the mode of discharge, storage, separation requirements, equipment to be made available and any other conditions concerning safety of the port or the vessel and in relation to the container cargoes the competent authority shall also designate the areas or depot where the container shall be stuffed or destuffed.

(4) **Commencement of cargo discharging or loading.**—

- (a) The Master or agent shall submit a ship shore checklist in Form-V as specified in Schedule-I to the competent authority prior to handling of dangerous goods by his vessel in Port.
- (b) The vessel may commence discharging and or loading of dangerous goods only after obtaining instructions from the competent authority; as specified in sub-regulation (iii) of regulation 5 and after the competent authority or Inspector of dangerous goods has satisfied himself of the correctness of the checklist and any other declaration made by the owner or agent or Master.

6. Restriction on handling and storage of dangerous goods.—(1) All categories of dangerous goods except IMDG Class I that is explosives, shall be transported, handled and stored at Jawaharlal Nehru Port.

(2) IMDG Classes 6.2 and 7 that is Infectious Substances and Radioactive Material respectively, shall have no cut-off time for export cargo and the container should be loaded directly on the ship just prior to sailing and the import container should be discharged immediately and cleared on the direct delivery basis.

(3) Stuffing or destuffing of dangerous goods containers or storage or handling or transportation of dangerous goods in break bulk form shall be permitted in an approved dangerous goods shed or godown under the supervision of the Inspector of dangerous goods.

(4) Segregation of various classes of dangerous goods stored at Jawaharlal Nehru Port shall be in accordance with IMDG recommendations as specified in Schedule-II.

(5) The competent authority may refuse permission

to dangerous goods, intended for storage within or transit, through the port, if it is considered that their presence is likely to endanger life or property, because of their condition, the condition of their mode of conveyance, or the conditions that may be prevailing in the port.

(6) The competent authority may order the removal of such substances or packages, freight container, portable tank, vessel or vehicle containing, it to any other place or to sea as considered necessary, if any dangerous goods within the port area constitute an unacceptable hazard.

(7) Unsuitable substances shall not be accepted unless all conditions necessary to ensure its safe transport and handling have been met and properly certified.

(8) (a) The competent authority may dump into the sea or otherwise destroy such dangerous goods, in a safe manner in consultation with Customs and Pollution Control Board, which in their opinion endanger the safety of the port and where such dangerous goods are so dumped or destroyed, the owner or agents of the goods shall not be entitled to any compensation whatsoever.

(b) The port may remove or restow any dangerous goods, which have been handled or transported contrary to the instructions of the competent authority, and the expenses may be recovered from the deposits or from the sale of the cargo, if the deposit is not adequate to meet these expenses.

(9) The vessel will retain on board all the pollutants and stop pollution caused by the leakage of any dangerous cargoes and take every precaution as per anti pollution regulations of the port.

(10) The competent authority shall direct the handling of marine pollutants and every precaution shall be taken to ensure that such pollutants are not dumped in the marine environment or dumped at sea.

(11) When the owner or agent seeks to import cargo, which is dangerous, but not covered by the IMDG Code, sufficient notice shall be given to the competent authority to arrange for the modalities for the reception of such cargo, failing which such cargo may be refused entry.

7. Packing of Dangerous Goods.—(1) The packaging of dangerous goods shall be in accordance with the latest amendment of IMDG Code and need identifiable supervision.

(2) Incompatible goods (including goods to be stowed away from one another) as well as dunnage or packing material liable to interact with other substances should not be packed into the same container.

(3) Dangerous goods, which may cause damage by taint, odour or contamination to other products, should

not be packed into the same container with goods susceptible to such damage. Foodstuff should not be packed into the same container having toxic material.

(4) When planning to stuff, the following should be kept in mind.—

(a) The cargo weight should be distributed evenly over the container floor. In no case, should more than 60 per cent of the load be on less than half the floor surface area.

(b) The goods should be tightly stowed; maintaining a level surface as far as is practicable.

(c) Liquids should not be stowed on top of dry goods. The relevant resistance of the lower layer should not be disregarded.

(d) Heavy goods should not be placed on top of light goods.

(e) Packing susceptible to damage, especially cargo should be protected against sharp and projecting angle or parts by the use of appropriate dunnage and protective material.

(f) The goods that cannot be stacked should be secured against movement; adequate dunnage material should be used to prevent the goods from shifting.

(g) As a rule, barrel should be packed last close to the container door.

(h) Vented packages should be packed upright and in such a manner that vents are not obstructed.

(i) The cargo in the container should be secured against movement during transport.

(j) The material used should not be susceptible to interaction with dangerous cargo.

(k) If any safety gear is provided with the container, the same should be used.

(l) The goods close the door should be secured in such a manner that they do not fall out when the door is opened.

(m) Unloading procedures should be borne in mind when packing container for simplicity, or supervision; identical goods should be packed together. It is useful to simplify identification of such goods by adequate labelling.

(5) Special packing instructions on individual packaging should be followed that is goods marked "Protect from frost" should be stowed away from container walls.

(6) Dangerous goods forming only part of a load should be stored for preference towards the rear end door of the container if this is compatible with other recommendations.

8. Marking, labelling and placarding.—The marking, labelling and placarding of containers having

dangerous goods shall be in accordance with the latest amendment of IMDG Code.

9. Responsible person to be in-charge of operation.—(1) Master of the ship shall whenever dangerous goods are loaded or discharged depute a responsible person to personally supervise the operations. Such officer shall take all precautions as are necessary under the IMDG Code and these regulations.

(2) Stuffing and destuffing of dangerous goods in the freight containers shall be undertaken as per recommendations of IMO and Inspector of dangerous goods under supervision of responsible person.

(3) A responsible officer shall supervise discharging or loading operation of containers at container terminal.

10. Split or spoiled packages or drums or receptacles etc. to do destroyed.—The dangerous goods shall immediately be carefully collected and disposed of or destroyed under guidance of the competent authority if any dangerous goods escapes or leaks from the packages or drums or receptacles in which it is contained, or is split.

11. Spill recovery and clean up of dangerous goods.—The dangerous goods shall immediately be carefully collected and disposed off or destroyed and the contaminated area shall be immediately cleaned under guidance of the competent authority, if any dangerous goods escapes or leaks from the packages or drums or receptacles.

12. Employment of children, intoxicated persons and certain other persons.—No person shall employ, allow or engage a person—

- (a) who has not completed the age of 18 years, or
- (b) who is in a state of intoxication, or
- (c) who is of unsafe mind for loading, unloading, storage or transport of dangerous goods or to enter any operational area where dangerous goods are handled, and stored.

13. Special provisions against accident and exclusion of unauthorised persons.—(1) No person shall commit or attempt to commit any act which may tend to cause a fire or explosion or spill causing pollution in or about any place in the port area where dangerous goods are handled, stored or transported :

Provided that nothing in this sub-regulation shall apply to any act which is necessary for the purpose of the storage, handling during transport of dangerous goods within the port area.

(2) Every person incharge of or engaged in the import, export, transport or handling of dangerous goods shall at all times—

- (a) comply with provisions of these regulations and the conditions of any licence relating thereto;

(b) observe all due precautions for prevention of thefts and of accidents by fire or explosion;

(c) prevent unauthorised person from having access to the dangerous goods;

(d) prevent any other person from committing any such act as is prohibited under sub-regulation (1).

14. Obligation to take precautions.—(1) The owner or agent or transporter or Master of dangerous goods and occupiers or custodians of all premises within the port area shall always observe safety precautions specified by the competent authority and prescribed in these regulations and as specified in Schedule-III.

(2) The competent authority may take such action as is reasonable for the safety of the Port and or may impose a penalty of a minimum of Rs. 50,000/- or on every incidents noted, when dangerous goods are handled or stored within the port area, owner or agents or Master fail to take reasonable precautions to prevent accidents.

15. Responsibilities of the owner or agent or Master.—(1) The owner or agent or Master will abide by all the instructions as specified by the competent authority.

(2) The owner or agent shall ensure that containers have a current safety approval plate in accordance with the CSC 1972 Convention.

(3) The owner or agent shall make a true and correct declaration of the dangerous goods to be discharged or loaded in the port and those in transit through the port, whether in Containers or other packages.

(4) Cases or receptacles of each class of dangerous goods brought into the port shall conform strictly with the packaging standards stipulated in the latest IMDG Code. Such cases or receptacles shall remain in a sound condition while dangerous goods are handled in the port area.

(5) The preventive measures as may be directed by the competent authority shall be followed, if any case or receptacle of dangerous goods is damaged or starts leaking during handling in the port area.

(6) Repairs to the damaged cases or receptacle of dangerous goods or repackaging their contents shall be carried out under the supervision of the competent authority, subject to special restrictions as applicable to individual classes of dangerous goods.

(7) No case or receptacle of dangerous goods shall be opened anywhere within the port area except for the purpose of drawing samples by the customs in an approved manner or with permission to do so from the competent authority and such permission may be granted subject to such additional restrictions and precautions as may be considered necessary.

(8) Tools liable to produce sparks or heat or static charge shall not be used to open or close or repair case or receptacle of dangerous goods or for drawing samples and as far as it is possible to do so, samples shall be drawn by suction method without tilting the container.

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(9) Handling of any dangerous goods, which are in a leaky, damaged or in a deteriorated condition, shall be only on the specific instructions of the competent authority.

(10) Provide every facility to the competent authority for inspection of dangerous goods.

(11) The owners or agents bringing dangerous goods shall ensure that all the formalities for the clearance of dangerous goods, especially with customs, are completed so that the delivery of such cargo can be taken immediately.

(12) Stuffing and destuffing of dangerous goods in the port if required, shall be undertaken as per recommendations of IMO and Inspector of dangerous goods.

16. Responsibilities of the Master.—(1) The Master of vessel carrying dangerous goods while approaching or leaving the port and during the time that it remains within the limits of the port shall exhibit conspicuously :—

- (a) between sunrise and sunset a red flag not less than 1 metre square, and
- (b) between sunset and sunrise a single red light visible all around the horizon.

(2) He shall whenever dangerous goods are loaded or discharged :—

- (a) depute a responsible person to personally supervise the operations and such officer shall take and or cause to be taken all precautions as are necessary under the IMDG Code and these regulations.
- (b) keep the fire fighting gears in readiness, with hoses and branch pipes connected.
- (c) ensure those repairs to any part of vessel requiring use of open flame or open fires are not carried out.
- (d) blank carefully fire in engine room and extinguish all other fire or non-safety lights.
- (e) maintain efficient and effective communication with the shore.
- (f) provide and use when necessary the equipment specified in the EmS schedule and MFAG published by the IMO.
- (g) provide access and facility to the officials of the port for the inspection of the dangerous goods.
- (h) ensure that no damaged, leaky containers or packages of dangerous goods are loaded either in ship or ashore without the express permission of the competent authority of the port.
- (i) ensure that appropriate personal protective equipment is used by those engaged in handling of these dangerous goods and also ensure that the cargo gear handling equipment and the

accessories used conform to the safety requirement for safe handling of such goods.

- (j) ensure that all the dangerous goods are correctly declared as required by the IMDG Code and the port and are correctly labelled and marked as per latest IMDG Code before discharging.

17. Responsibilities of barge owner or operator.—

(1) Barges carrying dangerous goods shall not load different classes of cargoes which are incompatible and shall maintain sufficient segregation between classes when carrying more than two classes, which are compatible and in every case, the instructions given by the Inspector of Dangerous Goods or the competent authority will be complied with.

(2) Surface area in holds as well as on deck of barges or lighters carrying dangerous goods should be of non-friction and non-sparking type.

(3) Lighting of naked lights or open flames on barges carrying dangerous goods at any place is strictly prohibited.

(4) A safe distance of 9.0 meters (nine meters) should be maintained between two barges berther alongside at any designated wharf or pier.

(5) Two or more barges will not be Double-Banked while loading or discharging, unless permitted by the competent authority.

18. Responsibilities of Transporter.—(1) The transporter of every goods carriage transporting dangerous goods shall ensure that the driver of the goods carriage has received adequate instructions and training to enable him to understand the nature of the dangerous goods being transported by him, the nature of the risks arising out of such goods, precautions he should take while the goods carriage is in motion or stationary and the action he has to take in case of any emergency.

(2) It shall be the responsibility of the transporter of the goods carriage transporting any dangerous goods to ensure the following:—

- (a) that the goods carriage has a valid registration to carry said goods and the said carriage is safe for the transport of the said goods; and
- (b) the vehicle is equipped with necessary first-aid, safety equipment, toolbox and antidotes as may be necessary to contain any accident.

(3) It shall be the responsibility of the transporter to ensure that the driver of the goods carriage holds a valid driving licence.

(4) It shall be the responsibility of the transporter to ensure that the driver has ability to read and write at least one Indian language and English and also possess a certificate of having successfully passed a course constituting of a syllabus and periodicity as specified in Central Motor Vehicle Rules, 1899, connected with the transport of dangerous goods.

19. Responsibility of the driver.—Every driver of a goods carriage transporting dangerous goods shall observe at all times all the precautions necessary for preventing fire, exploding or escape of dangerous goods carried by him while goods carriage in motion and when it is not being driven he shall ensure that the goods carriage is parked in a place which is safe from fire, explosion and any other risks and is at all times under control and supervision of himself or some other competent person above the age of 18 years.

20. General.—(1) Handling and storage of dangerous goods shall be done as per latest amendment of IMDG Codes, Acts, mentioned as in Section 4 of this regulation.

(2) The owner or agent or Master shall strictly abide by the instructions for handling of these goods, as given by the competent authority.

(3) All the general precautions shall be strictly followed by the owner or agent or Master.

(4) The owner or agent or Master shall report accidents to the competent authority and respective government authority immediately telephonically as well as in prescribed format.

21. Fencing of Storage Yard.—Storage yards of dangerous goods or any such sites should be fenced off to prevent the entry of unauthorised persons and should have facilities for watchmen including adequate means of communications.

22. Decontamination.—(1) In case of spillage involving hazardous goods or substances decontamination measures appropriate to the goods or substance concerned shall be carried out under the competent supervision.

(2) If there is any reason to suspect leakage of dangerous goods or substances, entry into a hold or compartment should not be permitted until the Master or the responsible officer has taken all safety considerations into account and is satisfied that it is safe to do so.

(3) Trained staff wearing self-contained breathing apparatus and other protective clothing should only undertake emergency entry into the hold under other circumstances.

23. Handling and storage of radioactive material (IMDG CODE CLASS 7).—(1) This class comprises materials which spontaneously emit a significant radiation and of which the specific activity greater than 70 kBq or Kg (2μCi or g).

(2) Documentation—

(a) The owner or agent wishing to use the port for handling or transit of radioactive materials shall seek the advice of Atomic Energy Regulation Board (AERB) for instructions regarding the handling of these materials.

(b) The owner or agent should submit to the competent authority copies of the following well in advance to enable the port to make arrangements to receive this cargo.

(i) For import—

(1) Valid regulatory consent or no objection certificate issued by the Atomic Energy

Regulatory Board (AERB), Niyamak Bhavan, Anushaktinagar, Mumbai-400 094, for the import of radioactive material.

(2) Signed declaration on the arrival particulars of the cargo in the prescribed format (Form VI as specified in Schedule I), by the authorised consignee or importer, endorsed by AERB, Mumbai.

(3) Certificate from importer in India stating their consent for receiving the radioactive material consignment.

(4) Transport information for the radioactive material cargo from the importer or shipper.

(ii) For export—

(1) Valid regulatory consent or no objection certificate issued by the Atomic Energy Regulatory Board (AERB), Niyamak Bhavan, Anushaktinagar, Mumbai-400 094, for the export of radioactive material.

(2) Valid certificate of approval of package design or special form for radioactive material, issued by AERB, Mumbai or the competent authority of country of origin of the package design, wherever applicable as per IMDG Code Class-7.

(3) Certificate from importer abroad stating their consent for receiving the radioactive material consignment.

(4) Shipper or consignors declaration as required by IMDG Code Class-7.

(iii) In-transit—

(1) In case of ships, in-transit, carrying radioactive material cargo, signed declaration in the prescribed format (Form VI as specified in Schedule I) endorsed by Radiological Safety Division (RSD), AERB, Mumbai should be submitted by the consignor or shipper.

(2) Transit information for the radioactive material cargo from the consignor.

(3) General instructions.—

(a) There will be no cut-off time for export cargo and the container should be loaded directly on the ship just prior to sailing.

(b) The import container should be discharged immediately and cleared on the direct delivery basis.

(c) In case of unavoidable circumstances, the export or import container should be stored in the container yard at the designated and isolated place for a short period, with due permission from the competent authority.

(d) The Safety Section, the Port Fire Station, Container Terminal and Inspectorate Dock Safety should be informed, well in advance, by the ship's agent of the movement of the container.

24. Sealing, marking and labelling of containers containing dangerous goods.—(1) The container should be sealed after packing and should not be locked unless specifically agreed to by Inspector of dangerous goods.

(2) Packing, marking, and labelling of container containing dangerous goods should be carried out in accordance with IMDG Code.

25. Stowage of dangerous goods in the terminal.—The dangerous goods container will be stacked with regard to segregation requirements and in accordance with the loading plan.

26. Examination Area.—This is a fenced area near the container gate complex where containers require examination including customs, health, repackaging, the examination area shall have adequate lighting, fire fighting and closed drainage system.

27. Handling of dangerous goods container in the import direction.—(1) The owner or agent or Master of a vessel wishing to discharge dangerous goods shall submit to the competent authority the following documents at least 48 hours (forty eight hours) in advance before the vessel's dangerous goods arrival in port.

(a) Application for discharging or loading dangerous goods (Form-I as specified in Schedule-I)

(b) Dangerous Goods Declaration (Form-II as specified in Schedule-I)

(c) Multimodal Dangerous Goods form (Form-III as specified in Schedule-I)

(d) Dangerous Goods Declaration (Form IV- in case of import of gas cylinder as specified in Schedule-I)

(e) A detailed stowage plan dealing with dangerous goods and their location on board shall be given.

(f) Transport Emergency Card (TREM CARD)

(2) The competent authority on receipt of these documents will give instructions to the owner or agent or Master for landing the dangerous goods.

(3) The Master of any vessel calling at the port will give a signed declaration to the Pilot regarding the dangerous goods cargo (both for discharge in the port and in transit).

(4) After the ship berths, the Master shall submit a ship shore checklist (Form V as specified in Schedule-I).

(5) The dangerous goods container will on discharge be moved to the special dangerous goods storage block in the container yard where they are slacked in accordance with segregation requirements.

(6) The owner or agents bringing dangerous goods into the port shall ensure that all the formalities for the speedy clearance of goods are completed and the cargo cleared speedily so as not to pose a risk to the safety of the port and its environment and if the owner or agent or Master fails to do so or if the dangerous goods poses any hazard to the port environment, the competent authority may take such action as is reasonable for the safety of the port and recover any expenses from the owner or agent or Master of such goods.

(7) Customs clearance of dangerous goods will comply with the requirements of the customs authorities inspection or customs examination or drawing of samples requiring opening of cases or receptacles of dangerous goods within port area will take into account the safety precaution requirements of the class of dangerous goods and the manufacturers instructions regarding handling or unpacking.

28. Penalties.—(1) Any person who commits a breach of any regulations shall be liable to pay a penalty of an amount of not exceeding Rupees One Lakh only (Rs. 1,00,000/-) and if the breach continues, a further penalty of Rupees Five Thousand Only (Rs. 5,000) per day or part thereof for period during which the said breach continues. The penalty as aforesaid shall be in addition to the cost of any action that may be taken under applicable port regulations.

(2) The competent authority may with the concurrence of the Chairperson have the vessel removed from the berth, if the default continues.

29. Notice of accidents.—(1) The notice of an accident required to be given under respective section of respective act and rules or regulations made thereunder shall be given forthwith.—

(a) to respective Governmental Authorities (e.g. Inspectorate Dock Safety, Chief Controller of Explosives, Pollution Control Board, officer in-charge of the nearest Police Station etc.)

(b) to the Port Authority [Deputy Conservator, Superintendent (Safety) etc.]

(2) Pending the visit of respective Governmental Authority, the port authority or until instruction is received from respective Governmental Authority, the port authority that he does not wish any further investigation or inquiry to be made, all wreckage and debris shall be left untouched except in so far as its removal may be necessary for the rescue of persons injured and recovery of the bodies of any persons killed by the accident.

30. Inquiry.—Inquiry of accident shall be also carried out by the Port Authority.

31. Power to Exempt.—The Chairperson, on advice of the competent authority, may in exceptional cases exempt conditionally or unconditionally any person or consignment of dangerous goods from all or any of the provisions of these regulations.

32. Change.—The Chairperson on advice of the competent authority reserves right to change these regulations and procedures in these without any prior information at any moment.

[F. No. PR-16012/3/2005-PG]

A.K. BHALLA, Jt. Secy.

Schedule—II

Form—I

(see regulation—5, 27)

Application form for discharging and/or loading of dangerous goods

To

The Dy. Conservator,
2nd Floor, New Fire Station Building,
Jawaharlal Nehru Port Trust,
Sheva, Navi Mumbai

Sub : Application for discharging and/or loading of dangerous goods

Ref. : Name of the ship..... and Voyage No. and due date

Sir,

1. The above ship is expected to arrive at this port from (Name of Last Port) on (date).
2. She will be carrying on board dangerous goods for discharge at this port. (Enclose separate list in Form Nos. II, III, IV)
3. The ship also carries dangerous goods as transit cargo for the next port. (Enclose separate list in Form II, III)
4. We propose to load dangerous goods on the subject ship for the ports. (Enclose separate list in Form Nos. II, III which is applicable)
5. Please acknowledge and issue necessary permission and instructions for the above cargo on the lists attached.

Thanking you.

Yours faithfully,

Signature and name of agent of ship with seal

Encl.:

1. Dangerous Goods Declaration
2. Multimodal Dangerous Goods Form
3. Dangerous Goods Declaration—in case of import of compressed gas cylinder.
4. AERB/RSD Clearance

C.C. to:

1. Sr. Manager (Container Terminal)
2. Suprentendent (Safety)
3. Asstt. Director (Safety), Inspectorate Dock Safety

Form—II

(see regulation—5, 27)

Dangerous Goods Declaration

Ship's Name :

Voyage Number :

Last Port :

Next Port :

Sr. No.	Container Number	Correct Technical Name	Flash Point	UN Number, EmS, MFAG	Stowage position on board	Gross Quantity	Remark

Date :

Signature and name of Master or agent of ship with seal

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Form—III
(see regulation—5, 27)

Multimodal Dangerous Goods Form

1. Shipper/Consignor/Sender	2. Transport document number
	3. Page 1 of 1
	4. Shipper's reference
	5. Freight forwarder's reference
6. Consignee	7. Carrier (to be completed by the carrier)
6-1 Notify party's	SHIPPER'S DECLARATION I hereby declare that contents of this consignment are fully and accurately described below by the Proper Shipping Name, and are classified, package, marked and labeled/placarded and are in all respects in proper condition for transport according to the applicable international and national government regulations. I undertake to hold the Carrier fully harmless and indemnify them against any and all losses, damage and expenses resulting from the failure to comply with the above.
8. This shipment is within the limitation prescribed for PASSANGER AND CARGO	9. Additional handling information
10. Vessel/flight No. and date	11. Port/place of loading
12. Port/place of discharge	13. Destination
14. Shipping marks *Number and kind of packages: description of goods Gross mass (kg) Net mass (kg) Cube (m³)	

15. Container identification No. / vehicle registration No.	16. Seal number(s)	17. Container/ vehicle size & type	18. Tare mass (kg)	19. Total gross mass (including tare) (kg)
CONTAINER / VEHICLE PACKING CERTIFICATE I hereby declare that the goods described above have been packed/loaded into the container/vehicle identified above in accordance with the applicable provisions.** MUST BE COMPLETED AND SIGNED FOR ALL CONTAINER/VEHICLE LOADS BY PERSON RESPONSIBLE FOR PACKING/LOADING		21. RECEIVING ORGANIZATION RECEIPT Received the above number of packages/containers/ trailers in apparent good order and condition, unless stated hereon: RECEIVING ORGANIZATION REMARKS:		
20. Name of company		Haulier's name	22. Name of company (OF SHIPPER PREPARING THIS NOTE)	
Name/Status of declarant		Vehicle reg. no.	Name/status of declarant	
Place and date		Signature and date	Place and date	
Signature of declarant and company chop		DRIVER'S SIGNATURE	Signature of declarant and company chop	

* **DANGEROUS GOODS:**

You must specify : Proper Shipping Name, hazard class, UN No., packing group (where assigned) marine pollutant and observe the mandatory requirements under applicable national and international governmental regulations, For the purposes of the IMDG Code see 5.4.1.1

** For the purposes of the IMDG CODE see 5.4.2

Form—IV
(see regulation—5, 27)

Dangerous Goods Declaration-In case of import of gas cylinder

Declaration to be made by the Master of a ship carrying cylinders filled with compressed gas before entering a port or by the ship's agent.

Name of the ship :

Voyage Number :

Description of filled cylinders	True chemical name and nature of the gas i.e. whether flammable, corrosive or toxic	Total quantity carried in the ship		Quantity to be landed at port		Remarks
		No. of cylinders	Kg. or M ³ of gas	No. of cylinders	Kg. or M ³ of gas	

Dated the day of 20

Signature and name of Master or agent of ship with seal

Schedule—II

Form—I

(see regulation—5, 27)

Application form for discharging and/or loading of dangerous goods

To

The Dy. Conservator,
2nd Floor, New Fire Station Building,
Jawaharlal Nehru Port Trust,
Sheva, Navi Mumbai

Sub : Application for discharging and/or loading of dangerous goods

Ref. : Name of the ship..... and Voyage No. and due date

Sir,

1. The above ship is expected to arrive at this port from (Name of Last Port) on (date).
2. She will be carrying on board dangerous goods for discharge at this port. (Enclose separate list in Form Nos. II, III, IV)
3. The ship also carries dangerous goods as transit cargo for the next port. (Enclose separate list in Form II, III)
4. We propose to load dangerous goods on the subject ship for the ports. (Enclose separate list in Form Nos. II, III which is applicable)
5. Please acknowledge and issue necessary permission and instructions for the above cargo on the lists attached.

Thanking you.

Yours faithfully,

Signature and name of agent of ship with seal

Encl:

1. Dangerous Goods Declaration
2. Multimodal Dangerous Goods Form
3. Dangerous Goods Declaration—in case of import of compressed gas cylinder.
4. AERB/RSD Clearance

C.C. to:

1. Sr. Manager (Container Terminal)
2. Suprentendent (Safety)
3. Asstt. Director (Safety), Inspectorate Dock Safety

Form—II

(see regulation—5, 27)

Dangerous Goods Declaration

Ship's Name :

Voyage Number :

Last Port :

Next Port :

Sr. No.	Container Number	Correct Technical Name	Flash Point	UN Number, EmS, MFAG	Stowage position on board	Gross Quantity	Remark

Date :

Signature and name of Master or agent of ship with seal

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Form-V

(see regulation-27)

Ships checklist for dangerous goods

Ship's Name : Voyage Number :
 Last Port : Next Port :
 Berth Number : Date :

Instruction for completion : All the questions to be answered in the affirmative. If an affirmative answer is not possible the reason should be give.

Sl.	Description	Yes	No	Remark
01.	Is the vessel securely moored			
02.	Is there an effective deck-watch in attendance on board?			
03.	Is the ship-shore communication system operative?			
04.	Are fire hoses & fire fighting equipment ready for immediate use?			
05.	Are sea and overboard discharge valves, when not in use, closed so that the pollution's are not discharge overboard?			
06.	Are 'NO SMOKING' signs prominent displayed in work area & smokes requirement being observed?			
07.	Are requirements for the use of galley & other cooking appliances being observed?			
08.	Are naked light requirements being observed?			
09.	Is the PPE available for use by the work force?			
10.	Is work area properly illuminated for the purposes of carrying on the work?			
11.	Is the handling equipment properly tested & certified & suitable for use? (if ship's equipment is used)			
12.	Are you ready to implement Emergency Management System Plan as prescribed for cargo?			
13.	Do you have the necessary antidotes on prescribed by MFAG code?			
14.	Are repairs involving hot work in the vicinity of the work place stopped?			
15.	Are the containers, packages, carboys, bottles or drums or any other means of packing are free of damage, free of leakage and otherwise safe for the purpose?			

Date :

Name & signature of Master with official seal

Note : No vessel will commence handling of dangerous goods unless the checklist is signed by Master. In addition, if any of the answers is in the negative permission of the competent authority is required prior to starting handling of dangerous goods.

Form-VI

(see regulation-23)

Clearance from AERB

Arrival/In-transit particulars of radioactive cargo to be submitted to RSD, AERB for port clearance (to be furnished by importer/shippers)

1. Package forwarded by (Consignor/Sender) :
2. Package addressed to (Consignee/receiver) :

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3. Proper Shipping name :
4. UN Class of dangerous goods :
5. United Nation No. : UN no.
6. Subsidiary risk (Corrosive/explosive, etc.) :
7. (a) Name of Radioactive material :
(b) Form of Radioactive material : Special form/other than special form Gbq (Ci)
8. Quantity/Activity of Radioactive Material :
9. Package details :
(a) Dimensions of the package/container :
(b) Weight of the package :
(c) Type of package* :
(such as IP-1/2/3, A B (U)/(M), (C) :
10. Radiation level on the surface of the package/container in mSv/h. : m S/v/h
11. Transport index of the package :
12. Category of the package : I-white/II-yellow/III-yellow
13. (a) Name of the ship/vessel :
(b) Voyage No. :
14. Date of arrival of the ship/vessel :
(if exact date is not know, likely date of arrival) :
15. Mode of transport from port to destination** :
(not applicable in case of in-transit shipments) :
16. Any other information (which can be helpful) :
to port authorities in locating and identifying :
the consignment) :
*In case of Type B(U)/(M) or C package, Competent :
authority identification number should also be given. :
**It shall be ensured that TREMCARD is available with :
the carrier. :
I hereby declare that the contents of this consignment :
are fully and accurately described above.

Signature of authorised signatory of importer/shipper
Name and address
Seal of the institution

Date :

Ref: AERB/RSD/20—/

Date :

Based on the above information provided by the importer/shipper, RSD, AERB has no objection to the receipt of above cargo at the port. This consignment is safe from radiological safety point of view for loading, unloading, stowage or storage.

For in-transit shipment, it should be ensured that the radioactive cargo is not offloaded a the port.

Signature :

Name :

Seal :

Date :

SCHEDULE-III

SEGREGATION TABLE FOR DANGEROUS CARGOES IN PORT AREA

Classes		2.1	2.2	2.3	3	4.1	4.2	4.3	5.1	5.2	6.1	8	9
Flammable gases	2.1	0	0	0	s	a	s	0	s	s	0	a	0
Non-toxic, non-flammable gases	2.2	0	0	0	a	0	a	0	0	a	0	0	0
Poisonous gases	2.3	0	0	0	s	0	s	0	0	s	0	0	0
Flammable liquids	3	s	a	S	0	0	s	a	s	s	0	0	0
Flammable solids	4.1	a	0	0	0	0	a	0	a	s	0	a	0
Spontaneously combustible substances	4.2	s	a	S	s	a	0	a	s	s	a	a	0
Substances which are dangerous when wet	4.3	0	0	0	a	0	a	0	s	s	0	a	0
Oxidizing substances	5.1	s	0	0	s	a	s	s	0	s	a	s	0
Organic peroxides	5.2	s	a	S	s	s	s	s	s	0	a	s	0
Poisons (liquids and solids)	6.1	0	0	0	0	0	a	0	a	a	0	0	0
Corrosives (liquids and solids)	8	a	0	0	0	a	a	a	s	s	0	0	0
Miscellaneous dangerous substances and articles	9	0	0	0	0	0	0	0	0	0	0	0	0

Note for the segregation table

Cargoes of classes 1 (except class 1.4S), 6.2 and 7 should be allowed in to the port area for direct shipment or delivery only. These classes have not been included in the table. However, if, through unforeseen circumstances, these cargoes have to be temporarily kept, it should be in designated areas. Segregation requirements of the individual class as stipulated in the IMDG Code should be considered by the port authority when specific requirements.

NOTE TO SEGREGATION TABLE

SEGREGATION ADVICE FOR THE TEMPORARY KEEPING OF DANGEROUS CARGOES IN PORT AREAS

- The reception and keeping of dangerous cargoes of classes 1 (other than class 1.4S), 6.2 and 7 should be subject to special rules for each port as the handling facilities at each terminal or berth vary considerably. The rules should be agreed with the authorities responsible for the safety of the port.
- All dangerous cargoes delivered to the port area should be marked, documented, packed, labelled or placarded in accordance with the IMDG Code.
- The segregation of dangerous cargoes should be in accordance with Section 15 of the General Introduction to the IMDG Code as follows:

3.1 Packages/IBC/trailers/flat racks or platform containers

0 = no segregation necessary unless required by the individual schedules

a = away from—minimum 3 m separation required

s = separated from—in open areas, minimum 6 m separation required in sheds or warehouses, minimum 12 m separation required unless separated by an approved fire wall

3.2 Closed containers/portable tanks/closed road vehicles

0 = no segregation necessary

a = away from—no segregation necessary

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s = separated from—in open areas, longitudinally and laterally minimum 3 m separation required in sheds or warehouses, longitudinally and laterally, minimum 6 m separation required unless separated by an approved fire wall

3.3 Open road vehicle/railway freight wagons/open-top containers

0 = no segregation necessary

a = away from—minimum 3 m separation required

s = separated from—in open areas, longitudinally and laterally minimum 6 m separation required in sheds or warehouses, longitudinally and laterally, minimum 12 m separation required unless separated by an approved fire wall

Notes :

1. For freight containers, portable tanks, lorries, flat racks or platform container trailers or rail wagons a distance of 3 m is equal to the width of a standard 20-foot container, or one rail track, one trailer lane or, in the case of successive rail wagons, the longitudinal buffer space.
2. The segregation table shown uses "0" to indicate no general segregation is required but that individual schedules of the IMDG Code must be consulted. The IMDG Code's general segregation table (15.1.16), however, uses as "X" instead of the "0" used in these Recommendations. The difference is intentional, to emphasize the difference in the use of the segregation tables.
3. Closed type unit means a unit in which dangerous goods are totally enclosed by sufficiently strong boundaries, such as a freight container, a tank or a vehicle. Units with fabric sides or tops are not closed type units.
4. General
 - 4.1. For dangerous cargoes with a secondary hazard, the segregation requirement for the secondary hazard should be applied when it is the more stringent. For cargo-transport units containing dangerous cargoes of more than one class, the most stringent segregation requirement should be applied.
 - 4.2. Dangerous cargoes in packaged non-containerized form, belonging to different classes, should not be stowed directly above each other. This applies also to packaged dangerous cargoes belonging to one class but having different secondary hazards and also to certain cargoes of class 8.
 - 4.3. containers, tank-containers and portable tanks containing dangerous cargoes, where practicable not be stowed directly above each other or overlap. Exemptions should only be allowed for containers which contain dangerous cargoes of the same class. This does not apply to containers with different cargoes of class 8. Where applicable, containers should be stowed in such a manner as to allow, when applicable, access to the doors and both sides at all times.
 - 4.4. Dangerous cargoes with poisonous labels or placards should be separated from foodstuff and animal feeds.
 - 4.5. The segregation requirements only apply to dangerous cargoes in storage areas and on vehicles in the port areas.
 - 4.6. All dangerous cargoes, except for individual packages, should, where applicable, be separated by a minimum distance of 1 m in order to permit access.

SCHEDULE-IV

Handling of IMDG Code Class 2 to 9

1. Handling and storage of gases : IMDG Code Class-2
 - (a) Definition and classification :—This class covers all the type of gases/cargoes as per IMDG Code Class II and further subdivided as follows :—
 - (i) Class 2.1 : Flammable gases.
 - (ii) Class 2.2 : Non-Flammable gases.
 - (iii) Class 2.3 : Poisonous gases.
 - (b) General requirements :—
 - (i) So far as fabrication, fittings, marking, colour code and labelling on cylinders manufactured in India are concerned, they shall conform to the requirements of the Gas Cylinder Regulations, 1981 if the capacity is up to 1000 litres and Static Mobile Pressure Vessel (Unfired) Rules, 1981 if the capacity exceeds 1000 litres. Cylinders imported shall in compliance with the IMDG Code, be marked to indicate that the appropriate authority has tested and certified the same.

- (ii) The valves of the cylinders or containers carrying gas shall be protected either by being so designed or else by the provisions of a set out metal cap securely attached to the body of the said cylinder or container. There will be no physical contact between metal cap and the valve or the valve body.
- (iii) Cylinders or containers of gas shall be marked or labelled legibly with the name of the gas. Cases in which cylinders or containers of gas are packed shall also be marked or labelled likewise.
- (c) Precautions for handling and use of gas cylinders :—
 - (i) Cylinders shall be adequately supported during handling.
 - (ii) Trolleys and cradles of adequate strength shall as far as possible be used when moving the cylinders.
 - (iii) The cylinders shall be handled carefully and not be allowed to fall upon one another or otherwise subjected to any undue shock.
 - (iv) Sliding, dropping or playing with cylinders is prohibited.
 - (v) Cylinders and cylinders containing liquefiable gases shall always be kept in an upright position and shall be so placed that they cannot be knocked over.
 - (vi) Cylinders used in horizontal position shall be secured that they cannot roll.
 - (vii) Open flames, lights, lighting of fires, welding and smoking shall be prohibited in close proximity to any cylinder containing flammable gases except those only in use for welding, cutting or heating.
 - (viii) All the gas cylinders or containers shall be stacked on trays when loading or handling or discharging. However, if this is not practicable, slings or any other safe method shall be used as prescribed by the competent authority.
 - (ix) Every care and precaution shall be taken to prevent the contamination of valves and fittings of the Cylinders/Containers by oily and fatty substances.
 - (x) Cylinders or containers containing flammable gases and toxic gases shall be handled separately and kept adequately separated from each other and from cylinders having other type of gases, at all times.
 - (xi) Cylinders or containers of gas shall at all times be protected from sunrays and other sources of direct heat.
 - (xii) Cylinders or containers of gas shall not be over stowed with other cargo.
- (d) Empty cylinders or containers :—These regulations are also applicable in the case of empty cylinders or containers unless they are effectively made gas free.

2. Handling and storage of flammable liquids in packed form : IMDG Code Class-3 ✓

(a) Definition and classification :—

- (i) This class cover flammable liquids packed in drums, receptacles and cases as per IMDG Code Class III. The containers for petroleum products shall conform to the requirements laid down in the Petroleum Act, 1934 and regulations framed there under.
- (ii) For the purpose of these regulations flammable liquids will be divided into the following groups depending upon flash points determined by closed cup test :
 - (1) Low flash point group of liquids having a flash point below—18°C (0°F)
 - (2) Intermediate flash point group of liquids having a flash point of—18°C (0°F) up to, but not including 23°C (73°F).
 - (3) High flash point group of liquids having a flash point of 23°C (73°F) up to and including 61°C (141°F).
 - (4) For the purpose of these regulations, liquids having a flash point above 61°C and below 93°C shall also be considered as flammable liquids when the same are being handled in the Port.

(b) Precautionary measures for handling and storage of flammable liquids :—

- (i) The liquids in this class are liable to polymerise and liberate dangerous gases and heat, possibly resulting in rupture of the receptacle. Therefore, utmost precautions and care should be taken when handling the container or receptacles holding these liquids. They should not be dropped, bumped, rolled or otherwise mishandled.
- (ii) The vapours from nearly all the liquids in this type have properties of narcotic effect to some degree. Labours handling them should be protected against this hazard.
- (iii) When these goods are loaded or unloaded or handled, they should be away from all the direct source of ignition, even in the transit, they should be kept in cool and well-ventilated places.

- (iv) All personnel working in this area or near vicinity are prohibited from bringing matches, lighters, flints, or any other material likely to cause ignition or spark.
- (v) Whenever a leaky drum is traced, it shall be isolated under the instructions of the competent authority.
- (vi) The packaging of these goods is such as to protect them from external source of ignition. If this is damaged it should be rectified under the instructions of the competent authority.
- (vii) Non sparking tools and suction methods should be used when drawing sample from these liquids.
- (viii) Segregation and separation of these cargoes *vis-a-vis* other cargoes shall be as prescribed in the IMDG code.

3. Handling and storage of solids : IMDG Code Class-4

- (a) Definition and classification :—For the purpose of these regulations solids will be divided into the three sub classes as below :—
 - (i) Class 4.1 : Flammable solids :—The substances in this class are solids possessing the properties of being easily ignited by external sources, such as sparks and flames and of being readily combustible or of being liable to cause or contribute to fire through friction.
 - (ii) Class 4.2 : Substances liable to spontaneous combustion :—The substances in this class are either solids or liquids possessing the common property of being liable spontaneously to heat and to ignite.
 - (iii) Class 4.3 : Substances, which in contact with water emit flammable gases :—The substances in this class are either solids or liquids possessing the common property when in contact with water of evolving flammable gases. In some cases are liable to spontaneous ignition.
- (b) Precautionary measures for handling and storage of :—
 - (i) Flammable solids (Class 4.1) are as follows :
 - (1) Care shall be taken to ensure that the packages are not damaged during the handling. This cargo should not be dropped, bumped, rolled or otherwise mishandled.
 - (2) Particular care shall be taken that there is no spillage of this cargo during handling. In the event of the spillage it shall be disposed off in a safe manner as prescribed by the competent authority.
 - (3) Under no circumstances, any vehicle or machinery or other cargo be allowed to roll over these spillage of flammable solids.
 - (4) It is particularly important to ensure that at every stage during loading or discharging or storage or shifting such cargo is handled away and at safe distance from other cargoes as may be prescribed by the competent authority.
 - (ii) Substances liable to spontaneous combustion (Class 4.2) are as follows :—
 - (1) Precautionary measures for Class 4.1 mentioned above are applicable to this category also. In addition they will be subject to the following restrictions :
 - (2) If packed in hermetically sealed condition throughout the period then they can be allowed to remain within the Port area.
 - (3) Flammable solids or substances liable to spontaneous combustion shall be transit stored in small stacks either inside the hazardous cargo shed or in any other premises indicated in the instructions covering individual consignments of such goods. Proper space shall always be left between such small stacks and between the stacks and the walls all round. The competent authority for the signs of overheating shall inspect such stacks regularly and periodically. In case any stack is found to be warmer than normal. Such stacks shall be broken up, cooled by aeration and restacked in a safe manner.
 - (iii) Substances, which in contact with water emit flammable gases (class 4.3) are as follows :—
 - (1) Precautionary measures for Class 4.1 and Class 4.2 mentioned above are applicable to this class also.
 - (2) Flammable solids or substances, which in contact with water emit flammable gases, shall not be handled whenever it is raining. During all stages of handling and transit storage of such substances all possible precautions shall be taken to prevent such substances getting wet or exposed to damp air.
 - (3) As some substances are liable to react dangerous even with the damp air, any container holding this cargo which is damaged or broken shall be handled as directed by the competent authority and he may take such action as is considered necessary for ensuring safety. He may even order the destruction of the container, if he deems it necessary.

4. Handling and storage of oxidising substances or organic Peroxides: IMDG Code Class-5

(a) Definition and classification :—For the purpose of these regulations oxidising substances or organic peroxides are divided into the following two sub groups :—

(i) Class 5.1 : Oxidising substances (Oxidising agents) :—These are substances which, although in themselves not necessarily combustible, may, either by yielding oxygen or by similar processes, increase the risk and intensity of fire in other materials with which they come into contact.

(ii) Class 5.2 : Organic Peroxides :—Organic substances which contain the bivalent O-O structure and may be considered derivatives of hydrogen peroxide, where on or both of the hydrogen atoms have been replaced by organic radicals. Organic peroxides are thermally unstable substances, which may undergo exothermic self-accelerating decomposition. In addition, they may have one or more of the following properties :—

- (1) be liable to explosive decomposition.
- (2) burn rapidly.
- (3) be sensitive to impact or friction :
- (4) react dangerously with other substances.
- (5) cause damage to the eyes.

(b) Precautionary measures for handling and storage of :—

(i) Oxidising substances or oxidising agents (Class 5.1) are as follows :—

- (1) All the substances in this class have the property of giving off oxygen when involved in fire and mixture of these substances are readily ignited with combustible material sometimes even by friction or impact. Therefore, all the boats, all the places on the shore or warehouses should be thoroughly cleaned prior to receipt of this cargo.
- (2) Any damaged or leaky container shall be moved under the instructions of the Competent Authority.
- (3) In the event of spillage of this cargo, such spillage should be swept separately and disposed of as prescribed by the competent authority. Under no condition, should this spillage be rolled over by weight of any type.
- (4) These substances should particularly be well separated from acids, since they are liable to give off toxic gases.
- (5) It is necessary to thoroughly clean the barges and all the areas where this cargo was stored after its delivery or disposal.
- (6) Special restrictions on Ammonium Nitrate :—Ammonium Nitrate to be brought to the port should be certified to be free from organic impurities, as specified by the IMDG Code. A certificate of purity issued by the competent Government Authority in the country of manufacture will have to be produced before such cargo or vessel is allowed inside the docks. This rule will not apply to Ammonium Nitrate of fertilizer grade.

(ii) Organic Peroxides (Class 5.2) are as follows :—

- (1) Handling of Organic Peroxides—Receptacles of liquid organic peroxide shall be handled in dead upright position. Even slight tilt may lead to spillage. This liquid is liable to react violently with the metal of the receptacle or any other substance they contact, which may lead to violent explosion.
- (2) Other organic peroxides (not in the liquid state) shall be handled with utmost care, using landing cushions necessary thus avoiding frictional contact.
- (3) If any package or receptacles, containing organic peroxides is discovered to be in damaged or in a leaky condition, it should be drenched copiously with water and disposed of in a manner as directed by the competent authority. Repackaging or repair of the damaged receptacle is not permitted in the Port area.
- (4) While these goods are being handled, the fire hoses should be laid out with the fire crew in readiness throughout.
- (5) Contact of organic peroxide with the eye should be avoided and when working this type of cargo, necessary protective equipment is to be provided and used.
- (6) At all times, this cargo should be kept away from sparks, flame or any other source of ignition.
- (7) These cargo packages should be protected from direct sun's rays, stored, and handled in well-ventilated places.
- (8) Organic peroxides shall be handled separately isolated from any other cargo.

(9) This cargo should only be handled during the day light hours.

5. Handling and storage of Poisonous substances : IMDG Code Class—6

(a) Definition and classification :—For the purpose of these regulations poisonous substances are divided into the following two sub groups :

(i) Class 6.1 : Poisonous (toxic) substances :—“Toxic” has the same meaning as “Poisonous”. These are substances liable either to cause death or serious injury or to harm human health if swallowed or inhaled or by skin contact.

(ii) Class 6.2 : Infectious substances :—These are substances containing viable micro organisms or their toxins, which are known or suspected to cause diseases in animals or humans.

(b) Precautionary measures for handling and storage of poisonous substances :—

(i) Receptacles of poisonous substances brought in the port shall remain in a hermetically sealed or effectively closed condition so as to prevent escape in form of vapours or liquids or dust.

(ii) The receptacles or containers should be inspected prior to receipt of the barge and at all times, they are being handled. Any leaky or damaged receptacle should be moved only under the instructions of the competent authority.

(iii) The substance of this class, which has a flash point below 61°C, is also by definition a flammable liquid. Therefore, while handling such type of substance, all the care should be exercised as recommended for flammable liquid and they should be stored in a cool and well-ventilated place.

(iv) All receptacles containing such cargo shall be handled in an upright position to prevent spillage.

(v) These substances could be poisonous either by skin absorption, ingestion or inhalation. Therefore, labourers or any person involved in handling these substances should be protected by appropriate personal protective equipment as prescribed by the competent authority.

(vi) The receptacles of such substances should be handled well separated from the other cargo.

(vii) If and when these substances are stored in open they should be properly covered with weighted tarpaulin, inspected frequently to detect any leakage and the stack should be prominently marked with appropriate IMDG label, so that the people working in the vicinity can identify it as poisonous goods. However, these substances with a flash point of less than 61°C should be stored in a cool and well-ventilated place, as any flammable liquid is stored.

(viii) Disposal :—In case of damage or spillage during transit or storage, the disposal of the contents and of any other goods contaminated by the spillage shall be determined by the competent authority with the advice from the Port Health Officer and the Customs Officer shall be suitably informed.

(c) Action to be taken in the event of any accident involving poisonous substances :—

(i) Notify the competent authority.

(ii) Direct the men in the vicinity to move away to a safe area.

(iii) Arrange to send to the Port Trust Hospital men who are suspected to have been contaminated with the poison after giving first aid if practicable.

(iv) A responsible employee of the section shall accompany these men to convey to the duty doctor information regarding the name and known properties of the poison involved in the accident.

(v) Take suitable action for decontaminating the area of spillage (Goods contaminated by the split poison shall be isolated for disposal as stipulated).

(d) Decontamination :—In case of spillage involving poisonous substances of this class, particularly liquid pesticides, decontamination measures appropriate to the substance concerned shall be carried out under the competent supervision.

(i) If there is any reason to suspect leakage of some substances of this class, entry into a hold or compartment should not be permitted until the master or the responsible officer has taken all safety consideration into account and is satisfied that it is safe to do so.

(ii) Trained staff wearing self-contained breathing apparatus and other protective clothing should only undertake emergency entry into the hold under other circumstances.

6. Handling and storage of radioactive material : IMDG Code Class — 7

(a) Definition and classification :—This class comprises materials which spontaneously emit a significant radiation and of which the specific activity greater than 70 kBq/Kg (2 UCi/g).

(b) Documentation :—

- (i) The owner or agent shall seek the advice of Atomic Energy Regulation Board (Trombay) for handling or transit of radioactive materials.
- (ii) The owner or agent should submit to the competent authority copies of the following well in advance to enable the port to make arrangements to receive this cargo :

(1) For import :—

- (i) Valid regulatory consent/no objection certificate issued by the Atomic Energy Regulatory Board (AERB), Niyamak Bhavan, Anushaktinagar, Mumbai-400 094, for the import of radioactive material.
- (ii) Signed declaration on the arrival particulars of the cargo in the prescribed format (Form VI as specified in Schedule I), by the authorised consignee/importer, endorsed by AERB, Mumbai.
- (iii) Certificate from importer in India stating their consent for receiving the radioactive material consignment.
- (iv) Transport information for the radioactive material cargo from the importer/shipper.

(2) For export :—

- (i) Valid regulatory consent/no objection certificate issued by the Atomic Energy Regulatory Board (AERB), Niyamak Bhavan, Anushaktinagar, Mumbai—400 094, for the export of radioactive material.
- (ii) Valid certificate of approval of package design or special form for radioactive material, issued by AERB, Mumbai or the competent authority of country of origin of the package design, wherever applicable as per IMDG Code Class-7.
- (iii) Certificate from importer abroad stating their consent for receiving the radioactive material consignment.
- (iv) The shipper's or consignor's declaration as required by IMDG Code Class-7.

(3) In-transit :—

- (i) In case of ships, in-transit, carrying radioactive material cargo, signed declaration in the prescribed format (Form VI as specified in Schedule I) endorsed by RSD, AERB, Mumbai should be submitted by the consignor or shipper.
- (ii) Transit information for the radioactive material cargo from the consignor.

(c) General instructions :—

- (i) There will be no cut-off time for export cargo and the container should be loaded directly on the ship just prior to sailing.
- (ii) The import container should be discharged immediately and cleared on the direct delivery basis.
- (iii) In case of unavoidable circumstances, the export or import container should be stored in the container yard at the designated and isolated place for a short period, with due permission from the competent authority.
- (iv) The safety Section, the Port Fire Station, Container Terminal and Inspectorate Dock Safety should be informed, well in advance, by the ship's agent of the movement of the container.

7. Handling and storage of corrosives : IMDG Code Class - 8

- (a) Definition and classification :—Substances in this class have the property of severely damaging living tissues. The substances may emit vapours, which can cause irritation to the mucous membranes; some vapours can even be toxic. Therefore, it is very essential that all the people handling this cargo and likely to come in contact with this substance should be provided with appropriate personal protective equipment.
- (b) Precautionary measures for handling and storage of corrosives :—
 - (i) This cargo should be handled well separated from the cargo of other class and special care should be taken to ensure that acids and alkalies are well separated.
 - (ii) The Receptacles/Cargoes should be handled with extreme care and always in an upright position to prevent any damage or spillage.
 - (iii) Any damaged Receptacles/Cargoes shall be isolated and moved further under instructions of the Competent Authority and taking great care to avoid direct skin contact.

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- (iv) The goods in this class with a flash point of less than 61°C shall be flammable goods by definition and therefore all precautions for handling and storage has to be taken in such cases.
- (v) These goods shall be stored in the covered space and when this is not possible they should be stored in the open on a covered platform well segregated from other cargoes and well marked.
- (vi) Whenever any receptacles or cargoes handling corrosive substances get damaged, they shall be rendered harmless or destroyed as directed by the competent authority.
- (c) In the event of an accident :—
 - (i) Direct men in the vicinity to move away to a safe area.
 - (ii) Render immediate first aid by giving copious wash of fresh water to the affected people prior to their removal to hospital.
 - (iii) Summon specialised medical aid.
 - (iv) Notify the competent authority.
 - (v) The competent authority shall organise suitable action for decontaminating the area of spillage as well as all the articles contaminated by the spilt corrosives.
- 8. Handling and storage of miscellaneous dangerous substances : IMDG Code Class - 9
 - (a) Definition :—This class includes a number of substances, which can not be properly brought under any of the precisely referred classes because they offer a particular danger which can not be properly covered by the regulations for the other classes or which presents a relatively low transport hazard.
 - (b) General requirement :—While giving the clearance for such substances the Competent Authority shall carefully consider the characteristic properties and known hazard of such substances and shall stipulate such precautionary measures as may be necessary for ensuring safety during their handling and storage.
 - (c) Precautionary measures for handling and storage of miscellaneous dangerous substances :—
 - (i) All the required precautions shall be taken while handling this class.
 - (ii) Any other precaution as advised by the competent authority shall be taken.

Schedule—V

Important Contact Numbers

Jawaharlal Nehru Port Trust

Name of Authority & Address	Contact Number	
	Office	Residence
(1)	(2)	(3)
Dy. Conservator	27244171	27473103
Chief Manager (Operation)	27244181	27473110
Senior Dock Master	27244173	27710513
Medical Superintendent	27243565	27473552
Dy. Commandant (CISF)	27244216	27472246
Asstt. Commandant (CISF)	27245061	27472323
Sr. Manager (P & IR)	27244023	27473108
Manager (Marine Conservancy & Pollution Control)	27245170	27473181
Asstt. Manager (Fire & Safety)	27245173	27473201
Superintendent (Safety)	27245184	27482205
Shift In-Charge (BT)	27245075	—
Shift In-Charge (CT)	27245013	—
CISF Control Station	27242275	—
Hospital	27473568/27243580	—
Fire Station	27245100/27245000	—
Port Control Station	27242367/27245151	—

Police	
Name of Authority	Contact Number
(1)	(2)
District Superintendent of Police, Raigad, Alibag	02141—222093
Police Commissioner, Thane	25344499
Police Commissioner, CBD, Belapur, Navi Mumbai	27684860
Asstt. Commissioner (Traffic Police), CBD, Navi Mumbai	27684860, 7576282
Police Control Room, Mumbai	22620111, 2621855/100
Police Control Room, Raigad	02141—222100
Police Station, Sheva, Uran	27242264
Government Services	
Name of Authority & Address	Contact Number
Dy. Director, Inspectorate Dock Safety	22692180 Direct
Operation Service Centre, 3rd Floor, Opp. GPO, P.D'Mello Road, Mumbai-400 038.	22624321 Ext. 3511/3558 Fax No.: 22613391 (Telefax)
Director General, Factory Advice Service & Labour Institute, Central Labour Institute, N.S. Mankikar Marg, Sion, Mumbai-400 022.	24092203 Fax No.: 24071986
Radiological Safety Division, Atomic Energy Regulatory Board (AERB), Niyamak Bhavan, Anushaktinagar, Mumbai — 400 094 Email: gen@aerb.gov.in	25572989-91, 25572993-95 Fax No.: 25562344, 25565717, 25583230
Member Secretary, Maharashtra Pollution Control Board, Mumbai	22659107, 22614348, 22692345 Fax No.: 22612320
Regional Officer, Maharashtra Pollution Control Board, CBD, Belapur, Navi Mumbai.	27572739, 27572940
Chief Controller of Explosives, Telegraphic Address:—Explosives, Nagpur.	0712-510102-3, 510578-80, 510459, 510389, 510670, 510248, 510026 Fax No.: 0712-510577
Dy. Chief Controller Explosives, CBD, Navi Mumbai.	27575946, 27575967, 27573881
Directorate of Industrial Safety and Health, Mumbai	24942230
District Collector, Raigarh, Alibag	02141—222001, 222118
Dy. District Collector, Raigarh, Alibag	02141—222081
Home Guard, Raigad, Alibag	02141—222012
Municipal Commissioner, CBD, Navi Mumbai	27571095
MSEB, Uran	27222235 Ext. 400
Tahsildar, Uran, Raigad	27222352