

MINISTRY OF SURFACE TRANSPORT

(Ports Wing)

New Delhi, 15th December, 1987**NOTIFICATION**

G.S.R. 987 (E). - In exercise of the powers conferred by sub-section(i) of section 124 read with sub section (1) of section 132 of the Major Port Trusts Act, 1963 (38 of 1963). The central Government hereby approves the Tuticorin Port Safety Regulations, 1985, made by the Board of Trustees of Tuticorin in exercise of the powers conferred on them by section 123 of the said Act and published in the Tamil Nadu government Gazette dated 15th April, 1987 and 22nd April 1987 as detailed in the schedule annexed to this notification.

2. The said regulations shall come into force on the date of publications of this notification in the official gazette.

[No. PR-16012/11/86-PG]

YOGENDRA NARAIN, Jt. Secretary.

SCHEDULE**TUTICORIN PORT TRUST**

Tuticorin Port Safety Regulations, 1985

(No. S-6/3/85-CDN/Vol. II)

No. S.R.O.C. 15/87- In exercise of powers conferred by clause(n) of Section 123 of the Major Port Trusts Act, 1963(38 of 1963) the Board of Trustees of the Port of Tuticorin, hereby makes the following regulations, namely, the Tuticorin Port Safety Regulations,

1985 subject to the approval of the Central Government and the same are published for public information:-

PART I

PRELIMINARY

1. Short title, extent and commencement:-

- (a) The regulations may be called the Tuticorin Port Safety Regulations, 1985.
- (b) They extend to the whole area of Port of Tuticorin.
- (c) They shall come into force on the date of their publication in the official Gazette.
- (d) These regulations are supplementary to Explosives Rules, 1983, Gas Cylinders Rules, 1981, Static and Mobile Pressure Vessels(Unfired) Rules, 1981 and Petroleum Rules, 1976 as applicable.

2. Definitions - in these regulations unless the context otherwise requires -

- (a) 'Board' means the Board of Trustees of Port of Tuticorin constituted under the Major Port Trusts Act, 1963
- (b) Chairman means the Chairman of the Board.
- (c) 'Deputy Conservator means the Deputy Conservator of the Tuticorin Port Trust.
- (d) 'Harbour Master' means the Harbour Master of Tuticorin Port Trust.

- (e) 'Traffic Manager' means the Traffic Manager of Tuticorin Port Trust.
- (f) 'Safety Officer' means the Officer appointed by the Board for administering and enforcing the Tuticorin Port Safety Regulations.
- (g) 'Assistant Safety Officer' means the Officer appointed by the Port to assist the Safety Officer in the enforcement of those Regulations.
- (h) 'Safety Inspector' means official appointed to assist the 'Assistant Safety Officer' in the proper enforcement of these Regulations and includes Sub-Officers' of the Port Fire Service if allotted these duties.
- (i) 'Port' means the Port of Tuticorin to which the Major Port Trusts Act, 1963 applies within such limits as may be from time to time be defined by the Central Government for the purpose of the said Act by notification in the Official Gazette.
- (j) 'Ship' means a vessel intended to be used in sea navigation excluding 'Oil Tanker'.
- (k) 'Oil Tanker', means a vessel exclusively used for transportation of inflammable liquids in bulk.
- (l) 'Boat' means a small craft which is not mechanically propelled.
- (m) 'Explosive Anchorage' means an anchorage situated in a position latitude 8 degrees 44 feet 54 inches N and longitude 78 degree 14 feet 43 inches E.
- (n) 'IMO' Code ' means the International Maritime Dangerous Goods Code issued by the Inter-Government Maritime Consultative Organisation, London.
- (o) 'Dangerous Goods' means all substances and substances covered by the list published by Board of Trade London included in the IMO Code and also such other substances which, in the opinion of the Safety Officer are dangerous goods for the purpose of these regulations.

3. The following officers, who may be appointed by the 'Board' shall exercise such powers and discharge such functions as are prescribed and assigned to them under these Regulations.-

1. Safety Officer.

2. Assistant Safety Officer.

3. Safety Inspector.

(a) Deputy Conservator shall also be Safety Officer for the purpose of these regulations.

(b) The Fire Officer of the Port shall be Assistant Safety Officer for the purpose of these regulations.

4. Classifications of Dangerous Goods – For the purpose of these regulations Dangerous Goods shall be divided into the following classes:-

Class 1 Explosives

Class 2 Gases: compressed; liquefied or dissolved under pressure.

Class 3 Inflammable liquids.

Class 4-1 Inflammable solids.

Class 4-2 Inflammable solids or substance liable to spontaneous combustion.

Class 4-3 Inflammable solids or substances which in contact with the water emit inflammable gases.

Class 5-1 Oxidising substance.

Class 5-2 Organic Peroxides.

Class 6-1 Poisonous(toxic substances)

Class 6-2 Infectious substances

Class 7 Radioactive substances

Class 8 Corrosives

Class 9 Miscellaneous dangerous substances i.e any other substances which experience as shown or may show to be of such dangerous characters or to be treated as dangerous goods.

Class 10 Substances covered by the list published by the Board of Trade, London.

PART II

GENERAL PROVISIONS

5. Permits for dangerous goods:- No dangerous goods shall be brought into the Port except under a permit issued for the purpose by the Assistant Safety Officer on behalf of the Safety Officer.

6. Safety clearance for chemical substances:-
 - (i) No chemical substances whether included in the IMO Code or not shall pass through the Port except in the case of dangerous goods under a permit and in the case of other substances under a no permit require certificate issued by the Assistant Safety Officer.

 - (ii) The question whether a particular substance is to be treated as dangerous goods or not shall be decided by the Safety Officer and his decision shall be final and binding on all the parties concerned.

7. Onus for identifying dangerous goods:- The onus for deciding whether a particular substance is to be treated as dangerous goods or not shall vest in the Safety Officer but not in the steamer agent or consignor/consignee of such substances. Any decision taken in this regard by the Safety Officer shall be binding on all parties concerned.

8. Application of safety clearance:- Steamer Agents or Consignors/Consignees intending to bring into the Port area, dangerous goods and/or chemical substances shall apply, in triplicate, to the Assistant Safety Officer for safety clearance for such goods/substances, atleast 48 hours before the actual arrival of such goods/ substances and the application shall be accompanied by a list containing complete details of chemical substances(whether such substances are included in the IMO Code) intended to be brought. One copy each of such application and the accompanying list shall be forwarded to the Safety Officer and the Traffic Manager

The list accompanying the application shall furnish complete details regarding such goods/substances,including their full technical names, quantities, mode of packing, IMO classification (if known and other relevant data). ITEMS INCLUDED IN THESE LISTS SHALL BE SERIALY NUMBERED for reference in the follow-up correspondences.

The applications shall also be accompanied by a copy of the ship's cargo manifest.

Applications for the issue of permits for 'Explosives' shall contain the following additional information:-

Class and division in accordance with schedule I of the Explosives Rules, 1983, the trade names of all the types of explosives and quantities of explosives of the respective class and division.

Applications for the issue of permits for inflammable liquids' including petroleum as defined in the petroleum Act,1934, shall contain the following additional information:-

'Flash point(s) of such liquid(s) and whether such liquid(s) is/ are miscible with water or not.

The applications shall also be accompanied by a copy of ship's cargo. The documents and information indicated in this regulation, a copy of the ship's cargo manifest also shall be forwarded to the Assistant Safety Officer, so as to enable him to gather information regarding transit cargo of dangerous goods carried by each ship.

9. Procedure for the issue of safety clearance:-

- (a) On receipt of application for the issue of safety clearance, the Assistant Safety Officer, shall classify all known dangerous goods in the cargo lists received along with the application according to the classes and shall issue separate permits for each class of goods in the forms prescribed under the schedules. The Assistant Safety Officer shall also identify non-dangerous goods included in the list and shall issue (separate permits for each class) 'no permit required certificates' for such goods. This may be done by noting the serial numbers of such goods (as given in the cargo list) in the blank space provided in the form prescribed for issue of permits to be used for forwarding permits to the parties concerned.
- (b) If the characteristics properties of any of the items on any cargo list are not known, the Assistant Safety Officer may require the concerned steamer agent/ consignor/consignee to furnish such information as may be found necessary and the serial number(s) of such items as given in the cargo list may be noted for reference in paragraph (2) the promotion indicated in Regulation 9(a).

On receipt of the required information from the party concerned the Assistant Safety Officer shall issue appropriate permits for items to be treated as dangerous goods and /or 'no permit required certificate' for items to be treated as non-dangerous goods.

It shall be responsibility of the parties applying for safety clearance furnished the characteristic properties of any chemical substance if called upon to do by the Assistant Safety Officer.

Chemical substances of unknown characteristic properties and not cleared by the Assistant Safety Officer on this ground shall not be handled and/or transit- stored inside the Port.

(c) Permits for dangerous goods and letters forwarding such permits shall be made out in quadruplicate copies and one copy of each shall be forwarded to:-

(i) The party who had applied for safety clearance.

(ii) The Safety Officer and

(iii) The Traffic Shipping Control together with one copy of the cargo list required with the application for permit.

The fourth copy will be retained by the Assistant Safety Officer for departmental reference.

(d) If all the items included in a particular cargo list were to be treated as non-dangerous goods a 'no permit required certificate' will be made out made out in quadruplicate copies which shall be forwarded to:-

(i) The party who had applied for the permit.

(ii) The Safety Officer and

(iii) The Traffic Section receiving such cargo together with a copy of the cargo list.

The fourth copy may be retained by the Assistant Safety Officer for departmental reference.

10. Safety Cards:

The Assistant Safety Officer shall prepare safety cards in the form corresponding to each of the class of goods for which permits are issued and despatched the cards together with a copy of the list of cargo goods to the Traffic Section receiving dangerous goods immediately after the ship bringing the goods referred to in these documents is berthed or immediately before the goods covered by such documents actually arrive for shipment.

Items of non dangerous goods and items of goods not granted safety clearance due to non availability of information regarding their characteristic properties shall be indicated

clearly on this cargo list for the guidance of the Traffic Section official.

The safety cards shall clearly indicate the place of storage of goods covered by each card.

Duplicate copies of these cards shall be made out and forwarded to the hazardous cargo shed in respect of all goods which are to be transit- stored exclusively in this shed.

11. Handling and transit-storage of dangerous goods:-

- a) Parts III to XI of these regulations stipulate the special conditions/restrictions precautions to be observed in the handling /transit- storage respectively of classes 1 to 9 of dangerous goods as per the IMO code. Handling and transit-storage of each of these classes of dangerous goods shall be subject to strict observance of the special conditions/restrictions precautions as applicable to that particular class of dangerous good in addition to the general provisions stipulated in this part (Part II).
- b) The Steamer agents/consignor/consignees of dangerous goods shall be responsible to observe and /or cause to be observed strictly the conditions/restrictions/precautions as laid down in this regulations in so far as they will apply to the goods brought by them into the port.
- c) i) Traffic Section officials shall extend every co-operation and assistance to the Assistant Safety Officer and Safety Inspectors in ensuring that all parties concerned observe the conditions/restrictions/precautions as laid down in these regulations.
- ii) The Traffic section officials shall also ensure that dangerous goods /other chemicals substances which have not been given safety clearance shall not be handled- transit stores anywhere inside the port.
- iii) Whenever a traffic section official notices any act of omission/or commission contrary to any of the provisions of these regulations, he shall immediately and effectively prevent continuation of such violation and shall notify the safety officer or the Assistant Safety Officer of such violations by telephone in the first instance, followed by a confirmatory report .

12. Obligation to notify the safety inspectors before commencement of handling of dangerous goods.:-

- a) Before commencement of landing shipping of dangerous goods , the cargo supervisors working for the steamer agents/stevedores shall contact the duty safety inspector and

shall inform him – that dangerous goods ready to be landed /shipped. Landing and shipping operations shall commence only after a safety inspector arrives on the scenes for overseeing such operations .

- b) Parties bringing dangerous goods into the port (for export) shall notify the duty safety inspector in advance that such goods are going to arrive at the port and on receipt of such information the safety inspector shall accompany such goods and shall take and or cause to be taken appropriate measures for safe transit – storage and /or shipment of such goods.
- 13) Obligation to notify the traffic section officials before commencement of handling of dangerous goods – before commencement of landing/shipping of dangerous goods the cargo supervisor working for the steamer agents/stevedores shall notify the traffic section officials of the port on duty on the respective quays , etc. , that the dangerous goods are ready to be landed/shipped. Landing/shipping operations shall commence only after the concerned traffic officials completes all arrangements pre requisite to such operations.
14. Safety Inspector to supervise handling dangerous goods - handling transit storage goods shall be carried out under personal supervision of a safety inspector who shall ensure strict observance of these regulations by all parties concerned and shall arrange to take adequate and appropriate precautions for preventing any accidents.
15. Action to be taken by the safety enforcement staff in case of violations of these regulations :- on receipt of any report regarding any violation of these regulations the assistant safety officer, if available or the safety inspector on duty shall proceed forthwith to the scene cases of such violation and shall take and/or cause to be taken prompt measures for preventing any accidents on account of such violation and shall submit atleast within 48 hours therefrom report to the safety officer to take steps to prevent accidents.
16. Prohibition of transit storage of dangerous goods in certain premises :- a) dangerous goods shall not be transit stores any where inside the port except inside the hazardous cargo sheds and at such other places as indicated in the safety cards pertaining to the individual consignment of such goods.
- b) Storage of dangerous goods in any premises in the port other than those occupied by board is prohibited. Provided, that the substance of vegetable origin which are readily combustible (e.g. , cotton, vegetables, fibres, etc.) or liable to spontaneous combustion) e.g. Oil cakes, oil contaminated vegetables, fibres, etc.) may, however, be stored in premises occupied by private parties after obtaining special permission, therefore, from the safety officer who may grant such permission only on the recommendations of the safety manager and subject to such special conditions/restrictions as may considered necessary for ensuing safety.

- c) Sulphur in bulk may be stored in the open plot inside the port area after obtaining permission from the Traffic manager and the Safety officer
17. Use of boat to carry dangerous goods prohibited during bad weather:- Shore to boat, boat to shore, or boat to ship/ships to boat transfer of dangerous goods shall be carried out only during fair weather. Such operations shall not be carried out when in the opinion of the safety officer the sea is not fit enough for safe operations.
18. Separation of dangerous goods :- a) Dangerous goods shall be handled separately clause wise only one clause of dangerous goods shall be landed/shipped at a time.
- b) While on class of dangerous goods is being loaded into /discharged from ships hold no other cargo shall be handled at same berth or on the open deck around that hatch.
19. Packing of dangerous goods:- a) Cases, receptacles of each class of dangerous goods brought into the port shall conform strictly to the standard stipulated in the IMO Code . Such cases /receptacles shall remained in a sound condition while brought into the port/ ban)
- b) If any case/receptacles of dangerous goods gets damaged or becomes leaky during handling in the port such case / receptacles shall be moved further subject only to observance of special accidents preventive measures as may be indicated by the safety officer/ safety inspector on duty.
- c) Repairs to damaged cases /receptaries of dangerous goods brought into the port or repacking their contents shall be carried out subject only to special restrictions as applicable to individual class of dangerous goods as stipulated in Part III to XI of regulation.
- d) No case /receptacles of dangerous goods shall be opened anywhere within the port except after obtaining special permission to do so from the safety officer who may grant such permission subject to such precautions and restrictions as the Safety officer may consider necessary.
20. responsibility of the Master of the ship carrying/discharging/loading dangerous goods. - (a) Masters of ships carrying dangerous goods while lying in the Port limits shall exhibit conspicuously;
- i) red flag from sun rise to sun set; and

- ii) a red light from sun set to sunrise.

 - (b) Whenever dangerous goods are loaded into/discharged from a ship the Master shall depute a responsible Officer of the ship to personally supervise the loading/landing operation. Such Officer shall take and/or cause to be taken all due precautions necessary for avoiding any accident.

 - (c) While dangerous goods are being handled the Master of the ship shall ensure that the ship's fire fighting gear is kept in readiness with hoses and branch pipes connected.

 - (d) Repairs to any part of the ship necessitating the use of open flame or open fire shall be forbidden while dangerous goods are being handled on any ship.

 - (e) Before commencement of discharging/shipping of explosives, inflammable liquids and liquid organic peroxides ship's engine room fire shall be carefully bunked up and all other fires or non-safety lights shall be extinguished.

 - (f) Masters of ships shall also comply strictly and caused to be complied strictly all the Regulations in this part (Part II) as well as the special provision pertaining to individual classes of dangerous goods as stipulated in Parts III to XI of these regulations in so far as such regulations apply to dangerous goods handled on board/alongside ships.
21. Obligation to take precautions – Steamer Agents Consignors/Consignees of dangerous goods and occupier or custodians of all premises within the Port shall always observe and/or cause to be observed any safety precaution prescribed by the Safety Officer, the Assistant Safety Officer, the Safety Inspector or any other official duly authorised in the behalf, by the Safety Officer whether or/not such precaution is provided for in these regulations.
 22. Failure to take precautions -Steamer Agents/Consignor/Consignees of dangerous goods handle or store within the Port fail to take reasonable precautions to prevent accidents the Safety Officer may take such notice as may be deemed reasonable by him for the Safety of the Port and may recover from such Steamer Agents/Consignors/Consignees such expenses as have been incurred for the purpose.
 23. Floating Craft – Smoking of tobacco and open fires shall be forbidden on tugs and other floating crafts operating within 50 metres of ships discharging on loading dangerous goods.
 24. Restrictions regarding smoking and open fires. - Smoking and the use and existence of naked fire shall be forbidden anywhere within 100 metres of places where explosives, inflammable liquids and liquid organic peroxides are handled/stored and within 30 metres of places where other inflammable/Combustible goods are handled/stored.
 25. Power to destroy dangerous goods – The Safety Officer may arrange to dump into the sea or otherwise destroy, in a safe manner case(s) /receptacle(s) the dangerous goods, the

continued storage of which in the Port may , in his opinion, endanger the safety of the Port.

26. Inspection . - Steamer Agents or ships lying within the Port, Consignor/Consignee of goods coming within the Port occupiers or custodians of premises within the Port and owners of goods handled or stored within the port shall when so required by the Safety Officer, the Assistant Safety Officer, the Safety Inspector or any other officials duly authorised in this behalf by the Safety Officer affords all reasonable facility to such officials to ascertain whether these regulations are duly observed.
27. Enforcing Authority – The Safety Officer, namely, the Deputy Conservator shall be responsible and shall have due jurisdiction to enforce these regulations.
28. Power to exempt – The Chairman on the advice of the Safety Officer and in consultation with the Chief Controller of Explosives and weith the approval of the Central Government may exempt conditionally or unconditionally any person/consign met of dangerous goods from all or any of the provisions of these regulations.
29. Penalties – Whoever contravance or fails to comply with any of these regulations under this part (Part II) be punishable with a fine which may extend to one thousand rupees and where the contravention or failure is a continuing one, a further fine of Rs. 500/- (Rupees Five hundred) per dam for every day after the first during which such contravention or non compliance continues.

PART III

REGULATION OF THE TRAFFIC OF

EXPLOSIVES

30) Classification of Explosives - For the purpose of these regulations, explosives shall be (IMO Class I) classified into the following groups:-

- (i) Service Explosives.
- (ii) Prohibited Explosives.
- (iii) Safety Explosives.
- (iv) Manufactured Fire Works.
- (v) Restricted Explosives.

31 (a) 'Service Explosives' means explosives owned by or intended for the Indian Defence Services.

(b) They will be handled within the Port subject to conditions negotiated between the Board and the Defence Services in respect of each consignments of such explosives. These regulations shall not , therefore, apply to Service Explosives'.

(c) Explosives Dangerous petroleum shall not be admitted into the enclosed harbour and shall be discharged before the vessels, carrying such cargo enter into the enclosed harbour at the position defined as " explosive anchorage".

(d) This regulation shall not apply to vessels of war flying the white ensign and all armed merchant vessels/auxiliaries in the service of the President of India and also vessels of war belonging to other countries who are on visits to the Port having been cleared by the Ministry of Defence.

(e) Such vessels of war as enumerated above would be permitted to handle inside the enclosed harbour all types of explosives/dangerous petroleum provided the authorisation of the Naval Officer in charge, Tuticorin.

- (f) All the vessels enumerated above shall also be permitted to lie in the harbour in berths allotted by the Port with their explosives/dangerous petroleum properly stowed to the requirements of the Naval authorities as all such vessels would only visit the Port after due clearance from the Naval Officer in charge, Tuticorin.

32.. Prohibited Explosives:- The following classes of Explosives are absolutely excluded from and shall not be allowed inside the Port:-

- (i) Class – 4 Chlorate mixture
- (ii) Class – 5 Fulminate
- (iii) Class – 7 Division 1 – Fire works composition.

Note:- Classification of explosives given above are in accordance with the classification made in the Explosives Rules, 1983.

33. Safety Explosives:- The following explosives are classified " Safety Explosives"-

- (i) Safety cartridges and
- (ii) Safety fuse

These explosives shall be treated as 'Inflammable Solids' and shall be handled and transit stored subject to the special regulations applicable to inflammable solids (Part VI of these regulations). The safety cartridges shall be subject to the following further restrictions.

- a) A continuous security guard shall be maintained to keep off unauthorised person from places where these explosives are handled /stored. The traffic section receiving these explosives shall arranged for the posting of such security guard.
- b) These explosives shall be transit- stored in the 'Lockfasts' inside the transit sheds or at other suitable places.
- c) Damaged/Unsound cases(s) of these explosives shall not be brought into the Port. Cases GETTING DAMAGED DURING hANDLING AT THE Port SHALL BE REPAIRED

IN APPROVED MANNER BEFORE THEY ARE FURTHER HANDLED TRANSIT STORED.

34) Manufactured Fire Works. - These explosives shall be generally handled and transit-stored subject to the special regulations applicable to inflammable solids (See Part VI) of the Regulation and shall be subject to further instructions contained in Regulation 33.

The explosives shall be accepted as cargo for direct delivery from the docks.

35. Restricted Explosives – All types of explosives other than the service explosive prohibited explosive and Safety explosives shall be treated as restricted explosives.

36. Ships not to carry Restricted Explosives while lying inside the enclosed harbour. - (i) No ship shall have on board restricted explosives while remaining inside the enclosed harbour.

(ii) This restriction may not apply to small quantities of explosives less than 10 Kgs. In all provided that such explosives are kept locked inside a magazine of approved pattern.

37. Landing from/Loading into ships of Restricted Explosives prohibited inside the harbour. - Restricted Explosives shall not be discharged from loaded into any ship while remaining inside the enclosed harbour. Such operation shall be carried out only at the 'Explosive Anchorage'.

Ships shall be anchored at the 'Explosives Anchorage' while landing/loading restricted explosives such operation shall not be carried out when a ship is underway.

38. Maximum quantity per consignment – The maximum quantity of restricted explosives that may be brought by loaded into any ship shall not exceed 80 tonnes net.

39. Number of consignment received at a time. - The Port shall receive only one consignment of restricted explosives at a time. A second consignment shall arrive only after the previous consignment has moved out of the Port.

40. Transit cargo of Restricted Explosive:- Ships carrying explosives for discharges at other Port(s) shall not be allowed to call at this Port, provided that the Safety Officer, may, in his discretion waive this restriction subject to the condition that no type of explosives of Class II or Class III Division as defined in the Explosives Rules, 1983, is carried as a transit cargo and that the quantity of such explosives does not exceed 25 tonnes.

Any ship granted exemption under this provision shall unload the transit cargo into a boat as the 'Explosive anchorage' before such ship enters the harbour and may load the

explosives into her again at the said anchorage on her outward journey from the Port.

41. Technical Representative. Any consigner/consignee intending to bring restricted explosives into the Port shall depute a technically qualified person to act as the Technical Representative to take charge of individual consignment of such explosives. Such Technical Representative shall remain in charge of each consignment of explosives through out the time that such consigning remains within the port-limits. He shall observe and/or cause to be observed all the regulations regulating the traffic of restricted explosives in so far as such regulation apply to the consigners/consignees. He shall also take and/or cause to be taken all necessary precautions for preventing any accident.

42. Cases of Restricted Explosives. - Damaged Unsound case(s) of restricted explosives shall not be discharged into boats, landed on the jetty or such places allotted by the Safety Officer or loaded into wagons before such case(s) is/are suitably repaired of the contents thereof are repacked in a manner provided in the Explosives Rules, 1983 and to the satisfaction of the Safety Officer.

The consignor's /Consignee's Technical Representative shall be responsible for isolating such Damaged/unsound case(s) and for arranging to repair such case subject to provision in the Explosives Rules, 1983 and to the satisfaction of the Safety Officer.

43. Hours of working. - Restricted explosives shall not be discharged from ships or loaded into boats from the shore before 06.00 hrs. or after 16.00 hrs., but landing from boat to shore or shipping from boat to shore or shipping from boat to ship of such explosives may be done between sunrise and sunset with the permission of the Safety Officer, provided that the landing/shipping operation can be completed with before sunset.

44. Traffic procedure in respect of Restricted Explosives imported into the Port- (a) Any ship bringing restricted explosives for landing at this Port shall discharge such explosives into boats at the Explosives Anchorage before the ship enters she enclosed harbour.

(b) Not more than 25 tonnes of restricted explosive shall be discharged into any boat.

(c) While loading into boat, restricted explosives shall be separated in accordance with the regulations laid down in the Indian Merchant Shipping (Carriage of Dangerous Goods) Rules, An explosive of the 6th (ammunition) Class or an explosive of the 7th (Fire Works) class shall not be discharged into or loaded into any barge or wagon along with an explosive not of the same class and division.

(d) Boats loaded with explosives shall be towed by tug and shall be moored alongside the Finger Jetty or any other paces allotted by the Safety Officer where they shall lie until called inside for off loading.

To give protection from rough sea during bad weather, the Safety Officer, may in his discretion permit boats loaded with explosives to lie at a place allotted by the Safety Officer

inside the enclosed harbour, subject to such additional restrictions that as he may deem fit to impose.

- (e) Boats loaded with restricted explosives shall be moored near the finger jetty or any other place allotted by the Safety Officer in such a way that a safety distance of not less than 100 metres is maintained between any two of such boats.
- (f) Restricted explosives lying in boats shall be properly covered with clean tarpaulins to protect with explosive from the sun. Tarpaulins contaminated with oil/grease/spilling of chemicals shall not be used for this purpose.
- (g) Explosives boats lying within the enclosed harbour shall never be left unattended; atleast three Lighter man shall remain always on duty on each boat.
- (h) Explosives shall be discharged from wooden Boats only at the Finger Jetty of such places allotted by the Safety Officer and not at any other point in the Port area.
- (i) When wagons/vans to load explosives are placed in the Finger Jetty or any other places allotted by the Safety officer and when other arrangements for loading into such wagon/vans are completed the Section Officer-in-charge may shift the explosives boats directly to the landing site from the place where they are kept. Not more than one boat at a time shall proceed to the landing sites.
- (j) Not more than five explosives wagons/vans shall be placed at a time on the Finger Jetty or any other place allotted by the Safety Officer and such wagons/vans shall be positioned not less than 50 metres away from the site of landing of explosives.
- (k) Cases of explosives so landed on the Finger Jetty or such places allotted by the Safety Officer shall without delay be carefully man-carried and loaded into wagons/vans placed not less than 50 metres away from the landing point and out of the Port immediately after loading operations are completed. Such wagons shall not remain in the Port during the night time.
- (l) Wagons/vans loaded with explosives shall be from the Finger Jetty or such place allotted by the Safety Officer .

- (m) Wagons loaded with explosives shall be loose shunted. If a steam engine is used for moving the wagons the engine shall be separated from the explosives wagons by not less than three empty wagons.
45. Traffic procedure in respect of Explosives exported from the Port.- (a) Explosives intended for export shall be brought into the Port only when the ship to receive such explosives is available at the Port.
- (b) Such explosives shall be brought only after arrangement have been made with the Traffic Department for keeping the boats to receive the same ready at Finger Jetty or any other place allotted by the Safety Officer.
- (c) The arrival of such explosives shall be so timed that shore to boat transfer of the explosives can be completed in accordance with the Regulation 43.
- (d) Such explosives shall be brought directly to the Finger Jetty or such place allotted by the Safety officer and shall immediately be loaded into the boats subject to restrictions stipulated in Regulation 44 (b) and 44 ©.
- (e) As far as possible explosives so loaded into boats shall be taken out and loaded into the receiving ship at the Explosive Anchorage on the same day. If this was not possible due to any compelling reason, the boats may be taken out and moored off Finger Jetty subject to the provisions contained in Regulations 44(e) 44(f) and 44(g). The waiting period for such boats shall not exceed 24 hours.
- (f) As soon as the ship is moored at the Explosive Anchorage ready to receive such explosives these boats shall be towed one after another by using a tug for the explosives being loaded into the ship.
46. Handling of explosives prohibited at the Finger jetty or such places allotted by the Safety Officer when a ship lies alongside this jetty or such places allotted by the Safety Officer.
47. Berthing of all Tanker ships while explosives remain inside the harbour.- while such explosives are being handled at the finger jetty or such places allotted by the Safety Officer, Tanker berth/oil jetty inside the harbour shall not be used for berthing and oil tanker ships.
48. Accident and Fire prevention measures:- (a) Prohibition of matches, fuses etc., - no person engaged in the handling of explosives shall carry fuses, matches, cigarette lighters or any other appliance(s) likely to produce ignition or explosion. This Regulation shall

apply with particular emphasis to the lighterman on stand by duty on explosives boats lying afloat awaiting clearance.

- (b) Responsibilities of ship's master:- The master of any ship discharging or receiving explosives shall see that the deck and the platform in the hold over which explosives are moved or covered with a suitable padding material. He shall also ensure that persons engaged in the handling of such explosives do not wear shoes having metal parts likely to create sparks.

He shall further ensure that wireless transmitter or radar installation on the ship shall not be operated while explosives are being handled on board.

- (c) First aid fire fighting equipment on boats- Each boat used for carriage of restricted explosives shall be provided with four buckets with hooks and ropes to facilitate drawing of water from the sea. These buckets shall be kept empty on suitable stands at the rate of two buckets at either end of the boat.

- (d) First aid fire fighting equipment on finger jetty or such places allotted by the Safety Officer:- Six buckets with hooks and ropes to facilitate drawing of water from the sea shall be kept on the finger jetty or such places as are allotted by the Safety Officer; three of these buckets complete with hooks and ropes shall be placed near the point of landing of explosives and remaining three sets shall be placed near the explosives wagons/vans. These buckets shall be kept filled up with water before commencement of handling of explosives. While explosives are being handled, prominent warning boats shall be provided for the information of all concerned.

- (e) Care in the handling of explosives:- Cases of explosives shall be handled with utmost care avoiding dropping on/pumping against hard surfaces. Landing cushions shall be used wherever necessary to avoid accidents, use of such cushions shall be compulsory at the handling points on the finger jetty.

- (f) Search pocket, warning against smoking such of naked lights and any type of open fire at all points anywhere around the vicinity where explosives are handled shall be arranged. Rubber heeled shoes alone shall be permitted to be used.

49. Restricted explosives to be protected from sun and from getting wet:- Cases of restricted explosives shall be duly protected from direct exposure to sun by covering them with clean tarpaulins.

Due care shall also be taken to ensure that restricted explosives do not get wet. In case any case of such explosives get wet due to any reason the technical representatives shall forthwith notify the same to the controller of explosives, South circle, Madras and shall keep all such explosives at an isolated place till the examination by Controller of explosives. Further movement of such wet case(s) shall be subject to such directions as may be given by the Controller of Explosives.

50. Boats used in the traffic to restricted explosives- (a) construction-boats used for the transport of restricted explosives may preferably be built of wood. If made of steel, they shall be lined internally with wood free from crevices and the sides shall be fitted with wooden grating designed in such manner that case of explosives cannot in contact with the metal of the boat.

The boats shall be marked conspicuously on both sides with a word "EXPLOSIVES" written in bold letters in English and in its Tamil equivalent.

(b) Inspection of boats:- Boats used for the carriage of restricted explosives shall be inspected once in every three months by an officer appointed by the Deputy Conservator to ascertain their suitability and fitness for conveyance of such explosives as required under the Explosives Rules, 1983. Any defect noticed during such inspections shall be rectified before such boat(s) are reused for carrying explosives.

Boats which may have been used for the carriage of other cargo shall be arranged to be cleaned and entirely free of spillings of goods previously carried before they are utilised for the carriage of explosives. This shall be the responsibility of the Traffic Department.

51. Penalties:- Whoever in breach of these regulations in Part III, transport or imports any explosius or otherwise contravenes any of these Regulations shall be punishable with:-

(a) If he imports any explosives in such contravention, imprisonment for a term which may extend to three years or fine which may extend to Rs.50000 or both.

(b) If he transports any explosives in such contravention, imprisonment for a term which may extend to two years or fine which may extend to Rs.30000 or both.

(c) In any other cases- fine which may extend Rs. 10000.

PART IV

REGULATIONS OF THE TRAFFIC OF GASES COMPRESSER,
LIQUEFIED OR DISSOLVED UNDER PRESSURE (IMO CLASS 2)

52. Cylinders/Containers of Gas – (a) The valves of cylinders/containers of gas shall be protected against damage, either by design of the cylinders/containers or by provision of a stout metal cap securely attached to the body of the cylinder/container. The metal cap shall not anywhere be in actual contact with the valve or valve body.

This restriction shall apply also to empty cylinders/containers.

- (b) Cylinders/Containers of Gas shall be marked or labelled legibly with the name of the gas. Cases in which cylinders/containers of gas are packed also shall be marked or labelled likewise.
53. Landing/Loading/Transit storage of cylinders/containers of Gas:- (a) Cylinders/Containers of Gas shall be handled with utmost care at all stages of their handling in the Port. They shall not be dropped on/or pumped against hard surfaces or rolled or otherwise rough handled. Landing cushion shall be used wherever required by the Safety Enforcement staff.
- (b) Only trays and not slings shall be used for landing or loading cylinders/containers of Gas. This restriction will not apply to large tanks of Gas, which may be lifted/lowered in any other safe manner.
- (c) Due care shall be taken to prevent contamination of cylinders/containers of gas with oily/fatty substances.
- (d) Cylinders/containers of different types of gases shall be separated from one another during handling and shall be transit -stored well segregated from one another.
- (e) Cylinders/containers of different types of gases shall be separated from another cargo and shall be transit-stored well segregated from other classes of dangerous goods and combustible substances.
- (f) Cylinders/containers of gas shall be transit stored other in the hazardous cargo shed or under covered accommodation such as verandas of Transit shed and covered platform. Actual places of storage of gasses shall be indicated on the safety cards issued by the Assistant Safety Officer.

- (g) They shall not be stored inside the transit sheds and warehouses. However, cylinders/containers containing inflammable gases like hydrogen, LPG and the like should be stored in the rooms set apart for inflammable gasses in the hazardous or dangerous goods shed.
- (h) Cylinders/Containers of gas shall , at all time, be protected from sun's hot and other sources of direct heat.
- (i) Cylinders/Containers of gas shall not be overstowed with other cargo.

54. Leakage of Gas :- (a) In the event of any accident from a Cylinder/Container, the Assistant Safety Officer or the Safety Inspector on duty shall forthwith be notified of the leakage by the master of the ship, occurred in a Ship, and the traffic section official, if occurs elsewhere and pending arrival of the Assistant Safety Officer, prompt measures for avoiding accidents shall be taken and /or caused to be taken.

Note:- (i) Inflammable Gases such as Acetylene, Hydrogen, Coal, Gas, Cooking Gas, etc. are liable to form explosive mixtures with the air, such mixtures may be ignited even by a spark, which may result in a shattering explosion.

(ii) Gases, such as Chlorine, Ammonia, etc. are liable to cause suffocation even in small quantities. They will attack the eyes, the throat and the lungs and may cause destruction of the mucous memberances, exposure to these gases can even be fatal.

(b) on receipt of information regarding accidental leakage of gas, the Assistant Safety Officer, if available or the Safety Inspector shall immediately turn out to the scene of occurrence and shall taken and/or cause to be taken prompt and effective preventive measures for avoiding any accident.

55. Penalties – Whoever contravenes or fails to comply with any of these regulations shall be punishable with a fine which shall not exceed one thousand rupees and in case of a continuous contravention shall not exceed five hundred rupees per diem for every day after the first day during which such infringement, continue.

PART V

REGULATIONS OF THE TRAFFIC OF 'PAC KED INFLAMMABLE LIQUIDS

(IMO CLASS 3)

56. These Regulations under this part are not applicable to inflammable liquids' carried in bulk (i.e. in tanks of oil tanker ships).
57. For the purpose of these Regulations under this part packed inflammable liquids are divided into the following three groups:-
- (i) Packed inflammable Liquids – Petroleum Class A means, which are inflammable liquids having flash point below 23 degree C.
 - (ii) Packed inflammable liquids – Petroleum Class B means, which petroleum having flash point of 23 degree C and above but below 65 degree C.
 - (iii) Packed inflammable liquids – Petroleum, Class C means petroleum having a flash point of 65 degree C and above , but below 93 C

REGULATIONS APPLICABLE TO PACKED INFLAMMABLE LIQUIDS GROUP A

58. No ship have on board packed inflammable liquid – Group A in excess of 30000 Litres which shall be inclusive of any quantity of such liquids while remaining inside the enclosed harbour, carried by her as transit cargo.
59. If any ship carrying packed inflammable liquids - Group A in excess of 30000 litres shall enter the enclosed harbour only after discharging the excess quantity into boat at the Explosive Anchorage.

Pending reshipment of the excess cargo, the boat(s) so loads shall lie at such place(s) and subject to such additional restrictions as the Safety Officer may indicate.

The ship may on her outward journey, reship this cargo from the boat(s) at the Explosive Anchorage.

60. If the total quantity of packed inflammable liquid – Group A on any ship lying in the Port were to exceed 30,000 litres on account of any fresh load accepted for shipment at the Port, the quantity in excess of 30,000 litres shall not be loaded inside the enclosed

harbour. Such excess quantity may be loaded into boat(s) at a place indicated by the Deputy Conservator and boats so loaded may be taken out to the Explosive Anchorage where the contents may be loaded into the ship.

61. Packed inflammable Liquid – Class A, may be landed/shipped directly at all berths subject to strict observance of the following safety precautions:-

- (i) The drums/receptacles/case of such liquids shall be landed directly into trailers which shall be kept ready for this purpose before the landing operations commences. Trailers so loaded shall be removed immediately to the hazardous cargo shed for transit storage of the liquid.
- (ii) Such liquids to be shipped from this Port shall be brought on the jetty or any other place allotted by the Safety Officer only after the arrangements for loading them directly into the ship have been completed and the consignment shall be loaded in the ship immediately after its arrival.
- (iii) Before landing or loading of such liquids commenced all inflammable/dangerous goods shall have been removed from the jetty.
- (iv) A fire engine shall be kept stand by on the quay whenever landing/loading of such liquids is carried out.
- (v) Steam locus shall not be allowed to operative within 100 metres of the points where such liquids are handled
- (vi) While such liquids are being landed/loaded no other cargo shall be landed from or loaded into the same ship.
- (vii) Provision of wooden barricades shall be made to demarcate the place where such petroleum is handled and to keep of unauthorised person from the vicinity.
- (viii) Persons in such vicinity shall be subject to search for matches etc.
- (ix) 'No smoking' boards shall be exhibited at the places where the liquids are handled during handling of Packed Inflammable, Liquids Class A.

62. A ship lying at the Moorings may discharge packed inflammable liquids – Class A, into boat(s) kept ready for the purpose.

Boat(s) so loaded shall be taken to any place allotted by the Dock Conservator where the contents may be transferred to the shore, to be transported directly for transit-storage in the hazardous cargo shed.

63. Packed inflammable liquids - Class A, intended to be loaded into any ship lying at a Mooring shall be loaded into boats at any place allotted by the Deputy Conservator, boats so loaded may be brought alongside the ship and their contents may be shipped with due diligence.

64. Packed inflammable liquids — Class A intended, to be shipped at any Mooring shall be brought into the Port area only after the ship to receive the same is ready and boats are kept ready for shore to mooring transport of such liquids.

65. Transit-Storage of packed inflammable liquids—Group A-- Such liquids shall not be stored anywhere in the Port except into the hazardous cargo shed upto the storage capacity fixed for that purpose.

In case the total quantity of inflammable liquids to be transit-stored exceeds the total storage capacity of the hazardous cargo shed, the Safety Officer may, on the recommendation of the Traffic Manager, permit the excess quantity to be transit stored afloat in boats at such places and subject to such additional restrictions as may be directed by him subject to the (afloat in books) also is utilised.

The Port shall not accept such liquids if the hazardous cargo shed is stored to its full storage capacity and the additional transit/storage facility (afloat in boats) also is utilised.

66. Packed inflammable liquids —Class A; shall be handled only during the day light.

The landing/shipping operations shall be so timed as to ensure that all phases of the operations (Landing and transit-storage arrangements with regard to import cargo on arrival into the Port and completion of shipment in respect of export cargo are completed between sunrise and sunset of any single day.

RESTRICTIONS APPLICABLE TO PACKED INFLAMMABLE LIQUIDS GROUP 'B'

67. The restrictions applicable to packed inflammable liquids Class A shall generally apply also to packed inflammable liquids—Group 'B' subject to the restrictions applicable to packed inflammable liquids Class A provided that:-

(a) There will not be any quantitative limit on packed inflammable liquids Class B carried by any ship.

(b) The maximum quantity of packed inflammable liquids—Class B, that any ship may land/load at a time at any berth or mooring shall be 80,000 litres provided that this quantitative restriction may be relaxed at the discretion of the Deputy Conservator.

(c) If any ship intends to discharge or load quantities of packed inflammable liquids—Class B in excess of 80,000 Litres at any berth or mooring the same may be permitted at the discretion of the Safety Officer provided that only one lot limited to 80,000 Litres is handled at a time, i.e. in the case of imported cargo the first lot not exceeding 80,000 litres shall have been removed from the jetty to the transit storage site before handling of the second lot commences and in respect of Export cargo the first lot not exceeding 80,000 litres brought on the jetty shall have been shipped before another lot is brought on the jetty.

(d) Handling of packed inflammable liquids—Group B may be allowed during the night time subject to a special permission granted at his discretion by the Safety Officer and subject to such additional restrictions that the Safety Officers may find fit to impose.

(e) Packed inflammable liquids-- Group B shall normally be transit-stored in the hazardous cargo shed.

If sufficient vacant storage space is not available in the hazardous cargo shed the Safety Officer may however, permit transit-storage of packed inflammable liquids—Class B in open plots separated by not less than 20 metres from any buildings, plant or installation. Consignment to store in the open plots shall be covered fully with clean tarpaulins and such tarpaulins shall be weighted all round to prevent them from getting displaced due to breeze, etc. The maximum quantity that can be stored in open plots shall be 10 tones.

68. The receptacles of inflammable liquids—Class A and B brought into the Port shall be in a sound and undamaged condition when they arrive at the Port.

In case any receptacles becomes damaged or leakage during handling as this Port, such receptacle shall not be moved further except after it is repaired or the leak is arrested in a manner satisfactory to the Assistant Safety Officer or Safety Inspector under no conditions shall leaky and open containers of inflammable liquid—Class B and A be handled/transit stored in the Port limits.

(Note-- Vapour escaping from an open/leaky container of inflammable liquids is liable to form an explosive mixture with air, even a spark may ignite this mixture with explosive violence. Being heavier than air. The vapour may flow to considerable distances before being diffused in the air).

69. Relaxation:-- The Safety Officer, may at his discretion relax all or any of the handling restrictions applicable to packed inflammable liquids—Class B, if the total quantity of such liquids landed from/loaded into any ship is less than 10,000 litres.

Transit-storage restrictions shall however remain unchanged even with regard to such small consignment.

70. Inflammable liquids—Group C-- The restrictions applicable to packed inflammable liquids Class A and B shall not however, be taken into or stored inside any transit shed or ware-house.

71. Penalties – Whoever contravenes any of the regulations under Part V shall be punishable with fine which may extend to five thousand rupees and for every subsequent offence with fine which may extend to twenty thousand rupees

PART VI

REGULATION OF THE TRAFFIC INFLAMMABLE SOLIDS (IMO CLASS 41) INFLAMMABLE SOLIDS OR SUBSTANCES LIABLE TO SPONTANEOUS COMBUSTION (IMO CLASS 4-2) AND INFLAMMABLE SOLIDS OR SUBSTANCE WHICH IN CONTACT WITH WATER EMIT INFLAMMABLE GASES (IMO CLASS 4-3)

A. Inflammable Solids (IMO CLASS 4-1)

72. Receptacles/Containers-- Inflammable solids shall be brought within the Port limits only in receptacles/containers which are in a sound and undamaged condition.

If packed in effectively closed drums/receptacles such drums shall continue to remain in an effectively closed condition. If packed in bags/cases the conditions of the bags/cases shall be such that no spillage will occur during handling on transit-storage in the Port area.

73. Handling: Inflammable solids shall be handled with utmost care avoiding bumping against or dropping on hard surface or otherwise sought handling.

74. Landing/Loading-- Inflammable solids may be landed/shipped at any jetty or mooring without any quantitative limit and without any restrictions regarding the working hours.

75. Transit-storage:-- Inflammable solid shall be transit-stored at such places, as may be specifically indicated in the safety cards issued to cover individual consignment of such goods some of the highly hazardous substances coming under this Class shall be transit-stored inside the hazardous cargo shed.

76. Separation during handling and storage—Inflammable Solids shall be well separated from other classes of dangerous goods and combustible substances during handling and shall be transit-stored well segregated from other classes of dangerous goods and combustible, Substances. Particular care shall be taken to ensure that at no time are these substances transit-stored any where in the vicinity of oxidising substance and organic peroxide.

77. Spillage:-- (i) Every care shall be taken to avoid spillage of inflammable solids during handling and transit-storage.

(ii) In the event of any spillage, such spilling shall be swept separately and shall be disposed of in a safe manner under the personal supervision of a Safety Inspector.

(iii) Under no circumstances shall railway rolling stock or other vehicles be permitted to move over spilling or inflammable solids; other cargo shall not be rolled; pushed over spilling or inflammable solids.

B. Inflammable solid or substances liable to spontaneous combustion (IMO Class 4-2).

78. Inflammable solids or substances liable to spontaneous combustion shall be fully subject to the restriction stipulated in Regulations 72 to 77 applicable to inflammable solids and also to the following additional restrictions:--

(a) If packed in hermetically sealed containers such containers shall remain in a hermetically sealed condition throughout the period during which they remain inside the Port.

Note:-- Some of the substance coming under this clause are liable to ignite spontaneously by mere exposure to air.

(b) Inflammable 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 safety cards covering individual consignment of such goods. Proper alleyways shall be left between such small stacks and between the stacks and the walls all round.

Such stacks shall be inspected regularly and periodically by the Assistant Safety Officer/Safety Inspector for signs of over-heating. In case any stack is found to be warmer than normal such stacks shall be broken up cooled by aeration and restocked in safe manner.

C. Inflammable solids or substances which in contact with water emits inflammable gases.

79. Regulations 72 to 77 applicable to inflammable solids shall apply with equal emphasis to inflammable solids are substances which in contact with water emit inflammable gases shall be fully subject to the restrictions stipulated in Regulations 72 to 77 and also to the following:-

(a) Inflammable solids or substances which in contact with water emit inflammable 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.

(b) As some of the substances coming under this class are liable to react dangerously even with damp air, no containers which are damaged/open shall be permitted to be stored anywhere in the Port area.

In case any containers of such substances gets damaged or opened during handling/transit-storage, the Safety Officer may take such action as he considers necessary for ensuring safety. He may even order destruction of the contents of such container in a safe manner.

80. Penalties-- (a) Whoever contravenes any of these regulations 72 to 78 shall be punishable with fined upto one thousand rupees and in case of continuing contravention extending to a further fine up to five hundred rupees for every day after the first during which such contravention continue.

(b) Whoever contravenes Regulation 79 shall be punishable with fined which may extend to Rs.5,000 and for every subsequent offence a fine which may extend to Rs.20,000.

P A R T V I I

REGULATIONS OF THE TRAFFIC OF OXIDISING SUBSTANCES (IMO CLASS 5-1)

AND ORGANIC PEROXIDES (IMO CLASS 5-2)

A. Oxidising Substances (IMO Class 5-1)

81. Containers:-- Oxidising substances shall be brought into the Port only in sound and undamaged container/cases.

82. Spillage:-- In case containers/cases of Oxidising substances are found to be in an open/damaged condition after their arrival at the Port such containers/cases shall be handled / transit-stored only subject to such effective measures being taken for preventing spillage as may be directed by the Assistant Safety Officer/Safety Inspector.

If spillage, however, occurs under unavoidable circumstances such spilling shall be swept, separately and shall be disposed of in a safe manner under the personal supervision of the duly Safety Inspector.

Note:-- Spillings of Oxidising substances when mixed with the spilling dust of other combustible substances are liable to be ignited with explosive violence; even more friction caused by vehicles and railway rolling stocks moving over or cargo being dragged or rolled may be sufficient to cause ignition of such mixture.

83. Separation:-- During handling and transit storage. Oxidising substances shall be well separated from other dangerous good as well as combustible substances during landing/loading and shall be transit-stored well segregated from any other cargo. Very special care shall be taken to ensure that oxidising substances do not come in contact with acids.

(NOTE:-- Oxidising substances are liable to make materials burn more easily; they will give up oxygen when involved in a fire, which will intensity the fire to explosive proportions. They will react violently with acids; highly toxic gases are evolved during such reactions).

84. Landing-Loading:-- Oxidising substances can be landed/loaded at any jetty or moorings without any quantitative limit or restrictions regarding working hours.

85. Transit- Storage's:-- Oxidising substances shall be transit-stored at such places as will be specifically indicated in the safety cards issued to cover individual consignments of such goods.

Ground space used for storage of oxidising substances shall be cleaned thoroughly before such goods are stacked and immediately after such goods are cleared from the storage site(s).

86. Special restrictions on Ammonium Nitrates:-- Ammonium Nitrate other than Fertiliser grades shall not be brought to the Port unless certified by the competent Government authority to be free from organic impurities above a permitted level and such certificate shall be provided to the Assistant Safety Officer by any party intending to bring Ammonium Nitrates.

Any ship carrying Ammonium Nitrate not satisfying this condition shall not be permitted to enter the enclosed harbour; such uncertified Ammonium Nitrate shall not also be brought to the Port for export.

B. Organic Peroxide (IMO Class 5-2)

87. Receptacles of Organic Peroxides:-- Receptacles/packages of Organic Peroxides brought to the Port shall remain in a perfectly safe and sound condition. Such receptacles/packages shall be examined carefully by a Safety Inspector along with a responsible Officer of the ship (bringing such goods) for signs of damages/leakage and their handling at the Port shall be permitted only if the Safety Inspector is satisfied that they remain in a safe undamaged condition.

If any receptacles have been provided with pressure release valves or venting arrangements, such valves or venting arrangements shall be in a perfectly normal condition. If the pressure release valve/venting arrangement on any receptacle is found choked/damaged if any signs of earlier leakage are noticed in the receptacle of any liquid Organic Peroxide such receptacle shall be deemed to be in an unsafe condition and it shall be jettisoned forthwith.

Before being jettisoned the receptacle shall be drenched in copious quantities of water applied from the open end of a hose line and the drenching operation shall continue while the receptacle is being lifted and dropped into the sea.

Under no conditions shall repacking of Organic Peroxides be permitted within the Port.

88 Handling of Organic Peroxides – Receptacles of Liquid Organic Peroxide shall be lowered/lifted/transport/transit-stored in a dead up right position. Even slight tilting of such receptacles shall not be tolerated, specially so in respect of receptacles provided with pressure release valves or venting arrangements.

NOTE. - Handling of receptacles in a tilted position may cause spillage of their contents. These liquids, if split are liable to react violently with the metal of the receptacles or any other substances with which they may come into contact, which may lead to shattering explosions.

Other Organic Peroxides (not in the liquid stage) also shall be handled with utmost care avoiding any rough handling whatsoever, suitable landing cushions shall be used wherever necessary.

NOTE – All Organic Peroxides are liable to cause disastrous accidents if subjected to friction.

89. Transit-Storage. - Organic Peroxides shall be transit-stored only inside a separate compartment of the hazardous cargo shed, no other substances shall be stored in the compartment along with organic peroxide.

Receptacles of Liquid Organic Peroxides shall be stacked only in single tier. If pressure release valves/venting arrangements are provide on any receptacles, special care shall be taken to ensure that such valves of venting arrangements are not blocked during transit-storage of such receptacles.

90. Landing of Organic Peroxides – Organic Peroxides shall be landed directly on all berths and shall not be handled at the Moorings.

(i) Receptacles/cases of such peroxide shall be landed directly into trailers, subject to observance of Regulations 85 and 86. Trailors for the purpose shall have been kept ready before landing operation commences. Trailors so loaded shall be removed immediately to the hazardous cargo shed for transit-storage of Organic Peroxide.

(ii) Before landing of Organic Peroxide commences, all inflammable dangerous goods shall have been removed from the jetty.

(iii) A fire engine shall be kept standing by on the jetty whenever landing of Organic Peroxide is carried out.

(iv) Steam locos shall not be allowed within 100 metres of place where liquid Organic Peroxides are handled.

(v) While Organic Peroxides are being landed no other cargo shall be landed from or loaded into the same ship.

91. Separation of Organic Peroxides. - Organic Peroxides shall be handled only after being clearly isolated from any other cargo and shall be transit stored as stipulated in regulation 88 Under no conditions shall they be permitted to come in contact with acids, metallic oxides and other dangerous goods.

92. Protection from heat. - At all stages of handling and transit-storage Organic Peroxide shall be well protected from the sun and any other sources of direct heat.

NOTE. - Some Organic Peroxides are liable to decompose on prolonged exposure to sun or other source of direct heat; the consequences of such decomposition will be violent.

93. Working hours:- Organic peroxide shall be handled only during day light, landing operations shall be so planned that landing, shifting to hazardous cargo, shed and storage therein are completed during the course of a single day.

94. Penalties. - Whoever contravenes any of the regulations under Part VII shall be a fine which may extend to Rs. 5,000 and for every subsequent offence a fine which may extend to Rs. 20,000.

PART VIII

REGULATIONS OF THE TRAFFIC OF POISONOUS (TOXIC) SUBSTANCES (IMO CLASS 6-1 AND INFECTIOUS SUBSTANCES (IMO CLASS 6.2)

A. Poisonous (Toxic) Substances (IMO Class 6-1)

95. Receptacles. - Receptacles of poisonous substances brought into the Port shall remain in a hermetically sealed or effectively closed conditions so as to prevent escape therefrom vapour /liquids, dust.

96. Inspection before landing/loading -

- (i) Before landing/loading of poisonous substances or immediately after such substances are brought to the Port for export, the duty of the Safety inspector shall be to inspect the receptacles thereof to ensure that they are in sound and safety conditions.
- (ii) Receptacles found to be in an unsound/damaged open conditions during such inspection shall be allowed to be landed/shipped. Other goods reasonably substances spilt from unsound/damaged/open receptacles shall not also be allowed to be landed/shipped.
- (iii) Ship may over carry damaged/open receptacles of poisonous substances and other goods which are suspected to have been contaminated with poisonous substances spilt from such receptacles taking such precautions as may be suggested by the Assistant Safety Officer to prevent hazards from such damaged/open receptacles, and other contaminated goods during the ship's stay within the port limit.
- (iv) Open/damaged receptacles of poisonous substances brought for export shall be removed forthwith from the port limit taking due precaution to avoid hazards there from.

97. Landing/Shipping. - The following precautionary measures shall be observed and/or caused to be observed strictly during landing/shipping poisonous substances -

- (i) Such substances shall be handled well separated from other cargo.
- (ii) During landing or loading of poisonous substances no other cargo shall be landed from or loaded into the same hatch/hold.
- (iii) Receptacles of poisonous substances shall be handled in the upright position, i.e. With bungs/lids or tops of cases facing upwards so as to eliminate the possibility of spillage.

98. (i) Receptacles damaged during handling. - In case any receptacle/case of any poisonous substance becomes leaky or damaged during handling at the post such receptacle/case shall be handled only subject to such effective precautions (for preventing hazards) as may be stipulated by the duty Safety Inspector.

- (ii) Such receptacles/cases shall be handled only by men wearing protective clothing and respirators of an approved type.
- (iii) Men handling damaged open receptacles/cases or poisonous substances shall wear rubber / polythene gloves, rubber boots, rubber aprons/oil suits and respirators of an approved type.
- (iv) The Safety Officer shall be responsible for maintaining sufficient quantities of such protective equipment ready at all times in the fire control in the post.

99. Transit Storage. -

- (i) Receptacles/cases of poisonous substances shall not be stored inside transit sheds and warehouses. They may be stored in the hazardous cargo shed.

- (ii) If at any time the storage space inside the hazardous cargo shed is found insufficient poisonous substances may be stored in the open space sufficient far-away from places where goods are stacked and men may work. Stacks of poisonous substances stored in the open space shall be properly covered with clean tarpaulins; the edges of these tarpaulins shall be weighed open properly by suitable means to prevent displacement due to wind, etc. Portable boards bearing the 'SKULL AND CROSS BONES SYMBOLS' and the words POISON printed boldly in English and its Tamil equivalent shall be exhibited prominently all around such stacks.

100. Disposal of contents of damaged/open receptacles – In case any receptacles/case of any poisonous substances becomes damaged during handling of transit-storage at the Port the disposal of its contents and all other goods suspected to have been contaminated with the poison spilt from such receptacle case shall be carried out as directed by the safety officer who shall give such directions after consultation with the Traffic Manager. The concurrence of the Port Health Officer and Customs Authorities shall be obtained before deciding the mode of disposal.

101. Action to be taken in the event of any accident involving poisonous substances – In the event of any receptacle case of any poisonous substances getting accidentally damaged/leaky during landing/loading/transporting/transit-storage, the Safety Inspector (If available at the site) or the Traffic Section official shall -

(i) Notify the Safety Officer; and Assistant Safety Officer.

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

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

and a responsible employee of the Traffic Section shall accompany these men convey and furnish to the Duty Doctor all information regarding the name and known properties of the poison involved in the accident,

and take all necessary and suitable action for decontaminating the area of spillage and shall isolate goods contaminated by the spilt poison for disposal as stipulated in regulation 98.

B. Infectious Substances (IMO Class 6-2)

102. The Port shall not handle infectious substances (i.e., disease producing germs, etc.)

103. Penalties – Whoever contravenes only if the Regulations under Part – VIII the penalty for any one infringement of regulation shall be liable to fine which may extend to one thousand rupees and in case of a continuing contravention to a further fine of five hundred rupees for every day after the first during which such contravention continues. (This regulations will apply to Regulations 95 to 101).

PART IX

REGULATION OF THE TRAFFIC OF RADIO-ACTIVE SUBSTANCES (IMO CLASS 7)

104. Radioactive substances passing through this Port have been limited to the types used for therapeutic purposes. Their traffic shall be permitted only against special permits issued by the Directorate of Radiation Protection, Government of India, and their (general precautions to be taken in their handling also are indicated by the said authority) handling shall be subject to the conditions specified in such permits and to the further condition that consignees of Radioactive substances received at the Port shall depute a technically qualified person to take charge of each consignment of such substances who shall work in collaboration with the safety Official not below the rank of Safety Inspector in ensuring safety during the handling/transit-storage of such substances.

105. Penalties – Whoever contravenes any of the regulations under Part IX shall be punishable with fine which may extend to one thousand rupees and in the case of continuing contravenes, a further fine of Rs. 500 (rupees five hundred) for every day after the first during which such contravention continues.

PART X

REGULATION OF THE TRAFFIC OF CORROSIVES (IMO CLASS 8)

106. Receptacles / Carboss – Receptacles, Carboys of corrosive brought to the Port shall remain in a perfectly sound and undamaged condition.

107. Inspection before handling – Before Corrosive are landed from any ship the receptacles carboys thereof shall be inspected by the Duty Safety Inspector. If any respective carboy is found damaged or leaky it shall not be landed; the ship may over carry such receptacle/carboy or may destroy its contents subject to taking such precautionary measures as may be indicated by the Duty Safety Inspector.

Corrosives brought to the Port for export shall be inspected by the Safety Inspector, immediately after their arrival into the Port. If any receptacle/carboy is found damaged/leaky during such inspection, the same shall be removed forth with from the Port subject to sufficient precautions being taken for preventing any accident or the contents thereof may be destroyed subject to sufficient precautionary measures being taken as may be stipulated by the Duty Safety Inspector.

108. Landing/Shipping – The following precautionary measures shall be observed and/or caused to be observed strictly during landing shipping or Corrosives:-

- (i) Such substances shall be handled well separated from other cargo Acids and alkalies shall never be mixed while landing or shipping
- (ii) Receptacles/carboys of corrosives shall be landed/loaded/transported in the upright position, i.e., with the bungs/steamers of receptacles or tops of cases facing upwards so as to eliminate the possibility of spillage.

109. Damaged/leaky receptacles/carboys – In case any receptacles/carboy of any corrosive substances becomes leaky or damaged during handling at the Port such receptacles/carboy shall be handled only subject to such effective precautions being taken for preventing accidents as may be stipulated by the Duty Safety Inspector.

Such receptacles/carboys shall be handled only by men wearing protective clothing of the type stipulated in Regulation 96.

110. Transit-storage. - Receptacles/Carboy of corrosive shall not be stored inside the transit sheds and warehouses. They may be stored in the hazardous cargo shed.

If at any time the storage space inside the hazardous cargo shed is found insufficient, corrosives may, under exceptional circumstances be stored on covered platforms and transit shed verandas subject to special precautions being taken to ensure that they are well separated from any other cargo.

NOTE. - Corrosives can char most organic matters and may cause ignition of such matter. They will attack metals when inflammable and/or poisonous gases are involved. They react dangerously with inflammable gases/liquids/solids, oxidising substances, organic peroxide and radioactive substances. Flames of some of the Corrosives are very dangerous.

111. Disposal of contents of receptacles/carboys damaged during handling/transit storage. - In case any receptacle/carboy of any corrosive substance becomes damaged during handling or transit/storage at the Port, the contents thereof shall be destroyed and rendered harmless as decided by the Assistant Safety Officer/Duty Safety Inspector and the Port Fire Service shall carryout such work.

112. Action to be taken in the event of an accident involving corrosives. - In the event of any accident involving corrosives the Safety Inspector (if available at the site) or the Traffic Section Official in-charge shall take or arrange to take action as indicated below:-

(i) Notify the Assistant Safety Officer.

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

(iii) Arrange to send to the Port Trust Hospital all men who are suspected to have been contaminated with corrosives, after giving a through washing of the affected parts of the body with copious quantity of water and a responsible employee or the section must accompany, these men to furnish to the Duty Doctor all information regarding the name of corrosive involved in the accident.

And take suitable action for decontaminating the area of spillage, as well as all articles contaminated by the spilt corrosive.

113. Penalties. - Any one who contravenes any of these regulations under Part X shall be punishable with fine which may extend to one thousand rupees and in the case of continuing contravention, a further fine of Rs. 500 (rupees five hundred) for every day after the first during which such Infringement continues.

PART XI

REGULATION OF THE TRAFFIC OR MISCELLANEOUS DANAGEROUS SUBSTANCES (IMO CLASS 9)

114. This class contains substances which are mildly inflammable toxic/corrosive or which present some special risks not covered by any of the other classes. As the characteristic properties of substances, included in this class differ from one substance to another framing general regulations to cover this class of goods is impracticable. The following procedure is laid down for overcoming this difficulty.

While giving safety clearance to each of the substances included in this class, the Assistant Safety Officer will carefully consider the characteristic properties and known hazards of such substances and shall stipulate reasonable restrictions and precautionary measures as necessary for ensuring safety during its handling and transit-storage.

115. Penalties. - Any one infringing any of these regulations shall be punishable with a fine which may extend to one thousand rupees and in the case of continuing infringement, a further fine of Rs. 500 (rupees five hundred) per diem for every day... after the first during which such infringement continues.

Class 10 substances covered by the list published by the Board of Trade, London.

116. Dangerous chemicals in limited quantities. - "Carriage of Dangerous goods in ships" by the Board of Trade, London, include an additional published class of dangerous goods which are not covered by only of the regulations under Parts III to XI and which substances shall be allotted to Classes 1 to 9 (IMO Code) depending on their characteristic properties and shall be subject to the appropriate special regulations under Part III and XI, safety clearance for these substances, may, therefore, be given by classifying such substances appropriately under one or the other of the IMCO Classes.

SCHEDULE 1-1**(a) Proforma – Permit for D.G. Class I (R)****TUTICORIN PORT TRUST****(Obverse)****Permit for D.G. Class 2 (R)**

S. No.. ..

Date

Permit Messers

to land/ship the undermentioned 'Restricted Explosives' from/by s.s./m.v. due to arrive on or about

Description Quantity

(1) (2)

Note. - This permit is issued subject to the following conditions:-

- (1) The traffic of these explosives in the Port area shall be subject to strict observance of the regulations under Parts II and III of the Tuticorin Port Safety Regulations, 1985.
- (2) Precautionary measures as indicated overleaf shall be observed and/or caused to be observed by all parties concerned.

Safety Officer, Tuticorin Port Trust.

(a) Proforma – Permit for D.G. Class I (R).

(Reverse)

Precautionary measures to be observed during the handling of Restricted Explosives.

1. Damaged/unsound cases shall not be handled except after they are repaired or the contents thereof are repacked in a manner as per schedule 2 of the explosives Rules, 1940 and to the satisfaction of the Safety Officer.
2. Handling shall be carried out only between 06.00 and 16.00 hours (day time).
3. Different classes of Explosives shall not be mixed handling/loading each class shall be handled and loaded separately.
4. Explosives shall be protected from the sun and from getting wet.
5. Handle with utmost care, avoiding dropping and bumping against hard surfaces. Use landing cushions wherever necessary.

(b) Proforma – Safety Card for D.G. Class I (R)

TUTICORIN PORT TRUST

Safety Card – Class – 1 (R) - Restricted Explosives (Reference – D.G.

Permit No. , dated (Traffic Department Official concerned).

Please note that the undermentioned consignment of Restricted Explosives is to be landed/shipped from by s.s./m.v. due to arrive on or about.

Description	Quantity
(1)	(2)

Transit – Storage _____

Safety Officer, Tuticorin Port Trust.

(A Group) III – 2 – 5

(b) Proforma – Safety Card for D.G. Class (R). (Reverse)

Precautionary measures to be observed during the handling of Restricted Explosives.

1. Damaged/unsound cases shall not be handled except after they are repaired or the contents thereof are repacked in a manner as per schedule 2 of the Explosive Rules, 1940 and to the satisfaction of the Safety Officer.
2. Handling shall be carried out only between 06.00 and 16.00 hours (day time).

- 3. Different classes of Explosives shall not be mixed during handling/loading each class shall be handled and loaded separately.
- 4. Explosive shall be protected from the sun and from getting wet.
- 5. Handle with utmost care, avoiding dropping and bumping against hard surfaces. Use landing cushions wherever necessary.

SCHEDULE 1 – 2.

(a) Proforma – Permit D.G. Class 1 (S)

TUTICORIN PORT TRUST

S. No. Permit for D.G. Class 1 (S) Date

Permit Messers

to land/ship the undermentioned 'Safety Explosives' from/by s.s./m.v. Due to arrive on or about

Description	Quantity
(1)	(2)

Note. - This permit is issued subject to the following conditions -

- (1) The traffic of these explosives in the Port area shall be subject to strict observance of the Regulations under Parts II and III of the Tuticorin Port Safety Regulations, 1985.
- (2) Precautionary measures as indicated overleaf shall be observed and/or caused to be observed by all parties concerned.

Safety Officer, Tuticorin Port Trust.

(a) Proforma – Permit for D.G. Class I (S). (Reverse)

Precautionary measures to be observed in the handling/transit/storage of Safety Explosives.

1. Keep off unauthorised persons from places where these explosives are handled/stored; a continuous security guard shall be mounted for ensuring this condition.
2. Transit-store only inside the 'Lockfast' in Transit sheds.
3. Damaged/open cases shall not be handled/transit-stores except after repairing them in an approved manner.
4. Handle the cases with utmost care, avoiding bumping against or dropping over hard surfaces. Use landing cushions wherever necessary.

(b) Proforma – Safety Card for D.G. Class 1 (S)

(Obverse)

TUTICORIN PORT TRUST

Safety Cord – Class I (S) – Safety Explosives (Reference. - D.G. Permit No.
dated Traffic Department Officials concerned.

Please note that the undermentioned consignment of Safety Explosive is to be
landed/shipped from/ by s.s./m.v. due to arrive on or about

Description Quantity

(1) (2)

Transit – Storage -----

Safety Officer, Tuticorin Port Trust.

(b) Proforma – Safety Card for D.G. Class 1 (S)

Precautionary measures to be observed in the handling/transit-storage of Safety Explosives.

- (1) Keep off unauthorised persons from places where these explosives are handled/stored; a continuous security guard shall be mounted for ensuring this condition:
2. Transit-store only inside the 'Lockfast' in Transit sheds.
3. Damaged/open cases shall not be handled/transit-stored except after repairing them in an approved manner.
4. Handle the cases with utmost care, avoiding bumping against or dropping over hard surfaces. Use landing cushions wherever necessary.

SCHEDULE 1- 3

(a) Proforma – Permit for D.G. Class 2. Dated:

TUTICORIN PORT TRUST

Permit for D.G. Class 2. Dated:

Permit Messers.

To land/ship the undermentioned case(s) from/by s.s/m.v. Due to arrive on or about.

Description Quantity

(1) (2)

.

Note. - This permit is issued subject to the following conditions.-

- (1) The traffic of Gas Cylinders in the Port area shall be subject to strict observance of the regulations under Parts II and IV of the Tuticorin Port Safety Regulations, 1985.
- (2) Precautionary measures as indicated overleaf shall be observed and/or caused to be observed by all parties concerned.

Safety Officer, Tuticorin Port Trust.

(a) Proforma – Permit for D.G. Class 2.

(Reverse)

Precautionary measures to be observed in the handling/transit-storage of Gases.

1. Valves of Cylinders/containers shall be protected by valve caps or other protective devices; do not land or accept for shipment cylinders/containers that do not satisfy this condition.
2. At all cost prevent contamination of cylinders/containers of gas with only fatty substances.
3. Separate cylinder/containers of different types of bases during handling/transit-storage.

- 4. Transit-storage well separated from other dangerous goods and combustible cargo.
 - 5. Protect cylinders/containers from the sun and other sources of direct heat.
 - 6. Do not overstuff cylinders/containers with any other cargo.
 - 7. In the event of leakage of gas, inform the Assistant Safety Officer.
 - 8. Handle cylinders containers with utmost care, avoiding bumping against or dropping over hard surfaces. Use landing cushions wherever necessary.
- (b) Proforma – Safety Card for D.G. Class 2.

TUTICORIN PORT TRUST

Safety Card—Class 2 Gas (es)

Reference --

D.G. Permit No. Dated :

Traffic Department Official concerned.

Please note that the undermentioned consignment of Gas (es) is to be landed, shipped from/by s.s/m.v. due to arrive on or about.

Description Quantity

(1) (2)

Transit—Storage -----

Safety Officer, Tuticorin Port Trust

(b) Proforma-Safety Card for D.G. Class 1(S).

Precautionary measures to be observed in the handling/transit-storage of Safety Explosives.

1. Keep off unauthorised persons from places where these explosives are handled/stored; a continuous security Guard shall be mounted for ensuring this condition.
2. Transit-store only inside the 'Lockfast' in transit sheds.
3. Damaged/open cases shall not be handled/transit-stored except after repairing them in an approved manner.
4. Handle the cases with utmost care, avoiding bumping against or dropping over hard surfaces. Use landing cushions wherever necessary.

SCHEDULE 1 – 3.

(a) Proforma – Permit for D.G. Class 2.

TUTICORIN PORT TRUST

Permit for D.G. Class 2. Dated:

Permit Messrs.

To land/ship the undermentioned case(s) from by s.s./m.v. due to arrive on or about.

Description Quantity

(1) (2)

Note – This permit is issued subject to the following conditions -

(1) The traffic of Gas Cylinders in the Port area shall be subject to strict observance of the regulations under Parts II and IV of the Tuticorin Port Safety Regulations, 1985.

(2) Precautionary measures as indicated overleaf shall be observed and/or caused to be observed by all parties concerned.

Safety Officer, Tuticorin Port Trust.

(a) Proforma – Permit for D.G. Class 2. (reverse) Precautionary measures to be observed in the handling/transit-storage of Gases.

1.Valves of Cylinders/containers shall be protected by valve caps or other protective devices; do not land or accept for shipment cylinders/containers that do not satisfy this condition.

2.At all cost prevent contamination of cylinders/containers of gas with only oily fatty substances.

3.Separate cylinders/containers of different types of bases during handling/transit-storage.

4.Transit-store well separated from other dangerous goods and combustible cargo.

5.Protect cylinder/containers from the sun and other sources of direct heat.

6.Do not overstuff cylinder, containers with any other cargo.

7.In the event of leakage of gas, inform the Assistant Safety Officer.

8.Handle cylinders/containers with utmost care, avoiding bumping against or dropping over hard surfaces. Use landing cushions wherever necessary.

(b) Proforma-safety Card for D.G. Class 2.

TUTICORIN PORT TRUST

Safety-Card – Class 2 (Gas (es))

Reference. -

D.G. Permit No. Dated:

Traffic Department Official concerned.

Please note that the undermentioned consignment of Gas (es) is to be landed/shipped from by s.s./m.v. due to arrive on or about.

Description	Quantity
-------------	----------

(1)	(2)
-----	-----

Transit-Storage _____

Safety Officer, Tuticorin Port Trust.

(Proforma – Safety Card for D.G. Class 2. (Reverse) Precautionary measures to be observed in the handling/transit-storage of Gases.

1. Valves of cylinders/containers shall be protected by valve caps or other protective devices; do not land or accept for shipment cylinders/containers that do not satisfy this condition.
2. At all costs prevent contamination of cylinders containers of gas with oily fatty substances.
3. Separate cylinders/containers of different types of bases during handling transit storage.

- 4. Transit-store well separated from other dangerous goods and combustible cargo.
- 5. Protect cylinders/containers from the sun and other sources of direct heat.
- 6. Do not overstuff cylinders/containers with any other cargo.
- 7. In the event of leakage of gas, inform the Assistant Safety Officer.
- 8. Handle cylinders/containers with utmost care, avoiding bumping against or dropping over hard surface. Use landing cushions wherever necessary.

SCHEDULE 1-4

(a) Proforma –Permit for D.G. Class 3 (Obverse.)

TUTICORIN PORT TRUST

S.No. Permit for D.G. Class 3. Date :

Permit Messrs. To land/ship the undermentioned Packed Inflammable Liquids (sz)--Group A/B from; by s.s./m.v.due to arrive on or about.

Description	Quantity
(1)	(2)

Notes.-- This permit is issued, subject to the following conditions:--

1. The traffic of these explosives in the Port area shall be subject to strict observance of the regulations under Parts II and VI of the Tuticorin Port Safety Regulations, 1985.
2. Precautionary measures as indicated overleaf shall be observed and/or caused to be observed by all parties concerned.

Safety Officer, Tuticorin Port Trust

(a) Proforma—Permit for D.G. Class 3. (Reverse)

Precautionary measures to be observed to the handling transit-storage of Packed Inflammation Liquids.

1. Do not land accept for shipment leaky/open receptacles.
2. If receptacles become leak during handling/transit storage such leaks shall be arrested forthwith by some efficient means.

Never allow leaky or open receptacles of inflammable liquids to remain within the Port limits without taking adequate precautionary measures.

3. Handle receptacles with utmost care avoiding drooping on or bumping against hard surfaces. Use landing cushions wherever necessary.

SCHEDULE 1-5

(a) Proforma—Permit for D.G. Class 4.1

TUTICORIN PORT TRUST

S.No. Permit for D.G. Class 4.1 Date :

Permit Messrs. To land/ship the undermentioned inflammable solid(s) from/by s.s./m.v. due to arrive on or about.

Description Quantity

(1) (2)

Notes—This permit is issued, subject to the following conditions :--

1. The traffic of these explosives in the Port shall be subject to the strict observance of the regulations under Parts II and VI of the Tuticorin Port Safety Regulations, 1985.

2. Precautionary measures as indicated overleaf shall be observed and/or caused to be observed by all parties concerned.

Safety Officer, Tuticorin Port Trust.

(a) Proforma—Permit for D.G. Class 4.1 (Reverse)

Precautionary measures to be observed in the handling/transit storage of inflammable solid (s)

1. Do not land or accept for shipment inflammable solids in open-damaged receptacles.
2. Receptacles that become damaged during handling shall not be moved further except after taking effective measures for preventing spillage.
3. Spilling, if any, shall be swept separately and disposed of in a safe manner.
4. Handle and transit store well separated/segregated from other dangerous goods and combustible cargo, especially so from oxidising substances and organic peroxides.
5. Handle with utmost care, avoiding developing on or becoming against hard surfaces. Use landing cushions wherever necessary.

(b) Proforma—Safety for D.G. Class 4.1

TUTICORIN PORT TRUST

Safety Card—Class 4.1 Inflammable solid(s) Reference : D.G. Permit

No. Dated : Traffic Department official concerned.

Please note that the undermentioned consignment of inflammable solid(s) is to be landed shipped from/by s.s./m.v. due to arrive on or about.

Description	Quantity
(1)	(2)

Transit-Storage

Safety Officer, Tuticorin Port Trust

(b) Proforma—Safety Card for D.G. Class 4.1(Reverse)

Precautionary measures to be observed during the handling/transit-storage of inflammable solid(s)

1. Do not land or accept for shipment/inflammable solids in open damaged receptacles.

2. Receptacles that become damaged during handling shall not be moved further except after taking effective measures for preventing spillage.

3. Spilling, if any, shall be swept separately and disposed of in a safe manner.

4. Handle and transit-store well separated/segregated from other dangerous goods and combustible cargo, especially so from oxidising substances and organic peroxides.

5. Handle with utmost care, avoiding dropping on and bumping against hard surfaces. Use landing cushions wherever necessary.

SCHEDULE 1 – 6

(a) Proforma – Permit for D.G Class 4.2

(Obverse)

TUTICORIN PORT TRUST

S. No. Permit for D.G. Class 4.2 Dated:

permit Messrs. to land/ship the undermentioned Inflammable Solid(s) of substance(s) liable to spontaneous combustion from/by s.s. m.v.due to arrive on or about

Description Quantity

(1) (2)

NOTE.- This permit is issued subject to the following conditions:-

1. The traffic of these explosives in the Port area shall be subject to strict observance of the regulations under Parts II and VI of the Tuticorin Port Safety Regulations, 1985.
2. Precautionary measures as indicated overleaf shall be observed and/or caused to be observed by all parties concerned.

Safety Officer, Tuticorin Port Trust.

A. Group III-2 – 6

(a) Proforma – Permit for D.G. Class 4.2 (Reverse)

Precautionary measures to be observed in the handling/transit-storage of Inflammable Solid (s) or substance(s) liable to spontaneous combustion.

1. The receptacles shall remain in a hermetically sealed condition throughout.
2. If receptacles get damaged/open during handling they shall not be moved further except after taking effective measures for preventing spillage and spontaneous heating.
3. Spilling, if any, shall be swept separately and disposed of in a safe manner.
4. Handle and transit-store well separated/segregated from other dangerous goods and combustible cargo especially so from oxidising substances and organic peroxides.
5. Handle with utmost care, avoiding dropping and bumping against hard surfaces. Use landing cushions wherever necessary.

(b) Proforma – Safety Card for D.G. Class 1.2.

Description	Quantity
(1)	(2)

TUTICORIN PORT TRUST

Safety Card – Class 4.2 Inflammable Solid(s) or substances(s) liable to spontaneous combustion.

Reference – D.G. Permit No. Dated:

Traffic Department Official concerned.

Please note that the undermentioned consignment of Inflammable Solid(s) or substance(s) liable to spontaneous combustion is to be landed/shipped

to from/by ss/mv. to arrive on or about.

Description Quantity

(1) (2)

Transit – Storage

Safety Officer,

Tuticorin Port Trust.

(b) Proforma – Safety Card for D.G. Class 4.2

(Reverse)

Precautionary measures to be observed in the handling/transit-storage of inflammable Solid(s) or substance (s) liable to spontaneous combustion

1. The receptacles shall remain in a hermetically sealed condition throughout.
2. If receptacles get damaged/open during handling they shall not be moved further except after taking effective measure for preventing spillage and spontaneous heating.
3. Spilling, if any, swept separately and disposed of in a safe manner.
4. Handle and transit-store well separated/segregated from other dangerous goods and combustible cargo especially so from oxidising substances and organic peroxides.
5. Handle with utmost care, avoiding dropping and bumping against hard surfaces. Use landing cushions wherever necessary.

SCHEDULE 1 – 7.

(a) Proforma – Permit for D.G. Class 4.3.

TUTICORIN PORT TRUST

S. No. Permit for D.G. Class 4.3 Date:

Permit Messrs to land/ship the undermentioned inflammable Solid(s) or substance(s) which is contact with water emit(s) inflammable gas(es) from by s.s/m.v.

to arrive on or about.

Description Quantity

(1) (2)

NOTE;- This permit is issued. Subject to the following conditions.

1. The traffic of those explosives in the Port area shall be subject to strict observance of the regulations under Part I and V of the Tuticorin Port Safety Regulations, 1985.

2 Precautionary measures as indicated overleaf shall be observed and or caused to be observed by all parties concerned.

Safety Officer, Tuticorin Port Trust.

(a) Proforma – Permit for D.G. Class 4.3.

(Reverse)

Precautionary measures to be observed in the handling/transit-storage of inflammable solid(s) or substance(s) which in contact with water emit(s) inflammable gas(es).

1. At all costs protect from damp.
2. Do not land or accept for shipment receptacles which are not in a hermetically sealed condition.
3. Receptacles damaged during handling shall be moved further only after taking effective precautions against spillage and contact of the contents with moisture.
4. Spillings, if any, shall be used swept separately and disposed of in a safe manner.
5. Handle and transit-store well separated/segregated from other dangerous goods and combustible cargo, especially so from oxidising substances and organic peroxides.
6. Handle with utmost care, avoiding dropping and pumping against hard surfaces. Use landing cushions wherever necessary.

(b) Proforma – Safety Card for D.G. Class 4.3.

TUTICORIN PORT TRUST

Safety Card – Class 4.3 – Inflammable solid(s) or substance(s) which in contact with water emit(s) inflammable gas(es).

Reference: D.G. Permit No. Dated:

Traffic Department Official concerned.

Please note that the undermentioned consignment of inflammable solid(s) which is contact with water emit(s) inflammable gas(es) is to be landed/shipped from by/s.s./m.v.

To arrive on or about. Transit-Storage

Description	Quantity
(1) (2)	

Safety Officer, Tuticorin Port Trust.

(b) Proforma – Safety Card for D.G. Class 4.3. (Obverse)

Precautionary measures to be observed in the handling/transit-storage of inflammable solid(s) or substance(s) which in contact with water emit(s) inflammable gas(es).

1. At all costs protect from damp.
2. Do not land or accept for shipment receptacles which are not in a hermetically sealed condition.
3. Receptacles damaged during handling shall be moved further only after taking effective precautions against spillage and contact of the contents with moisture.
4. Spilling, if any, shall be swept separately and disposed of in a safe manner.
5. Handle and transit-store well separated/segregated from other dangerous goods and combustible cargo especially so from oxidising substances and organic peroxides.
6. Handle with utmost care avoiding dropping and bumping against hard surface. Use landing cushions wherever necessary.

SCHEDULE 1-8 (a) Proforma--permit for D.G.Class 8-1 (Obverse)

TUTICORIN PORT TRUST

Sl.No. Permit for D.G.Class 5.1 Date:

Permit Messrs, to land/ship the undermentioned oxidising substance(s) from/by s.s./m.v. due to arrive on or about.

Description Quantity

(1) (2)

Notes:-- This permit is issued, subject to the following conditions:-

1. The traffic of these explosives in the Port area shall be subject to strict observance of the regulations under Parts II and VI of the Tuticorin Port Safety Regulations, 1985.
2. Precautionary measures as indicated overleaf shall be observed and/or caused to be observed by all parties concerned.

Safety Officer, Tuticorin Port Trust.

(a) Proforma-- Permit for D.G. Class 5.1 (Reverse)

Precautionary measures to be observed in the handling/transit-storage of Oxidising substance(s)

1. Land or accept for shipment only receptacles which are in a sound condition.
2. Spilling, if any, caused during handling shall be swept separately and disposed of in a safe manner.
3. Handle/transit-store of well separate/segregated from any other cargo especially so from acids.
4. Ground space used for storage of oxidising substance shall be cleaned thoroughly before they are stacked and immediately after they are cleaned.

Handle with utmost care avoiding dropping and pumping against hard surfaces. Use landing cushions wherever necessary.

(b) Proforma—Safety Card for D.G. Class 5.1 (Reverse)

TUTICORIN PORT TRUST

Safety Card-- Class 5.1 – Oxidising substance(s)

Reference: D.G. Permit No. Dated:

Traffic Department official concerned.

Please note that the under mentioned consignment of oxidising substance(s) is to be landed/shipped from/by s.s./M.V.

due to arrive on or about.

Description Quantity

(1) (2)

Transit— Storage -----

Safety Officer, Tuticorin Port Trust

(b) Proforma-Safety Card for D.G. Class 5.1 (Reverse)

Precautionary measures to be observed in the handling/transit-storage of Oxidising substance(s).

1. Land or accept for shipment only receptacles which are in a sound condition.
2. Spilling, if any, caused during handling shall be swept separately and disposed of in a safe manner.

3. Handle/transit-store well separate/segregated from any other cargo especially so from acids.
4. Ground space used for storage of oxidising substance shall be cleaned thoroughly before they are stacked and immediately after they are cleaned.
5. Handle with utmost care avoiding dropping and bumping against hard surfaces. Use landing cushions wherever necessary.

SCHEDULE 1 – 9

(a) Proforma— Permit for D.G. Class 5.2 (Obverse)

TUTICORIN PORT TRUST

Sl.No. Permit for D.G. Class 5.2 Date:

Permit Messrs, to land/ship the under mentioned Organic Peroxide from/by s.s./m.v. due to arrive on or about.

Description Quantity

(1) (2)

Notes:-- This permit is issued, subject to the following conditions:-

1. The traffic of these explosives in the Port area shall be subject to strict observance of the regulations under Parts II and VII of the Tuticorin Port Safety Regulations, 1985.

2. Precautionary measures as indicated overleaf shall be observed and/or caused to be observed by all parties concerned.

Safety Officer, Tuticorin Port Trust.

(a) Proforma—Permit for D.G. Class 5.2 (Obverse)

Precautionary measures to be observed in the handling/transit-storage of Organic Peroxide.

1. Land only receptacles which are in a safe and sound condition. If pressure release valves or venting arrangements are provided such valves or venting arrangements shall be in a perfectly normal conditions.
2. Damaged/leaky receptacle(s) of Liquid Organic Peroxides shall be petitioned forthwith applying water from the open end of a hose line on the receptacle(s) before and while being jettisoned.
- 3 Repacking of Organic Peroxides is strictly for-bidden.
4. Receptacles of Liquid Organic peroxides shall be lowered and carried in the dead upright position. Other organic peroxides also shall be handled with utmost care. Use suitable landing cushions wherever necessary.
5. Transit – store in a separate compartment of the hazardous cargo and subject to special precautions.
6. Handle severely isolated from any other cargo.
7. Protect from the sun or any other source of direct heat.

(b) Proforma – Safety Card for D.G. Class 5.2. ((Obverse)

TUTICORIN PORT TRUST

Safety card 5.2. Organic peroxides.

Reference : D.G. Permit No. Date:

Traffic department official concerned.

Please note that the under mentioned consignment of organic peroxides is to be landed/
shipped from/by s.s /m.v. on or about

Description Quantity

(1) (2)

Description Quantity

(1) (2)

Transit – Savings

Safety Officer, Tuticorin Port Trust

(b) Proforma – Safety Card for D.G.Class 5.2. (Reverse)

Precautionary measures to be observed in the handling/transit-storage of Organic Peroxide.

1. Land only receptacles which are in a safe and sound condition. If pressure release valves or venting arrangements are provided such valves or venting arrangements shall be in a perfectly normal condition.
2. Damaged / Leaky receptacle (s) of Liquid Organic Peroxides shall be jettisoned forthwith apply/water from the open end of a hose line on the receptacle(s) before and while being jettisoned.
3. Repacking of Organic Peroxides is strictly forbidden.
- 4 Receptacles of Liquid Organic Peroxides shall be lowered and carried in the dead upright position. Other organic peroxides also shall be handled with utmost care. Use suitable landing cushions wherever necessary.
5. Transit-store in a separate compartment of the hazardous cargo and subject to special precaution.
6. Handle SEVERLY ISOLATED FROM ANY OTHER CARGO.
7. PROTECT FROM THE SUN OR ANY OTHER SOURCE OF DIRECT HEAT.

SCHEDULE 1 – 10

(a) Proforma – Permit for D.G. Class 6.2 (Obverse)

Tuticorin Port Trust

s.nO. Permit for D.G. Class 6.2 Date :

Permit Messrs. To land /ship the under mentioned poisonous (Toxic) Substance(s)
from /by s.s./ m.v. due to arrive on or about

Description Quantity

(1) (2)

Notes:- This permit is issued, subject to the following conditions:-

1. The traffic of these explosives in the Port area shall be subject to strict observance of the regulations under Parts II and VII of the Tuticorin Port Safety Regulations, 1985.

2. Precautionary measures as indicated overleaf shall be observed and/or caused to be observed by all parties concerned.

Safety Officer, Tuticorin Port Trust

(A Group) III 2 – 7

(a) Proforma – Permit for D.G. Class 6.2 (Reverse)

Precautionary measures to be observed in the handling/transit – storage of poisonous (Toxic) Substances.

1. Land or accept for shipment only receptacles which are in a hermetically sealed/effectively closed condition.
2. The contents of an receptacles that becomes damaged during handling transit-storage may be destroyed with appropriate sanction.
3. Isolate and disposed of other cargo suspected to have been contaminated with poison as directed by the Safety Officer.
4. In case of any accident involving a poisonous substance men shall be moved away from the vicinity and those suspected to have been contaminated shall be sent to Port Hospital after giving first aid, if possible.

(b) Proforma – Safety Card for D.G. Class 6.2 (Obverse)

Tuticorin Port Trust

safety Card – Class 6.2 - Poisonous (Toxic) Substance.

Reference: D.G. Permit No. Dated :

Traffic Department Official concerned

Please note that the undermentioned consignment of Poisonous (Toxic) Substance (s) is to be landed/ shipped from/ by s.s / m.v. due to arrive on or about.

Description Quantity

(1) (2)

Transit – Storage.

Safety Officer, Tuticorin Port Trust

(b) Proforma – Safety Card for D.G. Class 6.2 (Reverse)

Precautionary measures to be observed in the handling transit – storage of poisonous (Toxic) Substance (s).

1. Land or accept for shipment only receptacles which are in hermetically sealed effectively closed condition.
2. The contents of any receptacles that becomes damaged during handling/transit-storage may be destroyed with appropriate sanction.
3. Isolate and dispose of other cargo suspected to have been contaminated with poison as directed by the Safety Officer.
4. In case of any accident involving a poisonous substance, men shall be moved away from the vicinity and those suspected to have been contaminated shall be sent to Port Hospital after giving first aid, if possible.

SCHEDULE 1 – 11

(Obverse)

(a) Proforma – Permit for D.G. Class 7

Tuticorin Port Trust

s.nO. Permit for D.G. Class 7 Date :

Permit Messrs. To land/ship the undermentioned

Radioactive substance(s) from /by s.s./ m.v

Description Quantity

(1) (2)

Note : - This permit is issued subject to the following conditions.

1. The traffic of these explosives in the Port area shall be subject to strict observance of the regulations under Parts II and IX of the Tuticorin Port Safety Regulations, 1985.

2. Precautionary measures as indicated overleaf shall be observed and/or caused to be observed by all parties concerned.

Safety Officer, Tuticorin Port Trust

(a) Proforma – Permit for D.G. Class 7 (Reverse)

Precautionary measures to be observed in the handling/transit – storage of radioactive substance(s).

1. Observe precautions as suggested by the Director of Radiation Protection, Government of India.
2. Handle/Transit store under the personal supervision of a technically qualified person deputed by the consignee/consignor.
3. Handle with utmost care avoiding dropping on or bumping against hard surface. Use landing cushions wherever necessary.

(b) Proforma – Safety Card for D.G. Class 7 (Obverse)

Tuticorin Port Trust

safety Card – Class 7 - Radioactive substance(s).

Ref: D.G. Permit No. Dated :

Traffic Department Official concerned

Please note that the undermentioned consignment of Radioactive substance (s) is to be landed/ shipped from/ by s.s / m.v. due to arrive on or about.

Description Quantity

(1) (2)

Transit – Storage.

Safety Officer, Tuticorin Port Trust

(b) Proforma – Safety Card for D.G. Class 7 (Reverse).

Precautionary measures to be observed in the handling/ transit – storage of Radioactive substance (s).

1. Observe Precautions as suggested by the Director of Radiation Protection, Government of India.
2. Handle/Transit store under the personal supervision of a technically qualified person deputed by the consignee/consignor.
3. Handle with utmost care avoiding dropping on or bumping against hard surface. Use landing cushions wherever necessary.

SCHEDULE 1 – 12

(b) Proforma – Permit for D.G. Class 8 (Obverse)

Tuticorin Port Trust

s.nO. Permit for D.G. Class 8 Dated:

Permit Messrs. To land/ship the undermentioned

'Corrosive(s) ' from / by s.s. / m.v. due to arrive on or about

Description Quantity

(1) (2)

Note : - This permit is issued subject to the following conditions.

1. The traffic of these explosives in the Port area shall be observed and/or caused to be observed by under Parts II and X of the Tuticorin Port Safety Regulations, 1985.
2. Precautionary measures as indicated overleaf shall be observed and/or caused to be observed by all parties concerned.

Safety Officer, Tuticorin Port Trust

(a) Proforma – Permit for D.G. Class 8. (Reverse)

Precautionary measures to be observed in the handling/transit – storage of corrosive (s).

1. Land or accept for shipment only receptacles/carboys which are in a perfectly sound condition.
2. Handle/transit-store well separated/segregated from any other cargo.
3. Receptacles of liquid corrosive shall be handled in the dead upright position.
4. Receptacles damaged during handling shall not be touched except by men wearing approved protective clothing.
5. Contents of damaged receptacles/ carboys shall be destroyed and rendered harmless by some efficient means.
6. Men suspected to have been contaminated with corrosives shall be sent to Port Trust Hospital after thoroughly washing the affected parts of the body.

7. Handle with utmost care avoiding dropping on or bumping against hard surfaces. Use landing cushions wherever necessary.

(b) Proforma – Safety Card for D.G. Class 8 (Obverse)

Tuticorin Port Trust

safety Card – Class 8 - Corrosive (s).

Reference : D.G. Permit No. Dated :

Traffic Department Official concerned

Please note that the undermentioned consignment of 'Corrosive (s)' is to be landed/ shipped from/ by s.s / m.v. due to arrive on or about.

Description	Quantity
(1)	(2)

Transit – Storage.

Safety Officer, Tuticorin Port Trust

(b) Proforma – Safety Card for D.G. Class 8 (Reverse).

Precautionary measures to be observed in the handling transit – storage of Corrosive (s).

1. Land or accept for shipment any receptacles/ carboys which are in a perfectly sound condition.
2. Handle/transit-store well separated/segregated from any other cargo.
3. Receptacles of liquid corrosive should be handled in the dead upright position.
4. Receptacles damaged during handling shall not be touched except by men wearing approved protective clothing.
5. Contents of damaged receptacles/carboys shall be destroyed and rendered harmless by some efficient means.
6. Men suspected to have been contaminated with corrosives shall be sent to Port Trust Hospital after thoroughly washing the affected parts of the body.
7. Handle with utmost care avoiding dropping on or bumping against hard surfaces. Use landing cushions wherever necessary.

SCHEDULE 1 – 13

(a) Proforma – Permit for D.G. Class 9 (Obverse)

Tuticorin Port Trust

S.No. Permit for D.G. Class 9 Date

Permit Messrs. To land/ship the undermentioned Miscellaneous Dangerous Goods from /by
s.s. / m.v. due to arrive on or about

Description	Quantity
(1) (2)	

Note : - This permit is issued subject to the following conditions:-

1. The traffic of these explosives in the Port area shall be subject to strict observance of the regulations under Parts II and XI of the Tuticorin Port Safety Regulations, 1985.
2. Precautionary measures as indicated overleaf shall be observed and/or caused to be observed by all parties concerned.

(a) Proforma – Permit for D.G. Class 9. (Reverse)

Precautionary measures to be observed in the handling/transit – storage of Miscellaneous Dangerous Goods.

1.

2.

3.

(b) Proforma – Safety Card for D.G. Class 9 (Obverse)

Tuticorin Port Trust

safety Card – Class 9 - Miscellaneous Dangerous Goods.

Reference : D.G. Permit No. Dated :

Traffic Department Official concerned

Please note that the undermentioned consignment of Miscellaneous Dangerous Goods is to be landed/ shipped from/ by s.s / m.v. due to arrive on or about.

Description Quantity

(1) (2)

Transit – Storage.

Safety Officer, Tuticorin Port Trust

(b) Proforma – Safety Card for D.G. Class 9

Precautionary measures to be observed in the handling/ transit – storage of Miscellaneous Dangerous Goods.

- 1.
- 2.
- 3.
- 4.

SCHEDULE - 2

Proforma of the letter forwarding Permits.

Calling for certain clarification etc.,

Tuticorin Port Trust

Tuticorin

Dated:

To

Messrs.....

Sirs,

Subject : - Permit for landing/shipping dangerous goods from/by s.s. / m.v.

Reference:- Your application No. Dated:

and the cargo list(s) enclosed herewith.

1. Permit(s) for landing/shipping items (f) Nos..... as on your cargo list(s) is/are forwarded herewith. This/these item(s) is/are dangerous goods. Precautions as detailed on the reverse of the permit form(s) shall be observed and or caused to be observed strictly in its/their handling/transit- storage

2. The characteristic properties of item (s) Nos. as on your cargo list(s) is/are not known. I am, therefore, unable to decide whether or not it/they is/are dangerous good(s).

You are, therefore, requested to furnish full particulars regarding the characteristic properties of and the known hazards inherent in this/these item(s) of cargo whether or not it/they is/are to be treated as dangerous goods will be decided only after receipt from you on your required information.

In the meantime, you are to understand clearly that this/these item(s) shall be landed/shipped only after this department is enabled to make a decision as aforesaid and take appropriate follow-up action.

3. Item (s) No.(s) as on your cargo list(s) is/are non-dangerous goods; no permit(s) is/are necessary for its/their landing/shipping.

Yours faithfully,

Safety officer

Tuticorin Port Trust

Copy to Traffic Shipping Control

Copy to Traffic Department Official concerned

Copy to D.P.C.'s Office

APPENDIX 'A'

Tuticorin Port Bulk Petroleum Regulations

PART I

Preliminary

A.1. Short title, extent and commencement :- (a) These Regulations may be called Tuticorin Port Bulk Petroleum Regulations, 1985.

(b) They extend to the whole of Port of Tuticorin.

(c) They shall come into force on the date of their publication in the Official Gazette.

(d) Application of Petroleum Rules, 1976, not barred :- These Regulations shall be in addition to and not in derogation to the Petroleum Rules, 1976. Nothing continued in these regulations shall be deemed to be contrary to any of the provision of Petroleum Rules, 1976.

A.2 Definition: - (a) 'Oil Tanker' means a ship licensed to carry petroleum in bulk as cargo.

(b) 'Petroleum' means liquid Hydrocarbon or mixture of Hydrocarbon and inflammable mixture (Liquid Viscous or solid) containing any liquid hydrocarbon.

(c) 'Petroleum- Class A' means petroleum having a flash point below 23 degree C.

(d) 'Petroleum- Class B' means petroleum having a flash point of 65 degree C

(e) 'Petroleum- Class C' means petroleum having a flash point of 65 degree C and above but below 93 degree C.

(f) 'Bulk Petroleum' means petroleum carried in bulk.

(g) 'Inner Harbour' means enclosed harbour lying within the North, South and Eastern Break water and West of the entrance.

A.3. Other items used in these regulations shall have the same meaning as defined in part I of the Tuticorin Port Safety Regulations, 1985.

PART II

GENERAL PROVISION APPLICABLE TO ALL OIL TANKERS

A.4. Notice of arrival of Petroleum - (a) The master of every oil tanker carrying petroleum shall deliver to the Pilot a written declaration under his signature in Form I, prescribed in Schedule II of the Petroleum Rules, 1976.

(b) Provided that if in anticipation of an oil tanker's arrival, the Agent as such oil tanker delivers to the Deputy Conservator a written declaration as aforesaid, no such declaration need be made by the Master of such vessel.

(c) The declaration given as aforesaid shall contain the following information in addition to the details furnished in Form I : -

(a) the name/names of the Petroleum product/products.

(b) the flash point of such product/products; and

(c) whether such product/products is/are miscible with water or not.

A.5. (i) Oil tanker carrying Petroleum in bulk : -

(a) No oil tanker carrying Petroleum – Class A in bulk shall enter the inner Harbour. Such Oil tankers shall be berthed only at the Oil jetty.

(ii) This regulation will not apply to oil tankers carrying on board less than 750 litres of Petroleum - Class A as part of the Tanker's stores (but not as

cargo) if such is carried in appropriate receptacles other than the cargo tanks and is stored in a safe manner.

- (b) (i) No oil tanker shall enter the inner Harbour after having discharged Petroleum – Class A until the tanks which contained Petroleum – Class A have been gas freed and a certificate has been obtained by the Master from the Controller of Explosives, to the effect that such officer has, after examination with the aid of a vapour testing instrument, found the vessel to be entirely clear of Petroleum – Class A and vapour thereof.
- (ii) Such certificate shall be forwarded to the Assistant Safety Officer before the oil tanker enters the Inner Harbour.
- (c) Discretion to allot any berth or mooring to any oil tanker and to order shifting of any tanker wherever necessary shall vest in the Deputy Conservator. His orders in this regard shall be binding on all Master of Oil tankers.
- (d) Cleaning the tanks shall not be carried out within the Port except with Permission of the Safety Officer in writing. During such Cleaning the Master of the Oil tanker shall take particular care to ensure that no oil (Oily water/oily refuse) is discharged into the sea or on the shore.
- (e) Oil tankers shall not carry out repairs within the Port without the permission in writing of the Safety Officer. If considered necessary, the Safety Officer shall require the Master of the Oil tanker to produce a gas free certificate of the type indicated in regulation A.5 (b) before permission for carrying out any repair is granted.
- (f) Oil tankers shall whilst within Port exhibit conspicuously a red flag not less than sq.m. From sun rise to sun set and a red light from sun set to sun rise.
- (g) Every oil tanker lying within the Port limits shall keep the end of a wire havser having a large eye paid out to the vater a edge at bow and quarter to enable us to take hold of in case of an emergency.

(h) Throughout the time an oil tanker is in the Port a responsible ship's officer and a ship's Engineer shall always be on board the tanker, night and day to carry out and to give effect of these regulations and to take all precautions for the safety of the oil tankers and her cargo.

(i) Power shall be maintained at least to work the oil tanker's anchor cables and mooring lines through out the time an oil tanker remains within the Port limits.

A.6. Landing/loading of Petroleum in bulk : - (a) Before any petroleum in bulk is discharged from/loaded into any oil tanker, the owner of the cargo or the Agent of the oil tanker shall obtain permission to do so from the Deputy Conservator, the Traffic Manager and the Assistant Safety Officer.

The Assistant Safety Officer will issue a written permit in this regard, for and on behalf of the Deputy Conservator.

(b) All Safety devices and equipment incorporate into or carried by oil tankers in accordance with Lloyds or other approved societies specification shall remain in good working condition throughout the period that tankers remain in the Port. All pipes and appliances used for discharging/loading of petroleum in bulk shall be free from leakage.

Discharging/loading of petroleum shall commence only after all such safety devices and equipments are inspected and tested by a competent ship's officer and found to be in good working condition. If any of these devices / equipments become defective or otherwise ineffective at any time while discharging/loading of petroleum is in progress, the oil tanker shall immediately stop discharging/loading. Discharging/loading shall thereafter resume only after such defective device/equipment has been restored to working condition.

(c) A certificate signed by the Master of the oil tanker to the effect that all safety devices/equipment referred to in regulation A.6 (b) are in good working condition shall be delivered to the Assistant Safety Officer before discharging /loading of petroleum can commence.

(d) (i) A bulk oil vessel shall commence discharging of dangerous petroleum only during the day time but a vessel which has commenced the discharge before sun set may continue to discharge even after sun set provided that such discharge is continuous and without interruption.

- (ii) Should anything occur after sun set which necessitates repairs on disconnection to the plant, pipes or connections and discharge shall be discontinued until after sun rise.
- (iii) In the case of interruption to pumping after sun set the Deputy Conservator may at his own discretion grant special permission to re-commence pumping even during the night time.
- (iv) Discharge or loading of dangerous petroleum interrupted or suspended after sun set, shall on no account, be recommenced until after sun rise without the permission of the Deputy Conservator.
- (e) Throughout the period that petroleum is being discharged/loaded connection on the oil tanker and/or the pipelines shall be under the constant supervision of a responsible officer of the oil tanker.
- (f) (i) Throughout the period that petroleum is discharged/loaded the pipelines and other fittings on the jetty shall be under the constant supervision of a responsible employee of the owners of the petroleum.
- (ii) When landing/loading of petroleum has been commenced such landing or loading shall be proceeded with due diligence, utilising the full capacity of pumps available on the tanker. In case such operations are suspended or discontinued for any reason the tanks and holds of the oil tanker shall be closed immediately.
- (iii) If the operations are suspended or discontinued for any reasons the tanker or holds of the oil tanker shall be closed immediately.
- (g) In the event of it being necessary to interrupt pumping in order to false steam on board, the pipe line in the vicinity of the vessel shall be flushed with water and the valve at the function of the flexible and fixed pipe ashore shall be closed before the boiler fires are lighted.

A.7. Accident/Fire Preventions – (a) One guard drawn from the Central Industrial Security Force shall remain on duty on board the Oil Tanker during the whole time that petroleum is being discharged/loaded.

- (b) No person engaged in discharging/loading of petroleum and/or operations connected therewith shall carry matches lighters or any other materials liable to cause fire/ignition/explosion.

CISF Personnel shall be posted at the western end of the North Break water or the Oil jetty, as the case may be, for ensuring that this condition is observed by all persons proceeding beyond these points. The guard on the tanker shall ensure that this condition is observed by all persons who may board the tanker from boats.

If any of these forbidden articles are being carried on by any person proceeding to the North Break Water or the Oil Jetty or boarding any Tankers, security guard shall take charge of such articles and may return the same when the person leaves the prohibited area.

- (C) No person shall be allowed on the tanker except those on genuine business connected with the working of the Oil Tankers.
- (d) (i) Naked fires, smoking and the use of non-safety light shall be prohibited at all time on any part of the Oil Jetty and the North Break Water.
- (ii) During discharging/loading of Petroleum – Class A , Open fires, smoking of tobacco and the use of non-safety lights shall be forbidden on the Oil tanker and on Floating craft lying alongside or remaining within 300 metres of tanker.
- (iii) During discharging /loading of Petroleum – Class B this safety distance may, however, be limited to 30 metres in so far as it applies to Floating Crafts.
- (iv) Harbour Crafts proceedings with 300 metres of Oil tankers discharging/loading Petroleum - Class A and within 30 metres of Oil Tankers discharging/loading Petroleum Class B shall ensure that galley fires, other naked flames and non-safety lights are either damped down or extinguished.
- (v) During the whole time that an oil vessel is discharging petroleum to oil pipe lines on North Break Water , shall be efficiently patrolled by CISF Personnel posted for the purpose.
- (e) Iron or steel hammer or any other instrument capable of causing sparks shall not be used for the purpose of opening or closing the hatches or tank lids of an oil

tanker nor shall chipping iron rust or paint be carried out in the vicinity while the tanker discharging/loading petroleum.

(f) (i) Boats / floating craft which are not employed for any work connected with oil tanker operations shall not be allowed within 30 metres of the oil tanker. The agent / master of the oil tanker utilising the service of any boat for tanker work shall ensure that the boatmen do not contravene any of the the fire prevention measured stipulated in this regulation.

(ii) Unauthorised boats /floating crafts going alongside or near oil tankers are liable to be prosecuted. If any boats /floating crafts even attempts to proceed near the floating pipelines used for tanker operations inside the enclosed harbour the licence of such boats /floating crafts is liable to be cancelled by the Deputy Conservator.

(iii) No vehicles with leak in their silencer or exhaust pipes shall be permitted to entry in to the north Break water.

A.8. Enforcement -(a) Enforcement authority. - The Safety Officer, The Assistant Safety Officer, shall be responsible and shall have due jurisdiction to enforce these regulations.

(b) Master and / Agents of oil tankers lying within the Port limits and carrying petroleum as cargo shall when so required by the Safety Officer, the Assistant Safety Officer, the Safety Inspector or any other officer duly authorised in this behalf by the Safety Officer afford all reasonable facility enable such officers to ascertain whether these regulations are duly observed.

A. 8 Power to exempt.- The Chairman on the advice of the Safety Officer and in consultation with the chief controller of explosives and with the approval of the Central Government, may, exempt conditionally or unconditionally any party from all or any of the provision of these regulations.

A. 10. Penalties.- Any one who contravenes any of the regulations under the Part II is punishable with fine which may extend to one thousand rupees and in the case of continuing infringement with a further fine of one thousand rupees per day for every subsequent day for which such infringement continues.

PART III

SPECIAL REGULATIONS FOR OIL TANKER OPERATION AT OIL JETTY

A.11. Any oil tanker may discharge / load any grade of petroleum classes A, B and C at the Oil Jetty. There will not be any time limit regarding commencement of operations at this jetty (i.e) discharge / loading of even petroleum – Class A may commence at any time during day or night.

A.12. Under no circumstances shall petroleum be pumped through the pipelines on the oil jetty at pressure exceeding 12 kilograms per square centimeters. This maximum pressure shall not be applied to the pipelines until one hour after the commencement of discharge of petroleum.

A.13 (i) When an oil tanker has finished discharging /loading of petroleum discharging /loading pipe lines shall immediately be emptied of petroleum at least up to the block valve on the oil jetty by flushing water through oil tanker pump or by any other efficient means.

(ii) The same procedure shall also be observed whenever discharging /loading pipelines have to be discontinued for any reason.

A.14 (i) Throughout the period of petroleum is being discharged /loaded at the Oil Jetty, the pipelines and fitments on the Oil jetty shall be under constant supervision of an employee of the Port Fire Service not below the rank of Sub Officer.

(ii) One Leading Fireman assisted by at least 3 fireman shall be posted for patrolling the fitments and pipe lines on the Jetty under the guidance of the Sub Officer.

(iii) A fire fighting tug shall also be put on alert on the other side of the tanker throughout such period

PART IV

SPECIAL REGULATIONS FOR PROTECTION OF OIL PIPE LINES

A.15 (a) (i) Instruction to the Port's Mechanical Engineer – Oil companies intending to land petroleum in bulk shall advise the Port's Mechanical Engineer of the intended landing of such petroleum at least 24 hours before such landing commences so as to enable him to post necessary staff to patrol the Oil pipe lines.

(ii) Instruct as above, regarding the landing of petroleum in bulk on Sundays and Port holidays should reach the Mechanical Engineer before 11.00 hours on the proceeding working day.

(b) In the event of a leak in the flexible pipe lines (that is to say pipe lines connecting the tanker to the shore pipe lines) or a fire on or around the North Breakwater the oil Company's supervisor or Assistant in charge of tanker discharges shall take action as follows:-

(i) Arrange for the tanker to stop pumping and to shut down all tanker discharge valves.

(ii) Notify the telephone exchange for informing the Deputy Conservator, the Traffic Manager, Mechanical Engineer , Fire service and other officers.

(iii) Notify the terminal receiving petroleum.

(c) Tanker discharge suspended on account of a leak involving petroleum of a fire shall recommence only after the leak is repaired or the fire is put out and the "All Clear Signal" is obtained from the Deputy Conservator or any other official authorised in this behalf by the Deputy Conservator.

A.16. (a) Instructions to all the officers and staff of the Port – On leak in oil pipe lines or a fire in or near the pipelines being noticed or reported, the staff concerned shall arrange to take action as detailed below :-

(i) Cordon off the area as best as possible pending arrival of Fire Service and see that no naked lights are brought or caused to be within 300 feet of the point of occurrence.

Explanation – For the purpose of this clause, locos, IC engines, hurricane and pressurised lanterns, railway signal lamps, all types of cycle lamps, ordinary electric hand torches etc. shall be considered as "naked lights".

(ii) Pending arrival of the Fire service, take such other measures as may be considered expedient to prevent to outbreak of fire or to keep in check or extinguish the fire if one has already started.

(b) In the case of leak or fire in the oil pipelines the CISF patrolling the oil pipelines shall take action as follows :-

(i) The CISF who notices leak or fire, shall rush to the oil manifold and inform the Master of the ship and shall inform fire control / Signal station and shall notify the occurrence to the Oil Company's staff and further on his way to oil manifolds, he shall alert the other CISF by shouting out the information to them.

(ii) The remaining two CISF shall rush to the location to the leak or fire and shall take such action as they can to prevent a fire or to keep the fire under control and in the case of a leak such Khalasies shall endeavour to cordon off the area as best as they can and shall warn off vehicle and other sources of naked light from the vicinity of the leak.

(iii) In the event of a fire, they shall endeavour to keep the fire under check by using earth and sand.

Note :- The supervisory staff of the Engineering Department who are responsible to post Khalasies to patrol the pipelines shall always ensure that such khalasies are thoroughly conversant with what exactly they should do in the event of a leak of fire.

A.17. Instruction to the Port Fire Service – (a) on receiving the report of a leak or fire in the pipelines or the pump house, the North Fire Station shall act follows :-

(i) Turn out one unit, under the charge of the senior most rank of Fire Service their available at the station.

(ii) Notify the Fire cum Assistant Safety officer and also notify the Harbour Master / Deputy Conservator of the leak of fire.

(iii) The senior most rank of the Fire Service turning out for the leak of fire shall take of course to be taken such action as may be necessary to prevent a fire in the case of a leak or to extinguish the fire, if a fire has already started.

PART V
SPECIFIC REGULATIONS FOR FIRE PRECAUTIONS

A. 18. Classification of Fires. - Fire shall be classified as follows :-

(a) "Minor fire" means any fire ashore, not necessitating the use of more than three jets.

(b) "Medium fire" means any fire ashore, necessitating the use of four to six jets and ships of minor or moderate intensity.

(c) "Major fire" means any fire ashore, necessitating the use of more than six jets and any ship fire of serious importance or any fire that exceeds the definition of medium fire.

A.19. Smoking – Smoking is not permitted any-where inside the Harbour premises, except inside office, canteens, rest rooms, latrines and on board ships.

Note:- For the purpose of this regulation , bunks shall not be considered to be offices.

A.20. Open flames or naked lights – (a) Open flames, hurricane lanterns, gas and other oil lamps, matches and other lighting material shall be absolutely forbidden at the following places-

(i) North Breakwater

(ii) All points within 100 feet of pipelines used to discharge petroleum Class A or B and any other place where petroleum Class A or B or carbide is being handed or is stored.

(b) No open flames or naked lights shall be used or caused to be used at other places within the harbour premises, except after obtaining written permission to do so from the authorised officials concerned.

(c) When granting such permission, the authorised official shall ensure that all reasonable precautions are taken to prevent a fire being caused by such flames or light.

(d) Hurricane lanterns, oil and gas lamps, shall be exempt from the restrictions contained under clause (b) such lamps may be used generally within the harbour premises, except at places specified under clause (a) but, under no circumstances shall such lamps be left unattended.

A.21. Fire Fighting.- How to call the Port Fire Service – (a) Fires ashore on ship lying alongside quay berths: either actuate the nearest Fire Alarm box or Telephone Fire Service and state location of the fire (use Fire Alarm or Telephone whichever is available nearest).

To actuate Fire Alarm box – Run to the nearest fire alarm box, break glass, pull handle and wait for Fire Service, on arrival state details and location clearly and coherently.

To give the call by telephone :- Run to the nearest Telephone and dial 2555 (Fire Control) and state clearly :

"FIRE ASHORE AT (OR)

FIRE IN SHIP AT "

(b) Fires afloat, that is to say, in ships at jetties and alongside quay Berths – (i) By day.-Hoist International Flags "DO" Sound continuous short blasts on the ships siren till answered by the Port Signal Station . The Signal Station shall answer by hoisting code flag "PENDANT NINE"

(II) BY NIGHT.- hOIST TWO RED LIGHTS, ONE OVER THE OTHER SIX FEET APART. Sound continuous short blasts on the ship`s siren till answered by the Port Signal Station.

The Signal Station shall answer by hoisting one red light, and acknowledged by continuous flashes on aldis lamp.

Note.- On receiving the "Fire Signal" the Signal Station shall FIRST CALL THE FIRE SERVICE and shall answer as above only after promulgating the Fire Call.

A. 22. Action to be taken by the Port Fire Control on receipt of a 'Fire Call' . The following actions shall be taken, namely-

(i) Turn out the Fire Fighting Units.

(ii) Inform the Fire Cum Assistant Safety Officer and the Harbour Master of the Port.

(iii) Inform the Safety Officer only if the Fire is known to be serious one or to be in ship and his presence is required and await further instructions from the Officer-in-charge at the fire incident.

Sequence of Operations – Ship Masters – (i) In the case of ship fire, the Master shall take immediate steps to fight the fire with appliance and men at his disposal

(ii) He shall make contact with the responsible Port Authorities to get assistance from the Port Fire Service and to co-ordinate fire fighting operations.

(iii) Masters of adjacent ships shall take all necessary precautions to prevent possible spreading of the fire to their respective ships.

A..23. Senior Port Officer Present.- The Senior Port Officer Present at the scene of occurrence shall ascertain that the Fire Service has been informed and make full use of all first aid fire equipment available , in addition he shall take all precautions against the fire spreading and take charge of fire fighting, pending the arrival of the Port Fire Service.

A. 24. (a) On receipt of a fire call, The Port Fire cum Assistant Safety Officer shall immediately proceed to the scene of the fire, and take charge of the fire fighting units in action.

(b) He shall be responsible for the control of operation in all fires of minor importance . For this purpose, all Port facilities shall be at his disposal.

(c) Should the fire be or become subsequently of much intensity as a Medium fire, he shall call the Deputy Conservator, who shall take over charge immediately on arrival.

A.25. (a) On receipt of a fire call, The Harbour Master shall immediately proceed to the scene of the fire and assume charge of the fire fighting and other allied operations.

(b) Should be considered that the fire necessitates the use of more than three jets, he shall call the Safety Officer who will take over charge immediately on arrival.

Note:- Normally the Harbour Master may be notified only if the Fire cum Assistant Safety Officer is not available or if the fire is known to be of a serious in nature.

A.26. (a) On arrival at the scene of fire, the Safety Officer shall assume charge of operations and shall take or caused to be taken such action as he considers necessary control or extinguish the fire.

(b) He shall thereafter be responsible for the assessment of risk and shall pass on control to the Administration when considered necessary.

A.27. Assistance from the Tuticorin Fire Service – In case of fires requiring more equipment and personnel than would be available with the Port Fire Service, assistance as necessary may be obtained from the Tuticorin Fire Service by sending an assistance message in code as detailed in regulation 30 to the Tuticorin Fire Service Area control and such assistance message may be given by or on behalf of the Safety Officer or the Fire cum Assistant Safety Officer.

A.28. Further assistance from the Tuticorin Fire Service :- In the case of every serious fire and on spares request by the Port Authorities, the Officer in charge of the Tuticorin Fire Service may, at his discretion; turn-out further assistance and such further assistance shall be to the maximum availability of appliances at the time.

A.29. Tuticorin Fire Service to work in collaboration with the Port Fire Service :- The Tuticorin Fire Service equipment and personnel arriving to render assistance shall work in collaboration with the Port Fire Service and shall operate under the general direction of the Senior most Port Officer in charge of the Fire.

A. 30. Form of assistance message in Code :- "Designation of the calling officerdate.....Fire.....Require assistance".

As an example, if the Fire-cum-Assistance Safety Officer decides that the assistance of the Tuticorin Fire Service is required for a fire occurring at V.O.C. Wharf No. 2 on the 21st of the Month, he should send the following message :-

Fire-cum-Assistant Safety Officer - 21st – Fire at V.O.C. Wharf No. 2 – Require assistance".

Note:- Unless this code is used, the Tuticorin Fire Service will not respond.

A.31. Fire in the Harbour, Central Industrial Security Force duties :-

- i. All cases of fire occurring in the Harbour, ashore or afloat, shall be communicated direct to Central Industrial Security Force attached to the Port.
- (ii)The Sub Inspector of CISF on duty at the Station of the CISF staff on receiving the message shall, on the receipt of information of a fire in the Harbour, immediately inform the Assistant Commandant and arrange for mobilisation of all off-duty officers and men and he shall proceed at once with the available men to the scene of fire and take immediately action to :-
 - (a) Keep the area around the Fire clear for fire fighting.
 - (b) Keep passage clear for fire fighting appliance and personnel.
 - (c) Prevent access to the fire by unauthorised persons

(d) Remove all non-essential persons from the vicinity of fire and

(e) Check any tendency to panic and prevent looting.

- iii. The CISF staff on duty in the Harbour shall at once proceed to the spot and take instructions from the Senior Fire Officer present, till the arrival of the CISF inspector.
- iv. A traffic control system to meet the needs of the situation shall be worked out and necessary CISF staff posted to ensure its smooth working.
- v. CISF staff on gate duties shall see that all the gates are kept open for arrival of fire fighting equipment and fire fighting personnel.
- vi. The off-duty men of the CISF on mobilisation shall report to the CISF when they shall be allotted to duties as and when required.
- vii. A cycle messenger shall be told off for duty. The CISF station telephone shall be manned by a sub-inspector till the fire is brought under control and orders to demobilise are issued.
- viii. All cases of fire shall, on receipt of information be reported without delay to Assistant Commandant, CISF who shall proceed to the scene to make a reconnaissance and shall thereafter contact the Deputy Conservator or the Chairman.

Note : In case of explosion or typhoon, duties exactly similar to these detailed above shall be performed.

A.32. Penalties – Any person contravening any of the above regulations is punishable with fine which may extend to five thousand rupees and for every subsequent offence with fine which may extend to five thousand rupees and for every subsequent offence with fine which may extend to twenty thousand rupees.

APPENDIX 'B'

SPECIAL REGULATION FOR BUNKERING OPERATIONS

B.1. Bunkering operations shall be carried out only after giving at least two hours notice in writing to the Deputy Conservator, Traffic Manager and the Assistant Safety Officer.

B. 2. Throughout the period a ship is receiving petroleum into her bunkers, the Master or the First Mate of the ship shall be present on board for ensuring that all the conditions/restrictions stipulated in these regulations are complied with in so far as these regulations apply to the ship and fit on board.

B.3. A ship officer shall be on watch and an attendant shall stand along side the flexible connection pipes while bunkering is in progress.

B. 4. (i) The suppliers of petroleum as bunker shall be responsible for ensuring that flexible pipes used for bunkering operations are in a sound condition and will withstand an internal pressure of not less than 2.5 kilograms per square centimeter.

(ii) They shall also ensure that all joints are oil tight and that spillage is avoided when flexible pipes are disconnected any unavoidable spillage caused during dis-connections of the flexible pipes shall be arranged to be properly cleaned up with sand.

B.5. The Officer on watch duty on the ship which receive petroleum as bunker shall be responsible for ensuring that all the valves in the ship's tanks and other connections are properly regulated to receive the bunker and that due warning is always given to the suppliers before any valves are closed so as to prevent the possibility of a sudden increase in pressure which may cause a burst in the flexible pipeline(s).

B.6. (i) The suppliers of petroleum as shall be liable for any damage whatsoever cause to the property/cargo belonging to or in the charge of the Trust by any leakage of such petroleum due to any negligence or defect in/failure of apparatus or appliances belonging to the suppliers.

(ii) The Master of the Agents of the ship receiving petroleum as bunker shall be liable for any such damage being caused by negligence or defect in/failure of apparatus or appliances belonging to the ship.

B.7. No cargo other than steel plate, iron rails and similar goods unaffected by oil, shall remain on the wharf within 10 metres of the bunker oil standpipes and shed doors immediately behind such standpipes shall be closed while bunkering is in progress.

B.8. Penalties – Any person contravening any of above regulations is punishable with fine which may extend to five thousand rupees and for every subsequent offence with fine which may extend to twenty thousand rupees.

APPENDIX `C`
REGULATIONS RELATING TO FUNCTIONING OF
WORKSHOP FOR REPAIRS INVOLVING HOT WORK ON
BOARD TANKERS

C.1. For the purpose of these regulations (i) "Explosion Proof" means electrical equipment or apparatus as defined and certified as explosion proof or flame proof when enclosed in a case which is capable of withstanding an explosion of a flammable hydro-carbon vapour air mixture or other specified flammable vapour, which may occur within. It and of preventing the ignition of hydrocarbon or other specified vapour surrounding the enclosure by sparks, flashed or explosions of vapour within. It must operate at such an external temperature that surrounding flammable atmosphere will not be ignited thereby.

(i) "Flammable" means capable of being ignited and of burning in air. The term 'Flammable gas' is used to mean to a vapour, air mixture within the flammable range.

(ii) 'Gas' means hydrocarbon and other vapours from petroleum as well as their mixture with air.

(iii) 'Gas free' means that the tank, compartment or container has been tested using an appropriate gas indicator and found to be sufficiently free at the time of the test of the toxic or explosive gases for a specified purpose.

(iv) "Gas Vent Lines" means the piping system fitted in a tanker to relieve pressure or vacuum in cargo tanks.

(v) "Hazardous area" is one in which an explosive (Flammable) atmosphere may be present continuously or intermittently or be present due to an abnormal or transient condition.

(vi) "Hot work" means any work which involves welding, burning soldering, brazing, sand blasting and chipping by spark producing tools and use of certain power driven tools non-flame proof electrical equipment with internal combustion engines and includes any other work which is likely to produce sufficient heat capable of igniting inflammable gases.

(vii) "Hot work certificate" means a certificate given by the Controller of Explosives certifying that he has in an adequate and suitable manner tested for the presence of inflammable vapour the oil tank compartment, space, or other part of the vessel specified in the certificate and found to be free therefrom and that having regard to all the circumstances in the case including likelihood or otherwise of the atmosphere be inflammable, the use of naked lights, fires, lamps may in his opinion be permitted in the oil tank, compartment, space or other part of vessel specified in the certificate.

(viii) "Man Entry Certificate" means a certificate given by the Controller of Explosives certifying that he has in an adequate and suitable manner tested the atmosphere in the oil tank or other fuel in the certificate and found that having regard to any circumstances of the case, including the likelihood or otherwise of the atmosphere being or becoming dangerous, entry to the oil tank or space without wearing breathing apparatus may in his opinion be permitted.

(ix) "Naked Lights" means open flames or fires, exposed incandescent material and any other unconfined source of ignition.

(x) "Oil Tank" means any tank or compartment in which oil is or has been, carried as cargo for use as lubricating oil for engines or boiler or as fuel for air craft on board.

(xi) "Permanent Ballast Tanks" means tanks having no connection with the cargo system which are used for the carriage of ballast only.

(xii) "Responsible Officer" means (a) the Master or any officer to whom the Master may delegate responsibility for any operation or duty.

(b) Responsible Officer is the head of the ship repairs Assistant Manager or a Superintendent or any Officer who is in control on the site of the work being undertaken and conversant with hazards attending work covered by this code and also familiar with precautions for fire fighting and other aspects.

(xiii) "Scale" means deposit or incrustation which may form on metal as a result of electrolytic or chemical action.

(xiv) "Sludge" means deposit in cargo tanks which may contain petroleum and water and also sand and scale or other foreign matter.

(xv) "Spontaneous Combustion" means ignition of a combustible material termed 'Spontaneous' if the inherent characteristics of the materials cause a heat producing exothermic chemical action and thus ignition without exposure to external fire, spark or abnormal heat.

(xvi) "Slop" means a mixture of petroleum and water arising from tank washing and not the collection of sludge from oil tanks.

(xvii) "Tank" means a receptacle of petroleum exceeding 1,000 litres in capacity.

(xviii) "Tanker" means a ship specially constructed or converted to carry liquid bulk cargo.

(xix) 'Ullage' means the depth of free space left in a tank above the liquid.

(xx) "Venting" means the procedure for release of gas or intake of air from and to cargo tanks.

C.2. Repairs to receptacles—No person shall cause to be repaired or repair by hot work any tank or container which has lost contained petroleum unless it has been thoroughly cleaned and is free from petroleum and petroleum vapour or, otherwise proposed for safety carrying out such hot repair and in all cases, certified in writing by a competent person to have been so prepared. The certificate required under this regulation shall be preserved by for a period of at least 3 months and produced to an Inspector on demand.

C.3. Responsible Officer as defined in Sub-Regulation (xiii) of Regulation C.1.--The master or other officer-in-charge specially responsible or a responsible officer of the ship repair firm of any vessel which has last carried petroleum on board, whether as a cargo or as fuel, or any vessel licensed under regulation shall see that--

(a) all due precautions are taken for the prevention of accidents due to ignition of petroleum or petroleum vapour.

(b) So long as there is petroleum vapour or oil in a tank all openings from the tank to the atmosphere except the gas escape line are kept closed and locked or otherwise fastened in a satisfactory manner; and when it is necessary to take dip or samples, the ullage plugs or sighting parts are closed immediately this has been done; provided that subject to the provisions of clause (c) such Master or Officer in-Charge may cause the necessary openings to be opened or unlocked for the purpose of taking on board or unloading Petroleum Class B or Petroleum Class C for cleaning the tanks or for other sufficient reasons.

(c) No person enters tank or an enclosed space which had or suspected to have contained petroleum without wearing a breathing apparatus of a type approved by the Chief Controller of Explosives unless he gets the concerned tank or space examined by an Officer appointed by the Central Government in this behalf with the aid of an approved petroleum vapour testing instrument and obtains a certificate from his to the effect that the said tank or space is free from dangerous petroleum vapour.

(d) The vessel does not undergo repair by 'hot work' to any of its tanks parts or fittings which are likely to contain petroleum vapour or petroleum unless he gets each such part or fitting, as the case may be examined by an officer appointed under clause (c) with the aid of an approved petroleum vapour testing instrument and obtains a certificate to the effect that the said tanks, parts or fittings are free from dangerous petroleum vapour or petroleum.

(e) The vessel used for the carriage of petroleum in bulk as a cargo is not taken among other ships or to a dry dock unless the vessel is proceeding to an oil berth or a certificate is produced from an officer appointed under clause (c) to the effect that he has examined all the tanks, cofferdams pump rooms and such other parts as deemed necessary with the aid of an approved vapour testing instrument and that such tanks, cofferdams, pump rooms and other parts are free from dangerous petroleum vapour together with a declaration from the Master that to the best of his knowledge there is no dangerous petroleum vapour present in any other part of the vessel not covered by the above certificate.

(f) The Officer granting a certificate required under clauses (c), (d) and (e) may specify conditions and make recommendations to maintain the gas free condition of tanks, space or parts certified.

C.4. The code of conduct for ship repairers as found in these regulation should be followed in to whenever ship repairs are carried out on board.

C.5. Code of conduct for ship repairers— Preliminary Procedure —1, on receipt of order for repair on any ship, before starting any kind of work and workmen boarding the ships, a declaration regarding the general condition of the ship shall be obtained by the repairer from the Master in the form given in the Schedule to this code.

ii. On receipt of the above declaration a responsible officer of the repairer shall undertake a general inspection of the job that are to be undertaken to the possible hazards that may develop during repair work and safety requirements to overcome the same.

iii. The repairer shall ensure that all statutory requirements laid down in this Code are fulfilled by the Master before undertaking any job.

iv. A responsible Officer or the repairer shall be present on board a tanker when repair work is in progress.

1. Man entry certificates for cold work :

1.1. No person shall enter or authorise another person to enter any tank, compartment or other space in which oil was last carried and any pump room unless a certificate for man entry into such a place, issued by the Controller of Explosives has been obtained and the place has been adequately ventilated.

1.2. If after the issue of a man entry certificate the atmosphere condition of a tank or any other place to which the certificate pertains undergoes change workmen shall be evacuated from such place and allowed to re-enter the space only after a fresh entry certificate has been obtained.

2. Hot work certificate:-

2.1. No hot work shall be undertaken.

2.1.1. In any oil tank in a vessel in which oil tank oil or liquid hydrocarbon was last carried unless a valid hot work certificate has been obtained in respect of that oil tank and of any oil tanks, compartment or space adjacent thereto.

2.1.2. On the outer surface of any oil tank in a vessel in which oil tank while was last carried unless a valid work certificate has been obtained in respect of that oil tank.

2.1.3. On the outer surface or in any compartment or space adjacent to an oil tank in a vessel in which oil tank oil was last carried unless a hot work certificate has been obtained in respect of that compartment or space.

2.1.4. Inside or on the outer surface or any pump room and similar space in which oil was handled unless a hot work certificate has been obtained in respect of that pump room or space.

2.2. In addition to the requirement given in 2.1 no hot work shall be undertaken on any part of an oil tanker unless a valid hot work certificate has been obtained in respect of that work.

3. Validity of Man entry Hot work Certificate :

3.1. A certificate will remain valid only for such a period as has been stipulated therein.

3.2. A Certificate in respect of any tank or other compartment will cease to be valid even before the expiry of the period for which it has been certified to be valid if ;

3.2.1. A change has been made in the existing installation in respect of that compartment or space by the removal of pipes, or any other fittings.

3.2.2. The floor space in that compartment or space is removed and the under floor space hosed down with water or otherwise disturbed.

3.2.3. Any part of the cargo oil pump unit is dismantled or disturbed in that compartment or space.

3.2.4. Oil or ballast is pumped or transferred through an installation situated in that compartment or space.

3.2.5. There is any reason to doubt about pollution of the atmosphere of the tank or space.

4. Hot work in tanks or other places on an oil tanker :-

4.1. No hot work shall be carried out :-

4.1.1. On any steam smothering valve chest or steam pipe leading from that chest, to an oil tank not certified for hot work.

4.1.2. On any pipe line of tank certified as gas free unless special precautions are taken to secure safety.

4.1.3. On the valve chest for heating steam or any pipe line leading from that valve chest to an oil tank not certified for hot work.

4.1.4. On any part of a Gas vent system unless the system has been isolated from all oil tanks including slop tanks not certified gas free for hot work and the system has been blown through with compressed air.

4.1.5. In any oil tank, pump room or other space if subsequent to the issue of a hot work certificate in respect of that, tank, pump room or space, any work was carried out which might have allowed entry or release of oil vapour into that tank pump room or space.

The gas free certificate for hot work in such event would be deemed to be invalid and further hot works shall be done only after a fresh gas free certificates has been issued in respect of that tank pump room or space by the Controller of Explosives.

4.1.6. In or near any refrigerated space unless the space and the surroundings are gas free and the insulation stripped.

4.1.7. In a cofferdam if there is evidence of leakage of oil or oil vapour into the cofferdam space, hot work shall be done only after space has been gas freed and a hot work certificate has been obtained.

4.2. Without prejudice to other relevant regulation hot work in the engine room of a ship in mid stream may be done provided that.

4.2.1. The vessel is not loading, discharging or bunkering oil, or ballasting/deballasting

.

4.2.2. Tank washing or gas venting operations are not being carried out.

4.2.3. All tank openings are securely covered.

4.2.4. Only ship's equipments are used for the purpose.

4.3. No section of any cargo oil pipe line or steam heating coil in a tank shall be subject to hot work, even if a tank is certified gas free for hot work. Unless and until at least one of the sections is removed with the use of hand tool and the system is blown through with compressed air.

4.4. An assurance in writing shall be obtained from the Master or Officer-in-charge of the vessel under repair that pumping up or running up operation which may disturb the condition in the pump room or other spaces certified for hot work will not be carried out.

4.5. Before hot work is undertaken a responsible officer shall examine the area to be treated to satisfy himself that such work can be safely undertaken. In particular, he shall ensure that ;

4.5.1. Adjacent compartments are also gas free and no gas from other compartments can be introduced by way or common gas vent lines, oil lines or heating system.

4.5.2. There is no oil impregnated scale or other material likely to give off gas.

4.5.3. No flammable or toxic gas remains in the vicinity.

4.5.4. There is no flammable material in adjacent spaces which might catch fire by the transmission of heat through the bulkheads.

4.5.5. There will be no release of petroleum gas or liquid while hot work is in progress.

4.5.6. Adequate fire extinguishing equipment is laid out ready for immediate use.

4.5.7. The area to be treated is notified to the Master or Officer in charge of the ship and a permit in writing obtained from him for the work on a day to day basis.

4.6. The vessels, for general survey and for extensive repair lasting for several days shall have the oil tanks thoroughly shipped only after obtaining gas free certificate for the hot work certificate shall be obtained again before commencement of gas cutting and welding. Hot work certificate on day to day basis for part of a tank shall not be accepted.

4.7. All wheels from the valve spindles in the pump room shall be removed to prevent handling of these valves by any unauthorised person and to indicate that it is not to be disturbed, while the work is in progress.

4.8. Electric wire or insulation panelling in any of gas cutting or electric welding work shall be removed to prevent them from catching fire.

4.9. A man to watch the other side of welding surface shall be present while welding is in progress.

4.10. Painting and hot work shall not be undertaken in the same area simultaneously.

4.11. Hand tools shall not only be used for the purpose for which they are designed. The risk of ignition of petroleum vapour by frictional spark produced by metal to metal impact in correct and normal usage is slight but care must be taken to prevent improper use.

5. Chief Precautions :

5.1. Launches barges and other vessels shall not be taken alongside as oil tanker ship unless prior permission has been obtained by the Master of the ship from the Port authorities to do so.

5.1.1. As far as practicable the launches, etc., shall preferably be taken on the leeward side of the ship.

5.2. Such launches, barges, vessels and equipment such as compressors, generator sets, etc. Which may give out sparks shall have spark arrestors fitted at their exhaust

5.3. When a launch or a barge is permitted to go alongside an oil tanker special care shall be taken to see that no open light or coal lit 'SIGHRI' is used for cooking and other purposes.

5.4. Always ensure that on the other side of the bulk-head on which gas cutting and welding is to be done no combustible explosive material or paint is stored.

5.5. While undertaking hot work on above or below decks and around accommodation spaces precautions shall be taken to ensure sparks, hot moral ships, etc., do not enter cargo spaces which may contain inflammable materials.

5.6. Inform the Master or Chief Officer of the vessel to arrange one of the member of ship's personnel to keep watch when hot work as stated in (5.5) is in progress.

5.7. While doing hot work outside the accommodation ensure to all Port holes are shut tight and are in closed position until hot work is finished.

5.8. Gas cutting direction should preferably be from in-board to out-board to prevent the sparks flying in the direction of the accommodation.

5.9. While the gas cutting or welding work is in progress inside the cargo holds, the Deputy Officer of the Vessel shall be informed not to do any painting work in the vicinity and directly

underneath the place of hot work.

5.10 Insist upon thorough cleaning of the hold and crevices within such holds wherein cargo like sulphur and other substances have been carried, if such holds are to be subjected to hot work during repairs.

5.11 Check for burning or smouldering materials at the site / vicinity of hot work before leaving such places for any short intervals on completion of work.

6. Personnel Safety :

6. Responsible Officer of the Repairers shall ensure that -

6.1.1. Workmen boarding oil tankers shall use safety shoes having soles made of or covered with anti – sparking material.

6.1.2. No person wearing synthetic apparel shall enter any oil tank, board any tanker ship unless the tank or the ship, as the case may be, is vapour free.

6.1.3. Workmen shall not wear metallic bracelets and rings while working on a tanker.

6.1.4. While carrying the repair item along the jetty, if a trolley issued for the purpose it shall have rubber covered wheel rims and shall be in good order.

6.1.5. Tools shall not be carried by personnel into oil tanks but lowered in a canvas bag or plastic bucket.

6.2. Toxic and explosive gases may generate in compartments such as bilge wells by the decomposition of organic matter in water. Hence all such spaces should be treated in the same way, as if they were carrying petroleum and other explosive materials.

6.3. In the event of fire inside an oil tank, due to any cause after the staging had been rigged up for work a thorough inspection of the staging shall be carried out before the work is resumed and work men are allowed to go on those staging.

6.4. The status of the tanks and other dangerous spaces in the ship shall be indicated at prominent places on the tank or space with signs for easy recognition of workmen also.

6.4.1. Red circle 30 cms. Diameter:- Which indicates that man entry and hot work are not permitted in that tank or space.

6.4.2. Yellow circle 30 cms. Diameter – Which indicates that only man entry and cold work are permitted in that tank or space.

6.4.3. Green circle 30- cms. Diameter – Which indicates that only man entry and hot work are permitted in the tank or space.

7. Miscellaneous :-

7.1. No work which involves immobilisation of engines shall be undertaken on board a tanker vessel berthed alongside on Oil Jetty.

7.2. While a person makes initial entry into a cofferdam or other confined space, another person shall be posted to stand-by near the point of entry into the space to keep watch and render summon aid, if required.

7.2.1. The person making the initial entry shall wear lifeline for the relay of distress signals as and when required.

7.3. No naked light or any other sources or ignition shall be taken near a drum or tank known to have contained paint. This precaution shall also apply to any tank or a very small enclosed compartment freshly coated with zinc rich primer.

8. Gas Welding and gas cutting -

8.1. Cylinders and Accessories.

8.1.1 No damaged or defective cylinders shall be taken in to use.

8.1.2 Defective hose or hose in doubtful condition shall not be taken into use.

8.1.3. The blow pipe and of hoses shall have protectors fitted on them or for protection against flash backs.

8.1.4. Hose couplings shall be of the type that cannot be unlocked or disconnected without an initial rotary movement.

8.1.5. Fuel hose and oxygen hose shall be distinguishable from one another.

8.1.6. Sparks lighters shall be maintained in such a condition as to ignite the gas on the first strike.

8.2. Handling and Transport of cylinders.

8.2.1. Cylinders shall not be dropped, dragged or permitted to strike one another.

8.2.2. Cylinders shall be shifted by tilting and rolling them on the bottom edgers.

8.2.3. Valves shall be kept closed and protection caps secured in placed before cylinders are move.

8.2.4. Cylinders shall not be lifter or carried by means of their valves or valve fittings.

8.2.5. When cylinders are transported by vehicles they shall be secured in place.

8.2.6. Lifting gear for cylinders shall be -

8.2.6.1. Of good construction, sound material and adequately strong and free from defects ;

8.2.6.2. Tested and full examined before being put in use by a competent person; and

8.2.6.3. Thoroughly examined by a responsible person.

8.2.7. Lifting gear shall not be loaded beyond their safe working load.

8.3. Use of cylinders and accessories.

8.3.1. Before connecting a regulator to a cylinder valve, the valve shall be opened slightly and closed immediately to remove the grit. Measures shall be taken during this operation to prevent the gas so released from reaching any possible source of ignition.

8.3.2 Cylinder valve shall be opened slowly and excessive force to shut supply shall not be applied while closing.

8.3.3 Burner torches shall be lit only by the use of spark lighters provided for the purpose.

8.3.4 Cylinder shall be kept at least four metres away from the site welding or cutting operations so that spark or hot slag or may not reach them.

8.3.5 It is to be ensured that oil grease or other combustible materials do not come in to contact with cylinders, valves, regulators and fittings.

8.3.6 Cylinders shall not be taken in to confined space.

8.3.7 Oil shall not be applied on valve fittings and cap threads.

8.3.8 Cylinders or pipe valves shall be closed when-

8.3.8.1 A defect develops in the gear.

8.3.8.2 The work is stopped for the time being or is completed.

8.3.8.3 The supply of gas ceases;or

8.3.8.4 They have to be moved.

8.3.9 Cylinder whether full or not shall be used as roller or supports.

8.3.10 Cylinders shall be placed in such a way so that they cannot become part of an electric circuit.

8.3.11 Do not test for leaks of gas with flame. Test by using soap water.

8.3.12 While carrying out heating or gas cutting work, water shall be sprayed on the metal surface having metallic continuity with the surface having metallic continuity with the surface to prevent heat being conducted to other areas treated with toxic coating or where some combustible material is stored.

8.3.13 While opening the box containing rubber hose it shall be ensured that the people in the vicinity do not smoke.

8.3.14 Gas manifolds shall bear the name of the substance they contain.

8.3.15 No acetylene generating plant shall be installed on board a ship under repair.

9. Are welding and cutting equipments :

9.1 Equipments used in welding operation shall be of good construction, sound material suitable for the work free from defect and maintained in good order.

9.2 It shall be ensured that-

9.2.1 Electrode holders are of a capacity capable of safely handling the maximum rated current required to be carried by the electrodes.

9.2.2 Electrode holders are capable of gripping the electrodes firmly.

9.2.3 All welding cable of flexible type. Completely insulated and are capable of handling maximum current requirement for the work and the maximum rated current required to be carried by the electrodes.

9.3 Cables in poor repairs shall not be used. When a cable becomes worn to the extent of exposing bare conductors, the portion so exposed shall be protected by means of suitable insulation tape.

9.4 When a structure or pipeline is continuously employed as a ground return circuit all joints shall be bonded.

9.5 No wire slings or shackles shall be used as on earth load.

10. Safety in use :

10.1 Persons employed in are welding operations and workers in the vicinity shall be provided with suitable personal protective equipments.

10.2 Welding electrodes shall not be struck against cylinders.

10.3 When live electrode holders are to be left unattended, electrodes shall be removed and the holders so placed or protected that they do not make electrical contact with employees or conducting objects.

10.4 All regulators shall be put in the 'OFF' position if out of use for any length of time.

10.5 Preservative coating giving out toxic vapours shall be scrap cleaned from and around the surface when cutting or welding is to be carried out.

10.6 Drums, Containers or hollow structure which had contained flammable substances be thoroughly cleaned of such substances before starting welding or cutting.

10.7 Welding or cutting work shall not be undertaken on the outside vicinity of the tank or other space for which only man entry gas free certificate has been obtained.

10.8 Hollow one piece cast brass buckets or jacketed vessels shall be vented either by opening a plug or by drilling a hole before starting, heating or gas welding in order to prevent building up of pressure and subsequent explosion.

10.9 All structural voids like inside of the rubber built up skegs, bilge, keets, etc., shall be vented by opening out the plugs at the tempest part and at the bottom and if possible shall be fitted with water and drained before gas cutting heating or welding is started.

10.10 At the end of each shift during lunch break or if the work is suspended for a considerable length of time the welding current shall be switched off.

10.11 Electrical equipments exposed to whether shall be adequately protected against moisture or corrosion.

10.12 Cable shall be kept clear of loads running gear and moving equipments.

10.13 Only duly authorised persons shall be permitted to install, adjust, examine, repair, displace or remove electrical equipments.

10.14 No tank or drum container shall be subjected to hot work unless the greasy contents, if any; is thoroughly cleaned. The tank or drum shall be filled with water to drive away all gases before hot work is commenced.

10.15 If a welder has to enter a tank or drum which has contained petroleum products for welding internally, the same shall be tested for gas free condition before starting the work. An approval certificate from the controller of Explosive must be obtained.

11. Ventilation :-

11.1 Before allowing workmen to enter any cofferdam, pump room or other confined space, such space shall be adequately ventilated.

11.2 When hot work is to be done in the confined space, general mechanical ventilation, i.e, blowers or local exhaust ventilation shall be arranged.

11.3 General mechanical ventilation shall be of sufficient capacity individually or collectively, as to produce at least one air change per hour and to maintain the fumes and smokes within safety limits.

11.4 Local exhaust ventilation shall consist of freely movable hoods placed as close to the person carrying out hot work as is possible. The system shall be of sufficient capacity and so

arranged as to remove fumes and smoke at the source and keep their concentration at the breathing zone within safety limits.

11.5 Contained air exhaust from the working space shall be discharged in to the open air or otherwise clear of the course of intake.

11.6 All air replacing that withdrawn shall be clean.

11.7 Oxygen from the cylinder or torch shall be used for ventilation purpose.

11.8 When a confined space is provided with only such a type and so arranged as to permit free passage of workmen through the opening

11.9 When a confined space cannot be adequately ventilated workmen employed wherein shall be provided with air respirators.

11.10 General mechanical or local exhaust ventilation shall be provided whenever welding, cutting or heating of metals of toxic significance like those mentioned below is carried out :-

(a) Zinc bearing base of filler metals coated with zinc.

(b) lead based metals.

(c) Cadmium bearing filter materials.

(d) Chromium bearing metal or coated with chromium bearing materials are used.

12. Use of electrical Equipment :-

12.1 General.

12.1.1 All portable electrical equipments shall be carefully examined for possible defects before being used. Special care shall be taken to ensure that insulation is undamaged and that cable are securely attached. All equipment shall be efficiently earthed.

12.1.2 When a tanker is not wholly gas free, the recommendation set out in 12.2 shall be observed.

12.1.3 Electric hand lamp shall not be taken inside the pump room which is not certified gas free for hot work.

12.1.4 Self contained battery fed or equivalent lamps of certified type are to be used in any any dangerous space.

12.1.5 For temporary electric lights, distribution boxes shall be of enclosed type and such boxes shall be fitted with cartridge fuses instead of open fuses even if the vessel is gas free.

12.2 Hand torches and Hand lamps-

12.2.1 Only self contained battery fed hand torches or hand lamp of and approved type shall be used within the restricted area enclosing all tanker berth and on board a tanker while at the berth, such torches or lamp shall be marked and covered by a certificate issued by a appropriate authority and shall be well maintained.

12.2.2 The use of portable electrical equipments, on wandering leads shall be prohibited over the tank deck and within the cargo tanks and adjacent spaces unless-

12.2.2.1 The compartment over which or within which the equipment and / or lead is to be used is gas free throughout the period during which the equipment is in use.

12.2.2.2 Compartments adjacent to it are also gas free.

12.2.2.3 All tank openings to other compartments if not gas-free are closed and remain so.

12.2.2.4 The equipment and circuit of any wandering lead is intrinsically safe.

12.2.2.5 The electrical equipment is wholly within an approved explosion proof container, an approved air pressurised container or an approved safety torch.

12.3 In hazardous areas electrical equipments used shall be FLAME PROOF.

12.4 When giving 3 phase A.C supply to the ship from shore shall be ensured that a four core cable is used and the EARTH core is connected to the ship's steel structure.

12.5 Cables used for power supply to and in the ship shall be of proper rating and kept in good condition and to full insulation.

13. Fire Fighting:

13.1 Adequate number of fire extinguishers and buckets filled with water or sand shall be readily available when hot work operations are in progress.

13.2 Exit signs shall be provided indicating escape routes leading to deck from all places of work.

13.3 Fire petrol shall be arranged and the entire ship shall be covered at least once in an hour.

13.4 In the ship under repair, responsibility of initial fire fighting rests with the master of the vessel.

14. Smoking:

14.1 Personnel when working about the ship shall not carry match or particularly lighters and the risk of doing so shall be impressed upon all.

14.2 In place where smoking is authorised suitable containers shall be made available for extinguishing cigarettes and disposing of matches.

c.6 Penalties- Any person contravening any of the above regulations is punishable with fine which may extend to five thousand rupees and for every subsequent offence with fine which may extend to twenty thousand rupees.

SCHEDULE.**DECLARATION FORM****Refer Appendix C Code C5.**

(To be filled in by the master of the vessel, in duplicate)

I. The master of the vessel s.s/m.v of gross tonnage with registration No..... have entered the harbour on The particulars regarding the cargo and other information are given as under :-

1. Type of cargo carried :-

(a) General (Dry)

(b) Chemicals

(c) Petroleum oil

(d) Explosive (other dangerous cargo)

2. The last cargo was of petroleum / dangerous / hazardous nature and -

(a) Date and Port of loading.

(b) Date and Port of discharging.

(c) Action taken to clean compartment to ensure safety for working.

3. Cargo oil tank washing practice followed (i.e., number of cargo tank washed) between one cargo discharge and the next loading.

Please state pressure and the temperature of the water jet used.

4. The present condition of the tanks, pump, rooms and other spaces where repair is intended to be carried out :-

(a) Is the vessel certified vapour free ? By whom ?

(with data and certificate number)

(b) Number of tanks washed by butter- worthing.

(c) Number of tanks gas freed.

(d) Are pump room and other places where work has been authorised -

(i) Gas free for man entry

(ii) Gas free hot work

5. State the number of tank carrying slops, if any.

6. What is the quantity and quality of oil cargo resued and slop on board and the tank numbers ?

7. State the location of the cross bunkers and other hazardous chemicals like hydrazine, etc., carried for ship`s use, if any.

8. State whether the fire fighting services are in working conditions :-

(a) Smothering steam.

(b) Fire pump

(c) Co2 and other equipments

(d) Portable fire fighting equipments.

The above information are true to the best of my knowledge.

For repairers use only.

Master of the vessel

I have personally gone through the contents of this perform and I certify that necessary safety precautions in accordance with **SAFETY REGULATIONS FOR HOT WORK** have been taken for carrying out the repairs / other connected work.

A senior responsible officer of the repairer who has been delegated with the requisite authority by the ship repairer.

N.B- one copy of this form is to be sent to Marine Department prior to commencement of work.

Administrative Office.

Tuticorin – 628 004.

Dated: 8th October 1986,

(Sd/-) Chairman,

Tuticorin Port Trust

MINISTRY OF SURFACE TRANSPORT**(Ports Wing)****NOTIFICATION****New Delhi, 9th August, 1989**

G.S.R. 742 (E) - In exercise of the powers conferred by sub-section (i) of Section 124 read with Sub-Section (i) of Section 132 of the Major Port Trusts Act, 1963, (38 of 1963), the Central Government hereby approve the Tuticorin Port Trust (Handling of Freight containers containing Dangerous/ Hazardous Cargo) Regulations, 1988, made by the Board of Trustees of Tuticorin Port in exercise of the Powers conferred on them by Section 123 of the said Act and Published in the Tamil Nadu Government Gazette dated 4th January, 1989, and 11th January, 1989 and errata dated 22nd March, 1989 as detailed in the schedule annexed to this Notification.

(PR – 16012/10/88 -PG)

YOGENDRA NARAIN, Jt. Secy.

SCHEDULE**TUTICORIN PORT TRUST****NOTIFICATION**

In exercise of the powers conferred by clause (n) of Section 123 of the Major Port Trusts Act, 1963, (38 of 1963), of the Board of Trustees of the Port of Tuticorin, hereby makes the following regulations namely, the Tuticorin Port Trust (Handling of Freight Containers Containing Dangerous/Hazardous Cargo Regulations, 1988 subject to the approval of the Central Government and the same are published for public information.

PART I - PRELIMINARY:

1. Short title, extent and commencement

- a) These regulations may be called the Tuticorin Port Trust (Handling of Freight Containers Containing Dangerous/Hazardous Cargo) Regulations, 1988.
- b) They extent to the whole area of Port of Tuticorin.
- c) They shall come into force on the date of their publication in the official Gazette.

2. DEFINITION:

For the purpose of these Regulations:-

- 2.1. 'Closed Container' means a Container which can be laden only through one or more doors in the side or end walls.
- 2.2. 'Container Handling Equipments' mean the equipments used for safe handling of containers such as Transfer cranes, Top lift Trucks Fork lift trucks or any other equipments fitted with special device for lifting containers.
- 2.3 ' Container Parking Yard' means the yard in which the containers are stacked.
- 2.4 ' Container ship' means a ship in which containers are loaded either below the deck or above the deck and shall also include container oriented ships handling cargo in break bulk form
- 2.5 'Container Space' means a space occupied by one container equivalent to one TEU which measures 6.1 mts x 2.4 mts. X 2.4 mts. This distance may be occupied by a neutral container or containers.
- 2.6. 'Dangerous cargo Shed' means a specially constructed shed used for keeping dangerous/hazardous cargo.
- 2.7 Deputy Conservator' means the Deputy Conservator of the Tuticorin Port Trust.

- 2.8. 'Freight Container' for dangerous cargo hereinafter called container means an article of transport equipment specially designed and constructed for the purpose of transport of dangerous goods by one or more modes of transport.
- 2.9 'I.M.O' Code means the Code of Practice published by the International Maritime Organisation on the International Maritime Dangerous Goods.
- 2.10. 'I.M.O. (IMCO)' means International Maritime Organisation.
- 2.11 'Loading Unloading means the placing of a container aboard a ship and its removal therefrom.
- 2.12 'Major Ports' means the Ports notified as Major Ports by the Ministry of Surface Transport, Government of India.
- 2.13 'Minor Ports' means the Ports governed by the respective State Government and Union Territory of India.
- 2.14 ' Open top container' means a container with the bottom, side and end walls but having no roof.
- 2.15 'Packages ' means receptacles for dangerous goods and receptacles containing dangerous/hazardous cargo.
- 2.16 'Packing and Unpacking' means the placing of packages containing dangerous /hazardous cargo into a container and their removal therefrom.
- 2.17 ' Platform container' means a type of loadable platform having the same overall external length and width as the base of series/ containers and equipped with top and bottom corner fittings located as on those containers so that some of the same securing and lifting devices may be used.

2.18 'Port' means the Port of Tuticorin.

2.19 ' Safety Officer' means the Deputy Conservator of Port of Tuticorin.

2.20 'Stuffing & Destuffing' means filling up the containers with cargo and removal of cargo from the container

2.21 ' Tank Container' means container especially build to transport and distribution of liquids and gases in bulk in accordance with such conditions as may be required.

2.22 'Transport Tractor – Trailer' means a combination of transport tractor with trailer coupled together permanently or temporarily designed primarily for the transportation of goods by road.

3. DANGEROUS / HAZARDOUS CARGO:

For the purpose of these Regulation, dangerous / hazardous cargo shall include all substances classified as such by the International Maritime Dangerous Goods code of the International Maritime Organisation, London.

4. CLASSIFICATIO OF DANGEROUS/ HAZARDOUS GOODS:-.

For the purpose of these Regulations, dangerous/ hazardous goods shall be divided into the following classes, based on the I.M.D.G. Code Classifications :

Class 1 - Explosives

Class 2 - Gases; compressed; liquified or dissolved under pressure.

Class 3 - Inflammable Liquids

Class 4.1 - Inflammable Solids.

Class 4.2 - Substances liable to spontaneous combustion.

Class 4.3 - Substances which in contact with water emit inflammable gases.

Class 5.1 - Oxidising Substances

Class 5.2 - Organic Peroxides

Class 6.1 - Poisonous (Toxic) substances

Class 6.2 - Infections Substances

Class 7 - Radio- active substances

Class 8 - Corrosives.

Class 9 - Miscellaneous dangerous substances i.e. And other substance which experience has shown or may show to be of such dangerous as to be treated as Dangerous goods.

5. GENERAL ACCEPTABILITY OF SHIPS CARRYING DANGEROUS/ HAZARDOUS CONTAINERS INTO THE PORT

5.1 All dangerous/hazardous cargo entering the Port area shall be classified, packaged labelled and /or marked in accordance with the IMO Code and be declared by the ships/Shipper accordingly. The container shall also be marked such and shall be accompanied by a Packing certificate issued by the Operating Company indicating the content.

5.2 Containers used for the carriage of dangerous/hazardous cargo shall be of adequate strength to resist the possible stress imposed by the conditions of the services in which they are deployed and they shall be properly and regularly maintained.

5.3. Stowage: No ship carrying containers of dangerous/hazardous cargo on board shall enter the Port unless the containers are stowed and documented according to Section 12 of IMO Code.

6. RESTRICTION ON ENTRY OF SHIPS CARRYING CERTAIN CLASSES AND QUANTITIES OF DANGEROUS/ HAZARDOUS CARGO:

6.1 Ships carrying explosives shall be allowed only at such of the anchorages or areas notified by the Port Authority and only in such quantities as may be permitted to be handled inside the Port area by the Port Regulations applicable.

6.2 No Cylinder containing gases compressed, liquified or dissolved under pressure shall be permitted to be brought inside the Port unless such cylinders are permitted for import/export by the Chief Controller of Explosives.

6.3 Dangerous goods in the containers of the following class and type shall be limited aboard any ship to such quantity as may be notified by the Port authority in no case exceeding 50 Tonnes net contents being the total of all classes.

Class 2 - Liquified inflammable or Poisonous Gases.

Class 3.1 - Inflammable Liquids e.g. Carbon -di-sul-phide

Class 4.2 - Spontaneously Combustible Liquid e.g . Aluminium Alkyls.

Class 6 - Tetramethyl Lead Fuel/Additives

Class 6.1 - Poisonous Toxic Substances

Class 6.2 - Infectious substances

Class 8 - Corrosives

Class 9 - Miscellaneous dangerous substances.

6.4 In all such cases, handling of tank containers shall be limited to day light hours and subject to the consignee; taking delivery from the port premises without depositing them for any length of time within the port premises.

6.5 The Deputy Conservator of the Port or his authorised representative specially nominated by him for the purpose of these Regulations shall be the Sole Authority to give permission for landing or loading dangerous/hazardous cargo in containers.

7 ADVANCE NOTIFICATION;

7.1 Ships: The Master or the ship Owner or Agent shall inform the Port Authority atleast 48 hours prior to arrival of the ship with dangerous/hazardous goods in containers aboard the ship and those to be discharged at the port.

7.2 An application for permission to land or load dangerous/hazardous cargo shall be given by the Steamer Agents or Consignor/Consignees in an application made in triplicate to Deputy Conservator of the Port at least 48 hours in advance. The application shall include a complete list of all substances with their true chemical names and IMO Code number. The list shall furnish complete details including their full technical names, quantities, mode of packaging, IMCO Classification and other relevant data. The items included in this list shall be serially numbered for reference and follow up correspondence Application for issue of permits for inflammable liquids including petroleum as defined in the Petroleum Act shall furnish information about the flash points of such liquids and whether such liquids are miscible with water or not.

7.3 One copy of each such application and the list shall be given each to the Deputy Conservator of the Port, Container Terminal Manager, Traffic Manager.

7.4 A copy of the Ship's cargo manifest shall also be furnished to the Deputy Conservator of the Port and Container Terminal Manager.

7.5 Exports: The intention to export dangerous/ hazardous cargoes through containers shall be duly informed to the Port Authority prior to their delivery at the berth at least 48 hours in advance and permission obtained from the Deputy Conservator before the dangerous/hazardous cargoes to be stuffed in containers are moved into the Port.

7.6 Transit: The same prohibitions and restrictions that are applicable in respect of dangerous/hazardous cargoes for loading or unloading within the Indian Ports

shall be applicable for cargo in transit.

8. Berthing:

8.1 Any container ship carrying with dangerous/Hazardous cargo on board shall only after permission to berth is granted by the Deputy Conservator, be berthed at the designated berth.

9. The dangerous/ Hazardous cargo containers shall be stacked in either of the following ways.:

(a) Stack the containers separately in a specially designated area which has been constructed for storage of dangerous/ hazardous cargo and provided with fire fighting arrangements.

OR

(b) Stack the containers in the Parking Yard itself by providing proper segregation as per IMO code. The segregation method contained in IMDG is shown in Appendix 'A' hereto and the segregation method with tyre-mounted Transfer cranes contained in IMO code, is shown in Appendix 'B' hereto.

9.1. The Port Authority shall devise a suitable segregation plan as regards the Classification of the cargo and the type of handing in the Terminal.

10. STUFFING AND DESTUFFING OF CONTAINERS : -

10.1 The Port Authority shall designate Container Depot/Container Freight Station suitable to handle dangerous/Hazardous cargo. The stacking of containers shall be in accordance with Regulations 9 above. The stuffing destuffing operation shall follows strictly the IMO Guidelines for the packing of dangerous hazardous cargo in a Freight Container and shall comply with Classes 12 & 13 of IMDG Code shown in Appendix – C hereto .

10.2 In case stuffing or destuffing is done in an area in the vicinity of the stackyard a minimum distance of 30 metre around shall be maintained.

10.3 Before Stuffing: Containers into which dangerous cargo are to be stuffed shall be examined visually for damage and if there is evidence of any material damage the container shall not be packed. Containers shall be clean dry and fit for use. Irrelevant cargo labels shall be removed or masked over before stuffing begins.

10.4 Information shall be provided by the Shipper about the hazardous properties of the dangerous cargo to be handled. The shipper shall also ensure that dangerous cargo is stuffed marked and labelled in accordance with the IMDG Code. No dangerous cargo shall be handled unless packaged marked and labelled in accordance with these Regulations.

10.5 No dangerous cargo shall only be handled, stuffed and secured except under the direct and identifiable supervision of a responsible person deputed by the Consignor or the Consignee as the case may be, who is familiar with the risks involve and has knowledge of the emergency measures to be taken and who shall also ensure that necessary protective equipment is available.

10.6 Smoking shall be strictly prohibited in the vicinity of the stuffing and de-stuffing area.

10.7 Suitable fire precaution measure shall be taken.

10.8 Packages shall be examined and any found to be damaged, leaking or sifting shall not be stuffed into a container, Packages showing evidence of staining etc., shall not be packed into a container without first determining that it is not unsafe or unacceptable to do so. Water or other matter adhering to packages shall be removed before stuffed into a container.

10.9. If cargo is palletized or otherwise unitised they shall be compact and shall be secured in a manner unlikely to damage the individual packages comprising the unit load. The materials used to band the unit load together shall be compatible with the substances unitised and shall retain their efficiency when exposed to moisture, extremes of temperature and sunlight.

10.10 In case electric power is used for any equipment or machinery in the area where containers are stacked or stuffing and destuffing is carried out, the electric supply systems in the equipment or machinery shall be of a type which will not cause any spark likely to cause hazard.

10.11 A container intended to carry dangerous cargo under temperature control shall be inspected and operated to ensure that the machinery is in proper working order before the shipment is made. A record of the inspection shall be maintained.

10.12 STUFFING AND SECURING:

Special care shall be taken during handling to ensure that the packages or receptacles are not damaged.

10.13 If a package containing dangerous cargo is damaged during handling so that the contents leak out, the immediate area shall be evacuated until the hazard potential can be assessed. The damaged packages shall not be transported.

10.14 No repacking shall be done with in the Port premises if there is leakage from dangerous cargo likely to cause any explosion, spontaneous combustion, poisoning or similar danger, personnel shall immediately be moved to a safe place and the emergency response organisation (e.g. the Fire Service, Pollution Control) shall be notified.

10.15 Dangerous goods of in compatible substances shall not be stuffed in the same container. Guidance of both a general and particular nature on this matter is found in the IMDG Code.

NOTE: It is also possible that in some instances, goods of the same class shall not be stuffed into the same container if they are incompatible, For example, Peroxides and Permanganates are both oxidising agents (Class 5.1). However, they may interact dangerously in the event of an accident.

10.16 Dangerous goods likely to cause damage by taint, odour or contamination shall not be stuffed in the same container with good so susceptible to such

damage.

10.17 When dangerous cargo, particularly those of Class 6.1 (Poisons) and Class 8 (Corrosives) are handled, consumption of any form of food or drink shall be prohibited.

10.18 Special taking instructions detailed on individual packages or otherwise available shall be strictly observed (e.g.) Goods marked 'Protect from frost' shall be stowed away from the walls of the container.

10.19 Goods marked 'this way up' shall be packed accordingly. When dangerous goods consignment forms only part of the load of a container, it shall preferably be stuffed so as to be accessible from the doors of the container.

11. MARKING AND LABELLING:

11.1 The containers shall be sealed prior to despatch. However, they shall not be locked unless specifically required and agreed to by the container operation. In such cases a key shall be readily available at all times.

11.2 Containers in which dangerous good are stuffed shall bear IMCO Dangerous Goods Code Class Labels (Placards) not less than 250mm x 250mm in size, and where not required by IMDG Code, there shall be atleast four such Labels (Placards) placed externally in conspicuous places, one on each side and one on each end Labels for the sides of the container shall be affixed in such position that they are not obscured when the container doors are opened.

11.3 The container shall also bear externally the correct technical name of each of the dangerous substances packed therein.

11.4 Additional labels as may be required by rail and road transport authorities shall be provided.

12. STUFFING CERTIFICATE:

12.1 Those responsible for the stuffing of the dangerous cargo into a container shall provide a 'Container stuffing Certificate' certifying that the stuffing has been properly carried out and embodying the following:-

- (i) That the container was clean, dry and apparently fit to receive the goods.
- (ii) No incompatible goods have been stuffed in the container.
- (iii) All packages have been externally inspected for damage and only dry sound packages packed.
- (iv) All packages have been properly stuffed in the container and secured and suitable securing materials used.
- (v) The container and packages are properly marked and labelled.
- (vi) The dangerous cargo in the container are those for which acceptance has been specifically obtained for the shipment in question.
- (vii) The consignor of the dangerous cargo has in each case issued a dangerous cargo declaration as to the nature of the hazard and that the cargo is suitably packaged for transport by sea.
- (viii) The Container Stuffing Certificate shall be forwarded with the

container to be available at the time of loading on board the ship.

(ix) The permission of the Deputy Conservator has been obtained for stuffing the cargo.

13. GENERAL ADVICE ON RECEIPT OF CONTAINERS CONTAINING DANGEROUS/HAZARDOUS CARGO FOR STUFFING/DESTUFFING

13.1 Containers of dangerous cargo shall be destuffed with care, always bearing in mind that the cargo may have been damaged in transit. Before the doors are opened, this possibility shall be borne in mind in relation to the properties of the cargo. For example, depending on the contents of the container, there may exist the possibility that leakage has caused unsafe concentration of toxic, inflammable or explosive vapour, or to have produced an oxygen enriched (or depleted atmosphere). If there is evidence that damage has occurred and such a condition exists, expert advice must be sought before commencing to destuff the containers.

13.2 Any container with dangerous cargo particularly toxic products, shall be ventilated before unpacking commences, that is the doors shall be kept open for an adequate period.

13.3 After a container containing dangerous goods has been unpacked, particular care shall be taken to ensure that no hazard remains. This may entail special cleaning, particularly if toxic spillage has occurred or is suspected. When satisfied that a container offers no hazard, the dangerous goods labels shall be removed.

13.4 If any container shows signs of heat it shall be removed to a safe place and Fire Service immediately notified. Care shall be taken to see that any fire fighting methods to be used are suitable for the cargo in question.

13.5 After destuffing the consignees shall be bound to return the containers in a clean and suitable manner for transport of all classes of cargo.

14. DESTUFFING OF DANGEROUS HAZARDOUS CARGO

14.1 Import of any dangerous cargo shall be notified to the Port Authority by the Operator Prior to the arrival of the container within the Port.

14.2 The import cargo documents shall have to be endorsed with a 'Dangerous Goods' stamp by the operator or the person responsible for the documents before the container is discharged.

14.3 Dangerous cargo containers shall be destuffed with care, always bearing in the mind that the cargo may have been damaged in transit. Before the doors or opened, this possibility shall be borne in mind in relation to the properties of the cargo. If there is evidence that such damage has occurred expert advice must be sought before commencing destuffing of the container.

14.4 As cargo is destuffed and checked, it shall be separated according to its class and placed in the correct storage area. Any discrepancy in respect of marks label or type of packing shall be reported to the Supervisor of the Port on duty and the operating company shall be informed at the earliest opportunity.

14.5 Areas for the storage of the various classes of dangerous cargo shall be clearly defined and wherever possible stowage shall be provided in the Hazardous cargo shed. In any event dangerous goods shall not be permitted to be stowed with in the harbour without the written permission of the Safety Officer or his authorised representative.

14.6 Removal of import dangerous cargo shall be effected immediately.

14.7 All dangerous cargo labels shall be removed as soon as the container can be declared non hazardous.

15. Total quantity of dangerous cargo in a designated area shall not exceed five container loads.

16. FIRE FIGHTING:

Special fire fighting provision shall be made in the designated areas where dangerous/hazardous cargo containers are kept. These shall include.

(i) The provision of all fire fighting equipment as required by national or local regulations is properly maintained and fully operational condition.

(ii) The provision of clear information as to emergency routines to be followed and a regular practice of such routines.

(iii) Good liaison between the container base and the local fire brigade. The means to call the Fire Service shall be readily available at all times.

(iv) Proper maintenance and cleanliness. For example, patches of oil mixed with sawdust are a potential source of ignition, heaps of rubbish can be readily ignited, piles of dunnage can assist in the rapid spread of fire etc.

(v) Proper care shall be taken to minimise sources of ignition such as smoking, unprotected or ill maintained electrical installations or repair equipment.

(vi) Proper care of machinery and its operations, particularly where re-fuelling is concerned.

(vii) Clear access to fire appliances within the premises shall be maintained and a route kept clear at all times to allow rapid access for emergency vehicles from outside.

17. SPECIAL EQUIPMENT:

17.1 Adequate and proper breathing apparatus shall be provided and men trained in its use kept in readiness so as to render immediate assistance should any personnel be affected by noxious fumes.

17.2 Protective clothing, comprising rubber boots and gloves and spron together with oilskins shall be available for use in dealing with split material.

17.3 Receptacles of inert material shall be available for use in minimising the spread of split liquid.

17.4 Nothing in this section shall prevent calling upon to proper emergency services as soon as any trouble arises.

18. LIGHTING:

18.1 Wherever and whenever dangerous goods are handled or other goods handled adjacent to dangerous goods, adequate and flame proof lighting shall be provided.

18.2 It shall be remembered that labels may appear to change colour in artificial light.

19. PENALTIES:

Any person contravening any of the above Regulations is punishable with fine which may extend to Rs.10,000/- for the first contravention, and with a further fine which may extend to Rs.1000/= for every day after the first during which the contravention continues.

SEGREGATION TABLE**APPENDIX (A)**

1.4 3.1

1.5 2.1 2.2 3.2 3.3 4.1 4.2 4.3 5.1 5.2 6.1 7 8

Explosives	1.4		2	1	2	2	2	2	2	2	2	X	2	2
	1.5													
Inflammable Gases	2.1	2		X	2	2	1	2	1	2	4	X	2	1
Non-Inflammable Gases	2.2	1	X		2	2	X	1	X	X	2	X	1	X
Inflammable Liquids	3.1	2	2	2			2	2	2	2	3	X	2	1
	3.2													
Non-Inflammable Liquids	3.3	2	2	2			1	2	2	1	3	X	2	1
Inflammable Solids	4.1	2	1	X	2	1		1	1	1	2	X	2	1
Spontaneously Combustible substances	4.2	2	2	1	2	2	1		1	2	2	X	2	1
Substances which are dangerous when wet	4.3	2	1	X	2	2	1	1		2	2	X	2	1
Oxidizing Substances	5.1	2	2	X	2	1	1	2	2		2	1	1	2
Organic Peroxides	5.2	2	4	2	3	3	2	2	2	2		1	2	2
Poisons	6.1	X	X	X	X	X	X	X	X	1	1		X	X
Radioactive Substances	7	2	2	1	2	2	2	2	2	1	2	X		2
Corrosives	8	2	1	X	1	1	1	1	1	2	2	X	2	
Miscellaneous Dangerous Substances	9													

Numbers in the table are defined in the next page.

The number in the table at pre-page are defined as follows:

IMDG Code Definition Container base Segregation

1. Away from : Not touching each other nor overtopping one with the other.

2. Separate from : 3 Metres (10 ft.) apart unless separated by fire resistant wall.

3. Separated by a complete : 3 Metres (10 ft.) apart unless separated by compartment fire resistant wall.

4. Separated longitudinally by : In different sections of the container base an intervening complete separated by a roadway or other effective fire compartment block, or at least 25 Metres (30 ft.) apart.

5. No general segregation : If in doubt refer to the IMDG Code O. The Blue recommended Book for particular substance.

1. Storage space should also be selected as between outside and inside the buildings in accordance with the following guidelines:

1.1 Commodities which the carriage by sea rules required to be stowed only on the deck of a ship should not be stored inside a building unless the building is specially equipped for such purpose.

1.2 Table:

IMCO Class Description Storage

1.4 Safety Ammunition Inside – Lock-up

1.5 Very insensitive substances Inside – Lock-up

1. Other than Safety Ammunition & Not to be stored except by special Class 1.5 arrangement

2. Compressed Gases

-- Inflammable Outside

-- Poisonous Outside

-- Inert Either

-- small cylinder (e.g. Lighter fuel) Inside

3. Inflammable liquids

3.1 Low F.P. Below (10o C) Outside
(0o F)

3.2 Intermediate F.P – 18o C Outside
Upto 23o C (0o – 73o F) Small quantities inside

3.3 High F.P. 23o C – 61o C Either

(73o – 141o F)

4.1 Inflammable solids Either

4.2 Spontaneous Combustible Outside (Keep dry)

4.3 Emit inflammable Gases in contact Outside (Keep dry)
with water

5.1 Oxidising Substances Large quantities outside small quantities
(Less than 2 Tons)
either

5.2 Organic Peroxides Outside (may need to be kept cool)

6.1 Poisons (Toxic) Either (look for other hazards and
store accordingly)

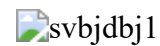
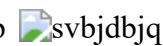
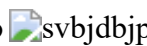
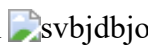
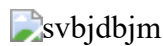
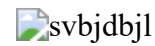
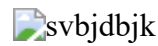
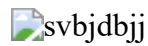
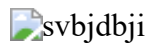
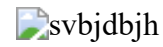
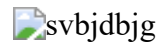
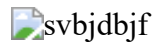
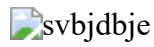
6.2 Infectious Accept only by special arrangements

7. Radio Active According to Transport Class &
A.E.A. Recommendations

8. Corrosives Either (consider degree of corrosive
and secondary hazard)

9. Miscellaneous (not to be construed According to particular hazard and
as necessary low hazard) quantity.

IMCO SEGREGATION



C.F.S.: All hazardous containers to be placed tier 1 if possible, not exceeding tier 2 for Fire Fighting purposes. General containers can still use hazardous slots in order to utilise all the blocks. All hazardous containers to have doors facing outwards. Port Safety and Port Fire Officers to have fire plans and segregation plans of container yard, giving fire hydrant positions. These Officers must also know the hazardous containers and contents in the yard at any one time. It would also be convenient if these official had a slot board (wood will do) with 'T' cards carrying cargo information. Cards could also be marked with the type of equipment needed to deal with an accident.

APPENDIX `C'

Copy of Section 12 and extract of Section 13 of

INTERNATIONAL MARITIME DANGEROUS GOODS

C O D E

SECTION 12 CONTAINER TRAFFIC:

12.1.1. The recommendations of this text apply to containers in which packages of dangerous goods are loaded.

12.1.2. In container traffic a number of small packages is enclosed for transit in a large box fitted with doors and lifting points. The size and construction of the container may vary with the trade in which it is employed. Many containers are the demountable bodies of road or rail vehicles.

12.1.3. Containers used for the carriage of dangerous goods should be of adequate strength to resist the possible stresses imposed by the conditions of the services in which they are employed.

12.1.4. Dry dangerous goods in bulk may be carried in containers specially approved for this purpose by the competent authorities.

12.2. Permitted Shipments:

12.2.1. Dangerous goods should only be transported in containers when they are packed as recommended in this code except as provided in Section 12.1.4.

12.2.2. Containers in which dangerous goods are loaded should not be transported on board passenger vessels unless such goods are specifically permitted by this Code to be so transported.

12.2.3. A dangerous substance should not be stowed in the same container with any other substance with which it is deemed incompatible by this Code unless the requirement for segregating those substances is not more stringent than "away from" (as defined in Section 15.8) and such segregation within the container can be assured during transport.

12.3. Container Certification:

12.3.1. The requirements set out in Section 9 of the General Introduction to this code with respect to the documentation of packaged dangerous goods should be met.

12.3.2. Containers in which dangerous goods are loaded should be examined externally for damage, signs of leakage or shifting of contents. Any container found to be damaged, leaking or shifting should not be accepted for shipment until repairs have been effected and or damaged receptacles removed.

12.4. Marking and Labeling:

12.4.1. Containers in which dangerous goods are loaded should bear labels as specified for each class in this Code, affixed on the outside, in a conspicuous place.

12.4.2. The special dangerous goods list or manifest required by Regulation 3(c) of Chapter VII of the Convention) should indicate clearly those containers in which dangerous goods are loaded and their location in the ship. The total quantity of each dangerous substance, in addition to the description as required under the above Regulation, should also be shown in the list or manifest.

12.4.3. Individual packages loaded in a container are exempt from the labelling requirements but the use of dangerous goods labels on such packages is recommended in case they need to be quickly identified in an emergency.

12.5 Stowage of Containers:

12.5.1. Containers in which dangerous goods are loaded should generally be carried and segregated in accordance with the stowage requirements laid down in this code for such goods, which are required to be stowed on deck are carried in a container, then that container must also be stowed on deck.

12.5.2. Containers in which dangerous goods are loaded should also be generally segregated in accordance with this code. In those cases where such segregation is not possible by virtue of the construction of ship (e.g. where there are intervening bulkheads on a container deck) alternative segregation arrangements may be accepted provided the competent authority is satisfied that an equivalent degree of safety is thereby assured.

12.5.3. Packages of dangerous substances and any other goods within the containers should be adequately braced and secured for the voyage. The packages should be loaded in such a way that there will be a minimum likelihood of damage to fittings during transportation. Such fitting on packages should be adequately protected.

12.5.4. Containers equipped with refrigerating or heating equipment, and which give rise to a toxic and/or inflammable hazard should be stowed on deck; they may be stowed and operated under deck provided that adequate ventilation and other safety precautions, to the satisfaction of the competent authority, are observed.

SECTION 13 – PORTABLE TANKS:

13.1. Applicability and Definitions:

13.1.1. Applicability

13.1.1.1. The recommendations of this section apply to portable tanks (as defined in 13.1.2.1.) fitted with pressure relief devices, intended for the carriage of dangerous liquids.

13.1.1.2. Attention is drawn to the fact that no provisions have been included in respect of any additional fire fighting and protection measures or other special equipment which may be necessary on ships carrying portable tanks.

13.1.1.3. Portable tanks of types other than those covered by this section may be considered for the carriage of dangerous liquids under special conditions to be prescribed by the competent authority.

13.1.1.4. Where exceptional hazards exist for an individual substance, additional requirements may be specified by the competent authority.

13.1.2. For the purposes of this Section a portable tank means a tank having a capacity of 450 Litres (100 gallons) or above for the transport bulk liquids with a vapour pressure of less than 3kp/cm² – Absolute (43 Pisa) at a temperature of 50o C (122o F). The tank should not be permanently secured on board the ship and its contents should not be loaded or discharged

while the tank remains on board. The loaded tank should be capable of being lifted on end off the ship.

13.1.2.2. Maximum allowable working pressure is the maximum gauge pressure permissible at the top of a tank in its operating position. This pressure is based on calculations for every element of the vessel using nominal thickness exclusive of:

(a) Allowances for corrosion, and

(b) thickness required for loading other than pressure.

13.1.2.3. Start-to-discharge pressure is the value of static pressure below which no bubbling occurs when air pressure relief valve is tested by means of air under a specified water seal on the outlet.

13.1.2.4. Total containment pressure is the sum of the vapour pressure in kp/cm^2 (psig) at a reference temperature at the liquid surface as specified by the competent authorities concerned, plus the effect on total pressure of the partial pressure contributed by the presence of air and other gases in the vessel space, the liquid expansion as determined by the bulk mean reference temperature, and the effect of the solubility of air and other gases in the liquid, plus a minimum dynamic pressure of 0.35 kp/cm^2 (5 psig). In no case should the total containment pressure be taken to be less than 1.75 kp/cm^2 (25 psig)., Where no acceptable data for solubility exists, it should be neglected.

13.11. Testing and inspection of Portable Tanks:

13.11.1. Such tests and inspections as the competent authority may require should be carried out during construction.

13.11.2. Every portable tank, and all piping, valves and other accessories thereof which are subject to the pressure of the tank contents, except pressure relief devices, should be tested by complete filling (including domes, if any) with water or other liquid having a similar density and applying a pressure of not less than $2 \frac{1}{2}$ times the maximum allowable working pressure. The details of the test should be as prescribed by the competent authority.

While under pressure, the tank should be inspected for leakage corroded areas, dents, or other conditions which indicate weakness that might render the tank unsafe for transportation service and it should not be placed in or returned to service if any evidence of such unsafe condition is discovered until the tank etc., has been repaired and the test repeated and passed successfully.

13.11.3. A tank should not be accepted for shipment unless the pressure relieving devices have been examined by a competent person in the previous six months. A visual and external examination may suffice. However, for those cargoes which tend to tender the devices in operative, the competent authority may require more frequent examination.

13.11.4. Tanks and their fitting should be inspected internally and externally with sufficient frequency and with due regard to the contents carried, but in no case at intervals greater than 2 ½ years, under conditions prescribed by the competent authority.

13.11.5. All pressure relief valves should be retested and inspected at intervals of not more than 2 ½ years, with due regard to the contents carried and under conditions prescribed by the competent authority.

13.11.6. Tanks should be retested hydraulically at intervals of not more than five years under conditions prescribed by the competent authority. Other types of retest may be permitted, exceptionally, as prescribed by the competent authority.

13.12. Marking the Portable Tanks:

13.12.1. Metal identification plate. There should be an every portable tank a rustproof metal plate permanently attached to the tank in a place rapidly accessible for inspection Upon the plate should be marked by stamping, embossing or other means, at least the information indicated below. This plate should not be painted so as obscure the markings thereon.

Manufacturer's name

Date of Manufacture

Tank Serial No.

Maximum Allowable working pressure .. kp/cm² (psig).

Test pressure kp/cm² (psig)

Total water capacity (gallon)

Maximum weight of liquid to be carried (kilos-tons)

Maximum Gross weight Kilos(tons) Control or permit or permit identification of competent authority Hydraulic test date

Authority who witnessed the hydraulic test Code rules or regulations (by name or other identification under which tank is designated

13.12.2. Test date and markings:

13.12.2.1. the test of the last hydraulic test and the witnessing authority mark should be clearly stamped on the metal identification plate specified above.

13.12.2.2. The date of the last visual examination as prescribed by section 13.11.4 should be visibly marked on the tank in a manner satisfactory to the competent authority.

13.12.3. Special purpose tanks, Special purpose tanks should be marked to indicate the substance they are permitted to carry.

13.13. Certification of Portable Tanks:

13.13.1. A certificate from an approved inspecting agency affirming that the tanks complies with the competent authority's requirements should be filed so as to be available to that authority.

13.14. General Handling Precautions for Portable Tanks:

13.14.1. The following recommendations and precautions are applicable only for tanks designated and constructed according to the provisions shown in this Section (e.g. Tanks with pressure relief devices).

13.14.2. Portable tanks should only carry liquid cargoes which are specifically authorised by the competent authority of the country concerned.

13.14.3. It is also envisaged that in due course the entry for each individual substance in the Dangerous Goods Code will indicate whether that substance may be carried in portable tank and what type of tank is required.

13.14.4. It is also envisaged that the Dangerous Goods Code will give individual requirements for the stowage of such substance in portable tanks and will indicate any differences between their stowage and that of approved packing.

13.14.5. Until such time as the amendments to the Code have been completed stowage of portable tanks should be as recommended in 13.15.

13.15. Stowage of portable Tanks:

1. Portable tanks should be stowed in accordance with the provisions of Section 14 of this Code except that the position of stowage should be in accordance with the following table:

<i>IMCO Class</i>	<i>Passenger Ship</i>		<i>Cargo Ship</i>	
	On Deck	Under Deck	On Deck	Under Deck
Explosive 1	*	*	*	
Gases 2	*	*	*	*

<i>IMCO Class</i>	<i>Passenger Ship</i>		<i>Cargo Ship</i>	
	On Deck	Under Deck	On Deck	Under Deck
Inflammable 3.1	Prohibited	Prohibited	Permitted	Prohibited
Liquids 3.2	Prohibited	(1) Prohibited	Permitted	Prohibited (1)
Inflammable 3.3	Permitted	Prohibited	(1) Permitted	Permitted (2)
Solids 4.1	*	*	*	*
Spontaneously Substance Dangerous 4.2	Prohibited	Prohibited	Prohibited	Prohibited
When met Oxidizing 4.3 Substances	Prohibited	Prohibited	Permitted (3)	Permitted (3)
Oxidising Substances 5.1	Prohibited(1)	Prohibited	Permitted (3)	Permitted (3)
Organic Peroxides 5.2	Prohibited(1)	Prohibited	Prohibited(1)	Prohibited(1)
Poisons 6	Prohibited(1)	Prohibited(1)	Permitted (3)	Permitted (3)
Radioactive Sub- stances 7	*	*	*	*
Corrosives 8	Permitted	Permitted	Permitted	Permitted
Misc. Dangerous Substances 9	Permitted (3)	Permitted (3)	Permitted	Permitted (3)

- Not applicable.

(1) except under special conditions to be specified by the competent authority.

(2) if not having poisonous or similar properties shown by a secondary label.

(3) under conditions to be specified by the competent authority.

13.15.2. Table in 13.15.1 applies to portable tanks containing liquids only. It does not apply to such tanks containing solids (also if dispersed or wetted) gases.

13.15.3. Where the individual entry for a substance in the Code is more restrictive than the table with regard to stowage, the individual entry should apply.

13.15.4. If a portable tank is to be shipped containing a liquid for which the individual entry shows one or more secondary labels, due consideration should be given to all properties of that liquid and stowage should be arranged accordingly.

13.15.5. Portable tanks found to be leaking or significantly damaged so as to possibly affect the integrity of the tank or its lifting and securing arrangements should not be accepted for shipment.

13.15.6. Portable tanks having residue of loading adhering to the outside of the tank should not be accepted for shipment unless cleaned and found to be satisfactory.

13.15.7. Portable tanks should not be overstowed unless they are carried in specially signed ships and unless they are specially protected to the satisfaction of the competent authority due attention should be paid to Section 13.9.12.

13.15.8. Portable tanks should not be accepted for shipment in ullege condition liable to produce on an acceptable hydraulic force due to surge within the tank.

13.15.9. Empty tanks not gas free should comply with the same provisions as tanks filled with their previous product.

13.16. Segregation of portable tanks:

Portable tanks containing dangerous liquids should be segregated in accordance with the International Maritime Dangerous Goods Code (see Section 15).

13.17. Securing of Portable Tanks:

13.17.1. In addition to the usual securing means provided for transportation, additional securing means, satisfactory to the competent authority and the master of the vessel, may be required in order to ensure more thoroughly against significant movement of the portable tanks during the sea voyage.

13.17.2. In determining the adequate of the securing devices, the motions and accelerations of 13.2.7 should be assumed.

13.17.3. Special instructions displayed on the tanks should be observed.