

National Waterways, Safety Of Navigation And Shipping Regulations, 2002

UNION OF INDIA

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Rule

NATIONAL-WATERWAYS-SAFETY-OF-NAVIGATION-AND-SHIPPING-F of 2002

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Ministry of Shipping (Inland Waterways Authorits of India), Noti., dated 30th November, 2004.- In exercise of the powers conferred by Section 35 of the Inland Waterways Authority of India Act, 1985 (85 of 1985), the Inland Waterways Authority of India, with the prior approval of the Central Government, hereby makes the following regulations for ensuring safety of navigation and shipping on the national iaterways, namely:

1. Short title and commencement .-

(1)These regulations may be called the National Waterways, Safety of Navigation and Shipping Regulations, 2002.(2)They shall come into force on the date of their publication in the Official Gazette.(3)These regulations extend to all National Waterways.

2. Definitions.-

In these regulations, unless the context otherwise requires :-(a)"Act" means Inland Waterways Authority of India Act, 1985 (82 of 1985);(b)"Annexure" means Annexure to these regulations;(c)"Competent Officer" means an offer appointed as such by the Authority to be in

charge of a section of the National Waterway for the development, management and maintenance;(d)"Channel marks" includes bamboo marks, buoys and beacons;(e)"Convoy" means a group of vessels, floating equipment or raft towed or pushed by a mechanically propelled vessel;(f)"Drifting" means being driven by the current with the engine stopped;(g)"Ferry boat" means any vessel providing a transport service across or along a waterway;(h)"Inland magnetically propelled vessel" means a mechanically propelled vessel which ordinarily plies on any inland water;(i)"Lock" means confined section of river or canal where level can be changed for raising and lowering boats between adjacent sections by use of gates and sluices;(j)"Lock basin" means the approach to the lock narrowing towards the lock from upstream and downstream;(k)"Master" means any person not being a pilot, harbour master, berthing master, has for the time being the command or charge of a vessel;(l)"Mechanically propelled vessel" means every description of vessel propelled wholly or in part by electricity, steam or other mechanical power;(m)"Navigable channel" means the channel intended for passage of ships;(n)"Owner" means when used in relation to goods, includes any consignor, consignee, shipper or agent for the safe custody thereof and when used in relation to any vessel, includes, any part owner, charterer, consignee, mortgagee or agent in charge thereof;(o)"Port" means an inland port;(p)"Small craft" means any vessel with a hull length less than 10 metres and less than 3 metres wide;(q)"Section" means a portion of the waterways controlled by one field headquarters;(r)"Terminal" means the place where the cargo and passengers change from one mode to another mode of transportation, Terminal facilities include berthing, cargo transfer, storage and ticketing and passenger rest, comfort rooms; and (s)"Vessel" means every description of watercraft, including small craft, vessel under oars or sail, floating equipment and non-displacement craft.

Chapter I

Waterways And Safety Measures On Waterways

3. Making of Navigable Channel.-

A navigable channel may be marked to indicate safe limits of the channel by channel marks like bamboo marks or buoys. Details of channel marking are given in Annexure-I. In case there is night navigation marks shall be provided with light or painted with luminous paint.

4. Traffic signals and signs.-

Traffic signals or signs may be erected on the banks of the river or on any fixtures on the river to ensure safety on the navigable channel. The signboards shall be painted with bright luminous paint. Different signals and signs are given in Annexure-II.

5. Passage through Bridges.-

When a vessel is passing under a bridge, the height of the mast or the height of the collapsed mast and that of the wheelhouse/superstructure should be less than between waterway level and the height of the that road bridge. Speed of such vessel should be regulated with reference to prevailing

weather conditions the currents likely to be experienced.

6. Passage through locks.-

(1) While navigating through the locks ; and lock basin, the master shall comply with any orders given to him by the lock master to ensure safety and orderly movement of ship and quick passage through the lock. (2) The order of priority for passage through the lock shall be as follows; (a) Vessels of the Authority, government vessels, belonging to the military vessels and police; (b) Passenger craft; (c) Fishing boats; (d) Cargo vessels; (e) Other craft. (3) The master shall take the following precautions while navigating through the lock (a) Vessels approaching a lock basin shall reduce speed and navigate with cautions. Overtaking is prohibited near lock basin unless instructed to do so by the lock master. (b) Vessels shall not trail anchors, cables or chains in locks or lock basin. (c) While the lock is being filled or emptied, vessels shall be moored and mooring shall be so handled as to prevent bumping against the walls or gates. (d) Vessels shall provide adequate fenders to avoid damage to the lock structure. (e) Vessel under sails shall lower their sails before entering the lock. (4) The passage through locks shall be in the order of arrival of the vessels in the lock basin. (5) Notwithstanding anything contained in Section 6(2) any vessel expressly granted priority of passage by the Authority shall have priority for locking or unlocking.

7. Reduction of speed in certain circumstances.-

(1) Every vessels shall regulate their speed to avoid creating excessive wash or suction likely to cause damage to stationary or other moving vessels or structures. (2) In particular the vessel shall reduce speed in good time, but without losing the steering way required for safety: (a) outside port entrances; (b) near vessels made fast to the bank or to a landing stage loading or discharging cargo; (c) near vessels lying at normal stopping places.

8. Drifting of a vessel on the National Waterway.-

Drifting of a vessel in the National Waterway unless authorized by the Competent Officer, is prohibited.

9. Crossing of navigable channel by ferry vessels.-

While crossing the navigable channel, the ferry vessels shall keep at such distance from vessels or rafts moving along the navigable channel, so that the latter are not obliged to change their course or reduce speed : Provided that ferry vessels, under special circumstances may be granted priority of passage across the navigable channel by the Competent Officer and such vessel shall exhibit a green allround light by night and a green flag by day, and shall have right of way as the circumstances permit.

10. Navigational and meteorological information.-

Competent Officer shall arrange for dissemination of information on storm, flash flood, channel depth and dangers in navigation by issuing river notices, publishing river charts and displaying appropriate cautionary signals as given in Annexure-III at the river ports

Chapter II

SAFETY OF VESSELS

11. Certifications of survey and registration.-

Every certificate of registration and every certificate of survey issued in respect of a mechanically propelled vessel under the Merchant Shipping Act, 1958, the Coasting Vessel Act, 1938, the Canals and Public Ferries Act, 1890 (Madras Act II of 1890). and the Inland Vessels Act, 1917 shall be valid and effective as a certificate of registration or certificate of survey as the may be, for making voyage in the national waterways :Provided that the certificate of survey shall be suitably endorsed by the Competent Officer having regard to the safety requirements as per regulations.

12. Certificate of competency.-

Certificate of competency or certificate of service as master, serang, engineer and engine driver issued under the Merchant Shipping Act, 1958 and the Inland Vessels Act, 1917, shall be valid for making voyage in national waterways.

13. Identification marks on vessels.-

(1)Every vessel except a small craft shall bear the following identification marks on its hull(a)Name of vessel (Name shall be inscribed on each bow and stern of the vessel).(b)Registration No.(c)Place of registry and year of registration.(2)The identification mark shall be inscribed with letter not less than 20 cm in height and 2 cm wide and shall be painted in light on a dark background or in a dark colour on a light background.(3)In addition to the identification marks, every vessel shall display on a fixed board, exhibited on the upper deck, the following information -(a)gross registered tonnage.(b)maximum permissible number of passenger.(c)name of the owner.(d)date of last survey.(4)Every vessel shall have the load line marked at least for one meter amidship on both sides and draught scale marked in meters and decimetres at both ends of the vessel.(5)Every small craft shall have its registration number and name of owner inscribed on both sides of the vessel.(6)Every craft shall have its registration number or the name of the owner, or both, exhibited on a wide board at a conspicuous part of the craft.

14. Vessels to ply with certain conditions for movement of national waterways.-

Vessels making voyage in the national waterways shall (a) ensure that the length, breadth, height, draught and speed of the vessel, convoys, and side by side formations are suitable and in accordance with the limits as specified by the Competent Officer from time to time. (b) ensure that no object is allowed to project beyond the sides of the vessel or raft that would constitute a danger to other vessels, rafts, floating establishments or installations on or adjacent to the waterway or channel except under the condition specified at (c). (c) ensure strict compliance of the safety requirements for carriage of over dimensional cargo as specified by the competent officer in each case.

15. Conditions relating to mooring or anchoring of vessels in port area.-

No vessel shall be moored or anchored within a port except in areas designated for such purpose by the Competent Officer.

16. Stationary Vessels.-

All stationary vessels, rafts and floating equipments must be anchored or made fast securely enough to withstand the current in such a way that they can adjust to the changes in water level.

17. Pilotage.-

(1) The Competent Officer shall: (a) classify the river stretch where pilotage shall be compulsory and where the pilotage shall be optional; (b) arrange positioning of experienced pilots; and (c) provide services of the pilot to the vessels in areas where pilotage is declared compulsory.

Chapter III

Navigational Safety And The Responsibility Of The Master And The Owner

18. Instructions to the Master.-

(1) The master shall be responsible for ensuring that the vessel is river worthy. He should follow the regulations relating to the safety measures for navigation in particular (a) take all precautions required to exercise vigilance and to avoid damage to the vessel, installations in the national waterway and avoid causing obstructions to shipping and navigation; (b) to avoid imminent danger, take all steps required by the situation (according to the general practice of seamanship) even if this entails departing from these regulations; (c) be responsible for compliance with the rules or regulations applicable to his vessel and his crew and to the vessel in tow, while his vessel is engaged in towing of other vessels; (d) ensure possession of valid certificates of registration and survey of the vessel and valid certificate or licence by the crew, ships article or the crew list, ships log and engine

log;(e)ensure that at no time the vessel is overloaded or carried more than the number of passengers it is certified to carry;(f)ensure that dangerous goods or explosive materials are carried on board as authorized by Competent Authority and procedures and safety precautions as per the Explosives Rules, 1983 are taken for carrying of such goods or material onboard;(g)on sighting a vessel or raft which has suffered and accident endangering persons or the vessel or threatening to obstruct the channel, give immediate assistance to such vessels without endangering safety of his own vessel;(h)in case of any marine casualty, give warning to the approaching vessels to enable them to take necessary action in good time and steer clear of the channel when in danger of sinking or goes out of control;(i)ensure that life saving appliances as specified in Annexure IV are carried onboard, in goods condition and in a position available for immediate use;(j)ensure that no time the vessel discharge in the waterway except at places designated by the Competent Officer, raw sewage, oily substances garbage etc.(2)The master of a passenger vessel shall display the disposition and use of life saving appliances carried onboard and demonstrate the use of like jackets before commencement of journey.(3)The master shall ensure that all the navigational aids, fire fighting and flooding control appliances are on board in proper working conditions and in a position available for immediate use and regular conduct of exercises to his crew for the efficient use of such appliances.(4)The master shall make immediate report to the nearest competent officer on-(i)sighting of any other vessel in distress;(ii)grounding or sinking of the vessel;(iii)outbreak of fire or flooding in his vessel;(iv)damage caused to any waterway installations or permanent structures;(v)observing uncharged obstruction of failure of navigational aid is noticed;(vi)falling overboard of any object which may become an obstruction or danger to navigation;(vii)spillage of oil into National Waterway;(viii)piracy or theft onboard.(5)Master or persons in charges of a vessel shall give the competent officer or any person authorized by him all necessary facilities for verifying compliance with these regulations.

19. Instructions to the owner.-

(1)Owner of the vessel shall make sure that the vessel is riverworthy in all respect and has competent crew on it.(2)The owner shall(a)ensure that the vessel does not proceed on any voyage or be used for any service unless the vessel had a valid certificate of survey in force applicable for such voyage or service;(b)ensure that only qualified personnel with a valid certificate of competency certificate of service or licence are employed on board the vessel as master/serang, engineer or driver and the crew;(c)ensure that the crew provided is sufficiently huge and skilled to ensure the safety on those onboard and safe navigation;(d)provide insurance for his vessel against third party risks;(e)arrange displaying of the distinguishing mark (registration mark) in a conspicuous place;(f)ensure that the certificate of registration granted in respect of any vessel shall be used only for the lawful navigation of that vessel;(g)report alterations carried out in his vessel which do not correspond with the particulars relating to the vessel or the description entered in the certificate of registration to the registering authority;(h)if it is an abandoned vessel, in the navigable channel, make arrangements for immediate marking of the vessel to avoid danger to other vessels;(i)make arrangements for the removal of a vessel from the navigation channel as early as possible or as directed by the competent officer;(j)forthwith give notice to the nearest competent officer, whenever-(i)a vessel has been wrecked, abandoned or materially damaged;(ii)any casualty happening to or on board any vessel, including loss of life, material damage to any other vessel or structures;(iii)a vessel has spilled oil

into National Waterway.(3)If an owner fails to remove a vessel under clause (h) of sub-regulation (2), the Competent Officer shall cause the removal of such vessel and recover the cost of such removal from the owner.

Chapter IV

Suspension, Cancellation And Appeal

20. Power to suspend and cancel endorsement on certificate of survey.-

(1)The Competent Officer reserves the right to suspend forthwith the endorsement on Certificate of Survey of the vessel for a period not exceeding sixty days in the case of contravention of any of the regulation mentioned hereinbefore at the first instance.(2)In the case of repeated contravention, the Competent Officer shall have the power to cancel the endorsement on Certificate of Survey of the vessel forthwith.

21. Appeal.-

(1)Any person aggrieved by an order of the Competent Officer issued under Regulation 20, may within thirty days from the date on which he receives such order, appeal against it to the officer so designated.(2)The officer so designated shall cause notice of every such appeal to be given to the Competent Officer in such manner as may be prescribed and after giving an opportunity to the appellant to be heard, shall pass such order thereon as deems fit and his decision shall be final.

Chapter V

Penalties And Legal Proceeding

22. Penalty for failure to observe navigable channel.-

If the master of the vessel fails to observe the navigable channel mark in contravention of Regulation 3, he shall be punishable with fine which may extend to four hundred rupees.

23. Penalty for failure to observe traffic signals and sign.-

If the master of the vessel fails to observe any of the traffic sign or signal in contravention of Regulations 4, he shall be punishable with fine which may extend to two hundred and fifty rupees.

24. Penalty for failure to observe overhead clearance.-

If the master of the vessel fails to ascertain the overhead clearance of his vessel or fails to regulate the speed by passing through the bridge in contravention of Regulation 5, he shall be punishable with fine which may extend to five hundred rupees.

25. Penalty for non-compliance with this order from lock master.-

If the master of the vessel fails to comply any of the order given to him by lock master to ensure the safety and orderly movement of the vessel and quick passage through the locks in contravention of Regulation 6(1) and (2) he shall be punishable with fine which may extend to five hundred rupees.

26. Penalty for failure to take precaution while negotiating through lock.-

If the master fails take any one of the precautions while through lock in contravention of Regulation 6(3), he shall be punishable with fine which may extend to three hundred rupees.

27. Penalty for failure to regulate speed to avoid creation of excessive wash or section.-

If the master of the vessel fails to regulate the speed of the vessel to avoid creation of excessive wash or suction likely to cause damage the stationary or other moving vessel or structures in contravention of Regulation 7, he shall be punishable with fine which may extend to two hundred rupees.

28. Penalty for causing the vessel to drift.-

If the master of the vessel, not being authorized by the Competent Officer, causes his vessel to drift in contravention of Regulation 8, he shall be punishable with fine which may extend to one hundred rupees.

29. Penalty for failure to keep safe distance.-

If the master of a ferry vessel while crossing the navigable channel fails to keep distance from vessels or rafts moving along the navigable channel, so that the latter are forced to change their course or reduce speed in contravention of Regulation 9, he shall be punishable with fine which may extend to one hundred rupees.

30. Penalty for failure to observe Navigational and Meteorological information.-

If the master of the vessel fails to observe the river notices or river charts or cautionary signals issued by the Competent Officer in contravention of Regulation 10, he shall be punishable with fine may extend to two hundred rupees.

31. Penalty for failure to obtain endorsement on Certificate of Survey for voyage in National Waterways.-

If any vessel proceeds on a voyage on National Waterway without obtaining the endorsement on

Certificate of Survey in contravention of Regulation 11, the owner and the master shall each be punishable with fine which may extend to five hundred rupees.

32. Penalty for failure to keep Certificate of Competency for making voyage on National Waterways.-

If the vessel proceeds on a voyage on National Waterway without the Certificate of Competency in contravention of Regulation 12, the master, serang, engineer and engine driver shall each be punishable with fine which may extend to five hundred rupees.

33. Penalty for failure to bear identification marks on vessel.-

If any vessel makes a voyage on National Waterway without bearing any of the identification mark in contravention of Regulation 13, the master and the owner shall each be punishable with fine which may extend to two hundred and fifty rupees at first instance and rupees four hundred in case of continued contravention.

34. Penalty for failure to comply with waterway limits.-

If the master of the vessel fails to ensure that the length, breadth, height and draught of his vessel and speed of the vessel and convoy in contravention of Regulation 14(a) he shall be punishable with fine which may extend to three hundred rupees.

35. Penalty for causing an object to beyond the sides of the vessel.-

If the master of a vessel causes an object to project beyond the sides of the vessel constituting a danger to other vessel or installation in contravention of Regulation 14(b), he shall be punishable with fine which may extend to four hundred rupees.

36. Penalty for non-compliance with safety requirement for over-dimensional cargo.-

If the master of the vessel fails to comply with the safety requirements for carriage of over-dimensional cargo in contravention of Regulation 14(c) he shall be punishable with fine which may extend to three hundred rupees.

37. Penalty for anchoring of the vessel outside the designated area in a port.-

If the master of the vessel causes his vessel to be moored or anchored in area not designated for such purposes within a port in contravention of Regulation 15, he shall be punishable with fine which may extend to one hundred at first instance and rupee one hundred per day in case of continued contravention.

38. Penalty for improper mooring.-

If the owner or master of stationary vessel, raft and floating equipment fails to anchor or make fast the vessel securely enough to withstand the current and change in water level in contravention of Regulation 16, he shall be punishable with fine which may extend to five hundred rupees.

39. Penalty for failure to observe the river stretch for compulsory pilotage.-

If the master of the vessel makes a voyage on national waterway without a pilot on a river stretch where pilotage is compulsory, as classified by the Competent Officer, in contravention of Regulation 17, he shall be punishable with fine which may extend to five hundred rupees.

40. Penalty for failure to observe instruction to the master.-

If the master of the vessel fails to observe any of the instruction given to him in contravention of Regulation 18, he shall be punishable with fine which may extend to five hundred rupee for each contravention.

41. Penalty for failure to observe instructions to the owner.-

If the owner of the vessel fails to observe any of the instructions given to him in contravention of Regulation 19, he shall be punishable with fine which may extend to five hundred rupees for each contravention.

42. Application of the provision of Inland Vessels Act, 1917.-

Notwithstanding anything mentioned hereinbefore, the provisions of Chapter 7, of the Inland Vessels Act, 1917 (1 of 1917) shall also mutatis-mutandis apply to all the mechanically propelled vessels making voyage on national waterways as they apply to mechanically propelled vessels on any Inland Waterways.

43. Provision for punishment of offences not otherwise provided for.-

If any person contravening of these regulations for which no specific penalty has been provided for, he shall be punishable with fine which may extend to two hundred and fifty rupees.

ANNEXURE-I (See Regulation 3) Marking Of The Waterway

A. Buoyage and marking of the waterway

(i) **Direction of buoyage** The direction of buoyage shall be defined as follows: (a) The general direction taken by the mariner when approaching harbour, river or estuary waterways from seaward. (b) In case of non-tidal rivers the direction against the flow of the river. (c) The direction in which the kilometre chainage increases in case of estuary. (ii) **Port Hand Marks** These marks indicate the left side of the channel. By day: Red buoys, preferably cylindrical (CAN), or red spars, Red Cylindrical top mark is compulsory on the spars as on the buoys if they are not cylindrical. By night: Rhythmic red lights, of any type (iii) **Starboard Hand Marks** These marks indicate the right side of the

channel. By day: Green buoys, preferably conical, or green spars, A green conical top mark point upward is compulsory on the spars and on the buoys if they are not conical. By night: Rhythmic green lights, of any type. R = Red, G = Green. (iv) Isolated Danger Marks. An isolated danger mark is a mark created on, or moored on, or above an isolated danger which has navigable water, all round it. Description of an isolated danger mark E7, (a) Topmark : Two black spheres one above the other. (b) Colour : Black with one or more broad horizontal red bands. (c) Shape : Optional, but not conflicting with lateral marks; pillar or spar preferred. By Night : Rhythmic white light-group flashing. R = RED, B = BLACK. B. Conventional Marks (i) Direction of marking. Conventional marks are made of bamboo strips and used only in rivers. The directions of marking will be downstream the river. (ii) Bamboo mat marks at the beginning and end of the channel. (iii) Bamboo marks in between and marks. Right Hand Marks. (iv) Underwater snag marks (painted with lime). (a) To indicate snag which can be crossed from either side. (b) Snag to be kept on left. (c) Snag to be kept on right. ANNEXURE-II (See Regulation 4) Signs And Signals

1. Day and Night marking

Where the prescribed mark consist of: (a) Light only, the lights may be used by day and by night; (b) Boards only, the boards may be used as night marks if illuminated. Boards shall be rectangular in shape of 1.5 metre x 1 metre size minimum; (c) Board and lights, by day, either boards or lights may be used; by night either lights or illuminated boards may be used.

2. Lighting

Lights may be provided at night for lighting of the lower parts of a bridge, of the piers of a bridge, of the approaches to a lock, of small cannal etc.

3. Intensity of lights

The lights recommended in these rules shall be visible for a distance of at least 2 kms., and shall be distinct from the surrounding lights.

4. Fixed lights

(i) Single red light (ii) Two red light placed one above the other (iii) Two or more red lights set apart (iv) Single green light (v) Two green lights set apart (vi) Single yellow light, along or between green lights (vii) A red light above a white light (viii) Do not exceed the speed indicated (in km/hour) (ix) Clearance above water level limit. (x) Width of fairway or channel limit. W = White, R = Red, G = Green, Y = Yellow, B = Black. ANNEXURE-III (See Regulation 10) Storm Warning Signals

1. WARNING : A storm may effect you shortly

2. DANGER : A storm will soon strike you

3. DANGER : The port is threatened by a Bore-tide or flash flood ; sudden rise in water level and strong current expected.

4. GREAT DANGER: A violent storm will soon strike you.

ANNEXURE-IV[See Regulation 18(1)(i)]Details Of Life Saving Appliances To Be Carried On Board Inland Vessels

1. Classification of vessels

Inland vessels shall be classified as follows, namely:-Class I Passenger vesselsClass II Ferry launches and boatsClass III Cargo vessels and vessels other than those falling under Class I, II, IV and VClass IV Non-propelled vessels (barges)Class V Pleasure crafts

2. Vessels of Class-I

2.1Every vessel of Class I shall be provided with:(a)Sufficient number of boat(s) as per requirement of sub-rule 2.2 and life rafts to accommodate total number passengers and crew on board.(b)(i)One life jacket for 50% of the passengers and crew on board only in WCC and 100% in respect of NW-I and II.(ii)Life jacket for child, for 10% of total number of persons certified to carry. For the purpose of this section, child means persons weighing below 30 Kg.(c)At least four lifebuoys for vessels up to 25 metre length, six lifebuoys for vessels 25-45 metre length and 8 lifebuoys more than 45 metre length. At least two of the lifebuoys supplied shall be equipped with self-igniting light if the vessel navigates at night.2.2At least one boat minimum carrying capacity of ten persons for every vessel up to 25 metre length except for small crafts and at least two boats for vessel of more than 25 metre length shall be provided. The boat shall be provided with necessary davit for launching. Boats are to be stowed equally on either side of the vessel if more than boat provided.

3. Vessels of Class-II

3.1Every vessels of Class II shall be provided with:(a)Sufficient number of boats(s) as per the requirement of sub-rule 3.2 and life rafts to accommodate the total number of passenger and crew on board.(b)(i)Life jackets for 50% of the passengers and crew on board only in WCC and 100% in respect of NW-I and II.(ii)Life jackets for child, for 10% of total number of persons certified to carry. For the purpose of this section, child means person weighing below 30kg.(c)At least eight lifebuoys of which at least two shall be equipped with selfigniting light if the vessel navigates at night.3.2At least one boat with minimum carrying capacity of 10 persons for every vessel between 25 metre to 45 metre length and two boats for every vessel of more than 45 metre length shall be provided. Boat shall be provided with required davit for launching. If more than one boat supplied they may be stowed on either side of the vessel. For vessel used for single continuous voyages not exceeding 5 kms, the competent officer may permit use of buoyant apparatus or lifebuoys in lieu of boats.

4. Vessels of Class-III

Every vessel of Class III shall be provided with:(a)At least one life raft to accommodate all crew for vessel over 10 metre.(b)One life jacket for each crew or person on board.(c)At least two lifebuoys for vessel up to 25 metre length and four lifebuoys for vessel of above 25 metre length of which one shall be equipped with self-igniting light if the vessel navigates at night.

5. Vessel of Class-IV

Every manned vessel of Class IV shall be provided with:(a)At least two lifebuoys one of which shall be equipped with a self-igniting light if the vessel navigates at night.(b)One life jacket for every crew on board.

6. Vessel of Class-V

Every vessel of Class V up to 10 metre in length shall carry life jacket for each person. Vessel above 10 metre shall carry sufficient life raft/lifebuoys for all persons on board. However, all vessels of Class V shall carry at least 21 lifebuoys of which one to be of self-igniting type if the vessel navigates at night.

7. Technical requirements

Every life saving appliances provided as per the provision of these regulations shall meet the requirement of Schedule-I.

8. Stowage

Every life saving appliances provided as per the provision of these rules shall be stowed according to the requirements of Schedule-II as far as applicable.

9. Display of usage

On every vessel of Class I and II, the list of life saving appliances and instruction of their use shall be displayed at conspicuous places.

10. Exemption

Exemption in vessels or class of vessels provided that she complies with the requirement of the I.V. Act, 1917, the keel of which is at corresponding stage of construction before the entry into force of these regulations may be exempted from compliance therewith of the provision for carriage of life boats until two years after the date of entry into force of these regulations provided that adequate life raft in lieu are provided on board.

I TO ANNEXURE IV

SPECIFICATION OF LIVE SAVING APPLIANCES

1. Boats

(a) All boats shall be well designed and be of such shape and proportions that they have sufficient stability and freeboard when carrying their full load of persons and equipment. Its stability shall be deemed to be adequate if, with half the maximum permissible number of persons standing on one side of the boat, there remains a freeboard of not less than 100 mm. (b) All boats shall be capable of being lowered into the water with their full load of persons and equipment. They shall be of such strength that they will not suffer permanent deformation if subjected to an overload of 25 per cent.

2. Life rafts

(a) Every life raft shall be fitted with secure beackets. (b) Every life raft shall be so constructed as to comprise units containing a volume of air of at least 0.096 m.³ (Or equivalent buoyancy devices in the case of rigid life rafts) and a deck area of at least 0.0372 sq. m., for every person it is permitted to carry. (c) The life raft shall be so constructed that if it is dropped into the water from the highest deck neither the life raft nor its equipment will be damaged. (d) Every rigid life raft shall be constructed as to retain its shape in all weather conditions, on deck and in the water.

3. Life jackets

A life jacket shall satisfy the following requirements: (a) It shall be properly designed and made of suitable material. (b) It shall be capable of supporting a mass of 7.5 kg in fresh water for 24 hours. (c) It shall be capable of keeping the head of an exhausted or unconscious person above water. (d) It shall be so designed as to eliminate so far as possible all risk of its being worn incorrectly, however, it shall be capable of being worn inside out. (e) It shall be capable of turning the wearer's body, on entering the water to a safe floating position slightly inclined backwards from the vertical. (f) It shall withstand the effects of oil and oil products and of temperatures up to 50°C. (g) It shall be reflecting orange in colour. (h) It shall be easy and quick to put on, and shall fasten securely to the body. (i) It shall be fitted with a whistle held in a pocket. (j) It shall bear the following particulars: Name of manufacturer, Type, Year of manufacture

4. Lifebuoys

(a) Every lifebuoy shall: (i) Be capable of supporting a mass of 14.5 kg in fresh water for 24 hours. (ii) Be made of suitable materials and withstand the effects of oil and oil products and of temperatures up to 50°C. (iii) Be reflecting orange in colour. (iv) Have a mass of not less than 6.5 kg. (v) Have an internal diameter of 0.45 metre + 10 per cent. (vi) Be encircled with rope which can be grasped. (b) At least one lifebuoy on each side of the vessel shall be fitted with self-igniting light and buoyant life line which is not less than 25 metre long and which is firmly secured by a hook.

II TO ANNEXURE IV

STOWAGE AND HANDLING OF LIFE SAVING APPLIANCES All buoyant apparatus and lifebuoys shall be so placed as to be capable of floating off the vessel freely. Suitable arrangements shall be made of access to the boats and rafts. Effective means shall be provided for lighting the life saving appliances and their launching devices. The launching devices provided for boats shall be so designed and arranged that the boats can be lowered reliably, quickly and without danger to persons. The launching devices davits, falls, blocks and other gear shall be of such strength that the boats can be safely lowered on either side in unfavourable conditions of list or trim. Life saving appliances shall be so stowed that they are easily accessible and can be launched as quickly as possible.