

The Dock Workers (Safety, Health And Welfare) Regulations, 1990

UNION OF INDIA

India

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Rule

THE-DOCK-WORKERS-SAFETY-HEALTH-AND-WELFARE-REGULATIONS of 1990

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The Dock Workers (Safety, Health And Welfare) Regulations, 1990Published vide G.S.R. 80(E), dated 16.2.1990.

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/449In exercise of the powers conferred by section 21 of the said Act the Central Government hereby makes the following regulations, namely:--

Part I – General

1. Short title, application and commencement .-(1) These regulations may be called the Dock Workers (Safely, Health and Welfare) Regulations, 1990.

(2)They shall apply to all major ports in India as defined in the Major Ports Act, 1963 (38 of 1963).(3)They shall come into force after the expiry of 30 days of their publication in the Official Gazette.

2. Definitions .-In these regulations, unless the context otherwise requires,--

(a)"Act" means the Dock Workers (Safety, Health and Welfare) Act, 1986 (54 of 1986);(b)"access" includes egress;(c)"authorised person" means a person authorised by the employer, the master of

the ship or a responsible person to undertake a specific task or tasks and possessing necessary technical knowledge and experience for undertaking the task or tasks;(d)"competent person" means--(i)a person belonging to a testing establishment in India who is approved by the Chief Inspector for the purpose of testing, examination or annealing and certification of lifting appliances, loose gears or wire ropes;(ii)any other person who is recognised under the relevant regulations in force in other countries as competent for issuing certificates for any of the purposes mentioned in sub-clause (i) for the implementation of the Protection Against Accidents (Dockers) Convention (Revised), 1932 (No. 32) and the Convention concerning Occupational Safety and Health in Dock Work (No. 152), 1979, adopted by the International Labour Conference;(e)"container" means an article of transport equipment of a permanent character and accordingly strong enough to be suitable for repeated use and as specified under national or international standards;(f)"container terminal" means the area where the operations of receiving, storage, despatch and interchange of containers, between transport made is carried out primarily with the help of lifting appliances and transport equipment, and includes associated road vehicles, waiting places, control inter-change grid, stacking areas and associated road vehicle, departure, but shall not include-(i)terminals which handle significant volumes of containerised cargo and break-bulk cargo together using the same operational areas;(ii)all railway terminals and all in-land depots;(iii)the stuffing and stripping of the contents of containers; and(iv)ship-board and ship-side operations LO/LO and RO/RO vessels;(g)"conveyor" means a mechanical device used in dock work for the transport of single packages or solid bulk cargo from one point to another point;(h)"dangerous goods" means any cargo which due to its explosiveness, inflammability, radioactivity, toxic or corrosive properties, or other similar characteristics, may cause injury, adversely affect the human system, loss of life or property while handling, transporting, shipping or storing and which is classified as such by any international or national standards;(i)"dock" means any dock, wharf, quay or shore and shall include any warehouse or store place belonging to owners, trustees or conservators of, and situated in or in the vicinity of the dock, wharf, quay or shore and any railway line or siding on or used in connection with the dock, wharf, quay or shore but not forming part of Indian railways;(j)"Form" means a form appended to these regulations;(k)"hatch" means an opening in a dock used for purposes of dock work or for trimming or for ventilation or for cleaning;(l)"hatchway" means the whole space within the square of the hatches from the top dock to the bottom of the hold;(m)"Inspector" means a person appointed by the Central Government under section 3 of the Act and includes the Chief Inspector;(n)"lifting appliance" means all stationary or mobile cargo handling appliances including their permanent attachments, such as cranes, derricks shore based power operated ramps used on shore or on board ship for suspending, raising or lowering, cargo or moving them from one position to another while suspended or supported, in connection with the dock work and includes lifting machinery;(o)"loose gear" means hook, shackle, swivel, chain, sling, lifting beam, container spreader, tray and any other such gear, by means of which, the load can be attached to a lifting appliance and includes lifting device;(p)"port" means a port as defined under the Indian Ports Act, 1908 (15 of 1908);(q)"port authority" means the person having the general management and control of dock:Provided that if any other person has, by exclusive right to occupation of any part of the dock, acquired the general management and control of such part, he shall be deemed to be the "Port Authority" in respect of that part;(r)"premises" means any dock, wharf, quay, warehouse, store place or landing place where the dock work is carried on;(s)"prescribed" means prescribed by the Central Government;(t)"pulley block" means pulley block, gin and similar gear, other than a crane block

pecially constructed for use with a crane to which it is permanently attached;(u)"responsible person" means a person appointed by the employer, the master of the ship, the owner of the gear or port authorities, as the case may be, to be responsible for the performance of a specific duty or duties and who has sufficient knowledge and experience and the requisite authority for the proper performance of the duty or duties;(v)"safe working load" in relation to an article of loose gear or lifting appliance means the load which is the maximum load that may be imposed with safety in the normal working conditions and as assessed and certified by the competent person;(w)"schedule" means a schedule appended to these regulations;(x)"ship" means any kind of ship, vessel barge, lighter or hover-craft excluding ships of war and country craft;(y)"testing establishment" means an establishment with testing and examination facilities, as approved by the Chief Inspector, for carrying out testing, examination, annealing or certification, etc., of lifting appliance or loose gear or wire rope as required under the regulations;(z)"transport equipment" means all powered and hand truck, for lift truck, tractor, trailer, locomotive, prime mover and any other such equipment used in dock work;(zz)words and expressions not defined in these regulations but defined or used in the Act shall have the same meaning as assigned to them in the Act.

3. Powers of Inspectors .-(a) An Inspector may, at any port for which he is appointed,--

(i)enter, with such assistance, (if any), as he thinks fit, any ship, dock, warehouse or other premises, where any dock work is being carried on, or where he has reason to believe that any dock work is being carried on;(ii)make examination of the ship, dock, lifting appliance, loose gear, lifting device, staging, transport equipment, warehouse or other premises, used or to be used, for any dock work;(iii)require the production of any register, muster roll or other document relating to the employment of dock workers and examine such document;(iv)take on the spot or otherwise such evidence of any person which he may deem necessary:Provided that no person shall be compelled under regulation 3(a)(iv) to answer any question, or give any evidence tending to incriminate himself;(v)take copies of registers, records or other documents or portions thereof as he may consider relevant in respect of any offence which he has reason to believe has been committed or for the purpose of any inquiry;(vi)take photograph, sketch, sample, weight, measure or record as he may consider necessary for the purpose of any examination or inquiry;(vii)hold an inquiry into the cause of any accident or dangerous occurrence which he has reason to believe was the result of the collapse or failure of any lifting appliance, loose gear, transport equipment, staging non-compliance with any of the provisions of the Act or the regulation;(viii)issue show-cause notice relating to the safety, health and welfare provisions arising under the Act or the regulations;(ix)prosecute, conduct or defend before any Court any complaint or other proceedings, arising under the Act or the regulations;(x)direct the port authority, dock labour board and other employers of dock workers for getting the dock workers medically examined if considered necessary.(b)A person having general management and control of the premises or the owner, master, officer-in-charge or agents of the ship, as the case may be, shall provide such means as may be required by the Inspector for entry, inspection, examination, inquiry, otherwise for the exercise of his powers under the Act and the regulations in relation to that ship or premises which shall also include the provision of launch or other means of transport.

4. Notice of Inspection .-(1) An Inspector may notify any defects or deficiencies which may come to his notice during his inspection and examination which he wishes to point out together with any orders passed by him under the Act or the regulations in Form IX to--

(i)the owner, master, officer-in-charge or agents of the ship; or(ii)the port authority; or(iii)the owner of lifting appliances, loose gears, lifting devices and transport equipment; or(iv)the employer of dock workers.(2)When an Inspector serves notice, under sub-regulation (1) above, in relation to any dock, lifting appliance, loose gear, lifting device, transport equipment, ladder or staging, he may, in the notice prohibit the dock work where conditions are dangerous to life, safety or health of dock workers and the use of the same in connection with the dock work and such dock, lifting appliances, loose gears, lifting devices transport equipment, ladders or stagings shall not be used until the defect or defects specified in the notice have been remedied and the Inspector has withdrawn the prohibitory order.

5. Appeal .-Any person aggrieved by an order of the Chief Inspector passed under section 5 of the Act may, within 15 days from the date on which the order is communicated to him prefer an appeal to the Secretary in Government of India, Ministry of Labour, New Delhi and the provisions of section 8 of the Act shall apply accordingly.

6. Penalties .-Save as is otherwise expressly provided in these regulations, whoever being a person responsible to comply with any of the regulations commits a breach of such regulations shall be guilty of an offence and punishable with imprisonment; for a term which may extend to six months, or with fine which may extend to five thousand rupees; or with both, and, if the breach is continued after conviction, with a further fine which may extend to one hundred rupees for each day on which the breach is so continued.

Part II – RESPONSIBILITIES

7. Responsibilities .-(1) It shall be the duty of the port authority to comply with regulations 9 to 12, 15 to 23, 61 (1) & (8), 80 (2) and (3) 81, 85 (12), 89, 91 (2) to (6), 92(2), 93 ((1), (3) & (4) and 94 to 115.

(2)It shall be the duty of the owner or master, or officer-in-charge and the agents of a ship to comply with regulations 12, 16 (1) to (3), 17 (1) (a), 24 to 37, 76, 80 (1), 99 (1) and 101 (1) & (3).(3)(a)It shall be the duty of the owner of the lifting appliance, loose gear, and transport equipment or any other equipment used in dock work on shore or on board the ship to comply with the regulations 17 (4), 27, 40 to 49, 51, 52 (1) to (4), 54, 57 (1) to (4), (6) & (7), 59 (1) to (3), 60, 62, 63, 64, 84 (1), 85 (5), 87

and 88.(b)In case lifting appliance, loose gear, or any other equipment used in dock work on board a ship not registered in India, it shall be the duty of the master or Chief Officer of such ship and agent of such ship to comply with the regulations 27, 40 to 49, 51, 52 (1) to (4), 54, 87 and 88.(4)(a)It shall be the duty of every employer and of all agents, employees and dock workers employed by him to comply with regulations 11 (1) & (2), 17 (5), 77 (5), 85 (8) and 86 (8).(b)It shall be the duty of every employer to comply with regulations 13, 14, 16 (4), 17 (4) & (5), 18, 20 (2), 24 (7) & (8), 25, 28, 29 (2), 31, 32 (3), (6), (8) & (9), 33 to 39, 45 (1), (2) & (3), 52 (5), 53 to 56, 57 (4) (e), (5), (6) & (8), 58, 59 (4), 61 (9) and (10), 62 (13), (17), 64 to 75, 77 to 82, 84 (2), 85 except 85 (12), 86, 87 (2), 88 (4) to (8), 89 to 93, 95, 98, 107, 109 (2), 110, 114 (4), 116 and 117:Provided that where the dock work is carried on by a stevedore or other person other than the owner of a ship, it shall be the duty of the owner, master or officer-in-charge of the ship, to comply with regulation 33 (1) so far as it concerns:--(i)Any hatch not taken over by the said stevedore or other person for the purpose of the dock work; and(ii)any hatch which, after having been taken over by the said stevedore or other person for the purpose of the dock work--(a)has been reported by written notice in Form I to the owner, master or officer-in-charge of ship, or by or on behalf of the said person, as being hatch at which the dock work has been completed for the time being,(b)either has been left by the persons fenced or covered as required by regulation 33 (1) or has been taken into use by or on behalf of the owner of the ship, and in either case has been so reported by such written notice as aforesaid. It shall be the duty of the owner, master or officer-in-charge of the ship to give immediately written acknowledgment of such written notice as aforesaid.(5)It shall be the duty of every dock worker to comply with the requirement of such of these regulations as relate to the performance of, or refraining from, an act by him and to co-operate in carrying out requirements of these regulations and if he discovers any defects in the lifting appliance, loose gear, lifting device, conveying any transport equipment or other equipment, to report such defects without un-reasonable delay to his employer or foreman or other person in authority .(6)No person shall, unless duly authorised or in case of necessity remove or interfere with any fencing, gangway, gear, ladder, hatch covering, life saving appliance, lighting, or other thing whatsoever required by the Act and these regulations to be provided. If removed, such things shall be restored at the end of the period during which their removal was necessary, by the person last engaged in that work necessitated such removal.(7)(a)No employer shall allow lifting appliance, loose gear, lifting device, or conveying and transport equipment to be used by dock workers which does not comply with regulations 17 (4), 27, 40 to 49, 51, 52 (1) to (4), 54, 57 (1) to (4) & (6) to (7), 59 (1) to (3), 60, 62, 87 and 88.(b)If the person whose duty, it is to comply with the regulations mentioned in sub-regulation (2) above fail to do so, then it shall also be the duty of the employer of the dock workers to comply with such regulations within the shortest time reasonably practicable after such failure.(8)It shall be the duty of the person for the time being in charge of any ship to produce for inspection and examination certificates required under regulation 51.(9)Every dock worker shall use the means of access provided in accordance with these regulations and no person shall authorise or order another to use means of access other than those provided in accordance therewith.(10)No person shall go upon any hatch beam for the purpose of adjusting the gear for lifting them on or off nor shall any person authorise or order another to do so .(11)It shall be the duty of the Dock Labour Board and every other employer of dock workers to comply with regulations 74, 89, 91 (3), 92, 93 (1), (3) & (4), 103, 107, 108 to 111.(12)It shall be the duty of the competent person to comply with the regulations 41, 47, 48 and 50.

8. Exemption .-The Chief Inspector may, subject to such conditions, if any, as may be specified therein, by order in writing (which may in its discretion be revoked at any time), exempt from all or any of the requirements of these regulations,--

(a)any dock or part of a dock, if he is satisfied that dock work is only occasionally carried on or traffic is small and confined to small ships and fishing vessels at such dock;(b)any appliance, gear, equipment, or device or any class or description of appliances, gear, equipment or device, if he is satisfied that the requirement in respect of which the exemption is granted are not necessary or equally effective measures are taken:Provided that he shall not grant exemption under this regulation unless he is satisfied that such exemption will not adversely affect the health, safety and welfare of dock workers.

Part III – SAFETY

A.-WORKING PLACES

9. Surfaces .-(1) Every regular approach over a dock which the working place and every such working place inside the dock workers have to use for going to or from a dock shall be,-

(a)kept clean and free from objects that can cause slipping, stumbling or falling,(b)maintained in good repair with due regard to the safety of the dock workers.(2)All areas of a dock shall be kept properly drained and graded in order to facilitate safe access to sheds, warehouses and store places and safe handling of cargo and equipment.(3)Drain pools and catch basins shall be properly covered or enclosed.(4)All areas of a dock and all approaches on which lifting appliances and transport equipment are used shall be soundly constructed, surfaced with good wearing material and sufficiently even and free from holes and cracks to afford safe transport of cargo and shall be properly maintained.(5)Any working area in a dock which is damaged or under repair shall be effectively blocked off from other areas and, when necessary, warning lights shall be provided at night.(6)All landing places used by dock workers for embarking or disembarking from crafts meant for transport by water shall be maintained in good repair with due regard to the safety of the persons using them.

10. Fencing of dangerous places .-(1) The following parts of a dock and approaches shall, as far as practicable, having regard to the traffic and working, be securely fenced so that the height of the fence shall be in no place less than one meter and the fencing shall be maintained in good condition:--

(a)all breaks, dangerous comers, and other dangerous parts or edges of a dock;(b)both sides of such

foot-ways, overbridges, caissons, and dock gates as are in general use by dock workers and each side of the entrance at each end of such foot-way for sufficient distance not exceeding, 4.5 metres: Provided that in case of fences which were constructed before the date of commencement of this regulation, it shall be sufficient if the height of the fence is in no place less than 75 cm. (2) The ditches, pits, trenches for pipes and cables and other hazardous openings and excavations shall be securely covered or adequately fenced. (3) Where wharves or quays slope steeply towards the water, the outer-edge shall be protected as far as practicable.

11. Passages to be kept clear.-(1) Cargo shall not be so stored or transport equipment or lifting appliances so placed on any areas of a dock where dock workers are employed so as to obstruct access to ships, cranes, life saving appliances, fire fighting equipment and welfare facilities provided under these regulations.

(2) Where any place is left along the edge of any wharf or quay, it shall be at least 90 cms, wide and shall be kept clear of all obstructions other than fixed structures, plant and appliances in use. (3) Where working areas of a dock are enclosed and the traffic warrants, a separate gate or passage shall be provided for pedestrians.

12. Railings and fencings.-(1) All railings for the fencing of hatch ways, accommodation ladders, grangways, stairway for embarking, disembarking, and any other dangerous place shall be of sound material, good construction and possess adequate strength and unless specified in these regulations:--

(a) be at least one metre in height; and (b) consist of two rails or two taut ropes or chains supporting stanchions and toe boards. (2) Intermediate rails, ropes or chains shall be 50 centimetres high. (3) Stanchions shall not be more than two metres apart and shall be secured against inadvertent lifting out. (4) The toe board shall be at least 15 centimetres high. (5) Railings shall be free from sharp edges. (6) Temporary fencing of hatchways elevated platforms, etc., shall, as far as reasonably practical, extend to a height of one metre and consist of either: (a) two taut ropes or chains with stanchions; or (b) a properly rigged and securely fastened safety net. (7) Stairs giving access to transport vessels shall be equipped with wooden or rubber fenders so that the gap of more than 30 centimetres is maintained between the side of the steps and side of the vessel.

13. Staging construction and maintenance.-(1) Sufficient supply of sound and substantial material shall be available at a convenient place or places for the construction of staging.

(2) All staging shall be:-- (a) securely constructed of sound and substantial material and shall be maintained in such condition so as to ensure the safety of all dock workers; and (b) inspected at regular and frequent intervals by a responsible person. (3) All planks and ropes intended to be used for a staging shall be:-- (a) carefully examined before being taken into use; and (b) re-examined by a

responsible person before they are used again after the stages have been dismantled.(4)All planks forming stages shall be securely fastened to prevent slipping.(5)All stages shall be of sufficient width to secure the safety of the dock workers working therein. In particular, on stage at a height of two metres or more above the ground level deck bottom, deck or tank top, shall be less than 30 centimetres wide.(6)Planks supported by the rungs of ladders shall not be used to support stages.(7)(a)Stage suspended by ropes or chains shall be secured as far as possible so as to prevent their swinging; and(b)no rope or chain shall be used in suspending stages unless it is of suitable quality, adequate strength and free from patent defects. Fibre rope shall not pass over sharp edges.(8)Safe means of access shall be provided for the use of dock workers to and from stages and ropes used for suspending stages shall not be used as means of access.

14. Work on staging .-(1) More than two men shall not be allowed to work at anyone time on a staging plank.

(2)When dock workers are employed on staging more than 2.5 metres high, they shall be protected by safety belts equipped with lifelines which shall be secured with a minimum of flask to a fixed structures.(3)Prior to each use, belts and lifelines shall be inspected for dry rot, chemical damage or other defects which may affect their strength. Defective belts shall not be used.(4)Work on a staging shall not be carried on when loaded slings have to pass over the stagings and there is danger from falling objects.

15. Life-saving appliances .-Provision for the rescue from drowning of dock workers shall be made and maintained, and shall include--

(a)a supply of life-saving appliances, kept in readiness on the wharf or quay, which shall be reasonably adequate having regard to all the circumstances; and(b)means at or near the surface of the water at reasonable intervals for enabling a person in water to support himself or escape from the water which shall be reasonably adequate having regard to all the circumstances.

16. Illumination .-(1) All areas in a dock and on a ship where the dock work is carried on, all approaches to such areas and to places to which dock workers may be required to go in the course of their employment, shall be safely and efficiently lighted in an appropriate way.

(2)The general illumination, in areas on the dock where dock workers have to pass, shall be at least 10 lux and at places where dock workers are employed the illumination shall be at least 25 lux without prejudice to the provision of any additional illumination needed at particularly dangerous places.(3)The means of artificial lighting shall, so far as is practicable, be such and so placed as to prevent glare or formation of shadows to such an extent as to cause risk of accident to any dock worker.(4)The portable lights shall be maintained in good condition and shall--(a)be equipped with substantial reflectors and guards; and(b)be equipped with heavy duty electric cords with connection and insulation maintained in safe condition.

17. Fire protection .-(1) Place where dock workers are employed shall, be provided with--

(a)sufficient and suitable fire-extinguishing equipment; and(b)an adequate water supply at ample pressure as per national standards.(2)Persons trained to use the fire-extinguishing equipment shall be readily available during all working hours.(3)Fire-extinguishing equipment shall be properly maintained and inspected at regular intervals and a record maintained to that effect.(4)A portable fire-extinguishing equipment of suitable type shall be provided in every launch or boat or other craft used for transport of dock workers and also in the crane cabins including mobile cranes.(5)Smoking shall not be allowed in the hold of a ship, on wharf, in warehouses and transit sheds and "No Smoking" or other cautionary notices shall be displayed at such places.

18. Excessive noise, etc .-Adequate precautions shall be taken to protect dock workers against the harmful effects of excessive noise, vibrations and air pollution at the work place. In no case the noise levels shall exceed the limits laid down in Schedule VII.

B.-WAREHOUSES AND STORE PLACES

19. Construction .-(1) All floors, walls, steps, stairs, passages chutes and gangways of warehouses and storeplaces shall be of sound construction and properly maintained.

(2)The slope of ramps shall be such that the stability of transport equipment or vehicles using them is not endangered.

20. Floor loading .-(1) The maximum load per square metre to be carried by any floor of a warehouse or store place and maximum load of any lifting appliance and transport equipment used on such floor shall be displayed at conspicuous places.

(2)The maximum loads referred to in sub-regulation (1) shall not be exceeded.

21. Stairs .-(1) For every staircase in a warehouse or store place, a substantial handrail of a height of at least one metre shall be provided and maintained, which if the staircase has an open side shall be on that side, and, in the case of a staircase having two open sides, such a handrail shall be provided and maintained on both sides.

(2)Any open side of staircase shall also be guarded by the provision and maintenance of lower rail or other effective means.

22. Openings .-All openings in floors and walls shall in so far as they prevent danger, be effectively protected.

23. Means of escape in case of fire .-(1) All warehouses and store places shall be provided with sufficient means of escape in case of fire for the dock workers employed therein and all the means of escape, other than the main exit in ordinary use, shall be distinctively marked in a language understood by the majority of the dock workers.

(2)A free passageway giving access of each means of escape in case of fire shall be maintained for the use of all dock workers.(3)In every dock there shall be provided effective and clearly audible means of giving warning in case of fire to every dock worker employed therein.C.-MEANS OF ACCESS

24. Access between shore and ship .-(1) When a ship is lying at a wharf or quay for the purpose of dock work, adequate and safe means of access to the ship, properly installed and secured, shall be provided.

(2)Safe means, required by sub-regulation (1) shall be as follows:--Where practicable, the ship, accommodation ladder or a gangway or a similar construction, shall be--(i)not less than 55 cms, wide at the steps and of adequate depth with steps having permanent non-skid surface;(ii)properly secured and securely fenced throughout its length on each side to a clear height of one metre by means of upper and lower rails, taut ropes or chains or by other equally safe means except that in the case of ship's accommodation ladder such fencing shall be necessary on one side only provided that the other side is properly protected by the ship's side;(iii)constructed of suitable material and maintained in good condition and suitable for the purpose;(iv)maintained in a condition as to prevent slipping;(v)fitted with a platform at either end of the ladder and the lower platform or the treads resting on the dock;(vi)an angle maintained not exceeding 40 degrees to the horizontal irrespective of resting on the dock.(3)When a fixed tread ladder is used and the angle is low enough to require dock workers to walk on the edge of the treads, cleated duck boards shall be laid over and secured to the ladder.(4)Whenever there is danger of dock workers falling between the ship and the shore, a safety net or other suitable protection shall be rigged below the accommodation ladder in such a manner as to prevent dock workers from falling.(5)If it is not possible to rest the accommodation ladder or gangway and the foot of the same is more than 30 cms. away from the edge of the wharf or quay, the space between them shall be bridged by a firm walkway equipped with railing on both the sides with a minimum height of one metre with the mid-rails.(6)Access to the ship shall not be within the swinging radius of the load.(7)When the upper end of the means of access rests on or is in flush with the top of the bulwark substantial steps properly secured and equipped with at least one substantial handrail one metre in height shall be provided between the top of the bulwark and the deck and the steps provided shall be, as far as practicable, in line with the gangway.(8)The use of swinging derricks or rope ladders for the access shall be prohibited.

25. Access between ship and another vessel .-(1) When a ship is alongside another ship, and dock workers have to pass from one to the other, adequate and safe means of access shall be provided for their use, unless the conditions are such that it is possible to pass from one to the other without undue risk and without the aid of any special appliance.

(2) If the other ship is sailing barge, flat, keel, lighter or other similar vessel of relatively low free board, the means of access shall be provided by the ship which has the higher free board. (3) Rope ladders used as a means of access between ship and another vessel shall,--(a) be of good construction, made up of suitable and sound material with adequate strength and properly maintained for the purpose for which it is used; (b) be adequately secured at its upper end in such a manner that it is firmly and safely held in order to prevent any possible slipdown of its upper portion when the ladder is used; (c) have treads which are flat and of a width and depth of not less than 30 centimetres and 15 centimetres respectively and so constructed as to prevent slipping; (d) have suitable provisions as far as practicable, for preventing the ladder from twisting; and (e) have bottom tread within the safe distance of the lower landing place.

26. Access between deck and hold .-(1) If the depth from the level of the deck to the bottom of the hold exceed 1.5 metres there shall be maintained safe means of access from the deck to the hold in which work is being carried on.

(2) Where practicable, access to the hold shall be by separate man-hatches 60 centimetre by 60 centimetres clear in size, with a sloping ladder and hand rail through each deck to the lower hold and hinged cover for a man-hatch shall, while in the open position, be effectively secured. (3) When the length of the hatchway exceeds 7 metres, a fixed hold ladder shall be fitted both on or near the fore and aft side of the hatchway. (4) Fixed hold ladders shall be maintained in good repair and shall comply with the following provisions:--(a) the ladders shall be at least 30 centimetres between their up-rights and leave free footroom of at least 12 centimetres behind the ladder; (b) the rungs shall be so fastened that they cannot tilt, and the intervals between rungs shall not exceed 30 centimetres; (c) the rungs shall afford an adequate handhold; (d) the ladders shall be sufficiently long; and (e) a suitable landing platform shall be provided for every six metres length or fraction thereof. (5) Fixed hold ladders connecting decks shall lie in the same straight line, unless measures are taken at each tween deck for safe ascent and descent from the ladders. (6) (a) If the fixed hold ladders cannot extend upwards on to the coamings, strong cleats shall be fitted to the coamings in the same line as the ladders at intervals not exceeding 30 centimetres having a clear internal width of at least 30 centimetres while affording free footroom of at least 12 centimeters and so constructed as to prevent the foot from slipping sideways; (b) Coamings which are higher than 90 centimeters above the deck shall also be provided with the necessary cleats referred to in this sub-regulation on the outside. (7) Shaft tunnels shall be provided with adequate hand-hold and foot-hold on each side. (8) The approaches to hold ladders and stairs shall be at least 40 centimetres wide and shall not be obstructed, and if on one or both sides there are dangerous moving parts it shall be at least 50 centimetres wide. (9) Cargo shall be stacked sufficiently far from the ladder to leave at each rung of the ladder foothold of a depth including any space behind the ladder of not less than 12 centimetres

for a width of 25 centimetres.

27. Fencing of and means of access to lifting appliances .-(1) Safe means of access to every part of a lifting appliance shall be provided.

(2)The operator's platform on every crane or tip driven by mechanical power shall be securely fenced and shall be provided with safe means of access. In particular, where access is by a ladder,--(a)the sides of the ladder shall extend to a reasonable distance beyond the platform or some other suitable hand-hold shall be provided;(b)the landing place on the platform shall be maintained free from obstruction and slipping; and(c)in case where the ladder is vertical and exceeds six metres in height, a resting place shall be provided, after every six metres and part, thereof.

28. Ladders .-(1) All metal, wooden, rope or other ladders, that are used by dock workers shall be of sound material, good construction and adequate strength for the purpose for which they are intended and shall be properly maintained and kept free from oil or other slippery material.

(2)Wooden ladders shall not be painted, but covered with clear varnish or other transparent preservative.(3)No ladder shall be used which has--(a)a missing or defective rung; or(b)any rung which depends for its support on nails, spikes or other similar fixings.(4)Every ladder shall be inspected at suitable intervals by a responsible person, and if any defects are found in any ladder, the ladder shall be immediately taken out of service.D.-DECKS, HATCHWAYS, ETC.

29. Bulwarks or rails .-(1) All upper decks to which dock workers may have access for the purpose of carrying on dock work shall be provided on the outer edge upto a height of one metre above the deck with a bulwark or guard rails so designed, constructed and placed, as to prevent any dock worker from accidentally falling overboard.

(2)The bulwarks or guard rails shall be continuous except where sections have to be removed for the purpose of dock work and such sections shall not extend beyond the minimum distance necessary.

30. Deck ladders .-Ladders leading from upper deck or bridge deck or which deck to main deck shall be so situated as to reduce, as far as practicable, the risk of dock workers,--

(a)being struck by cargo during loading or unloading; and(b)falling direct into an open hold if they fall from the ladder.

31. Skeleton decks .-(1) When dock work is proceeding at any skeleton deck, adequate staging with suitable railings shall be provided to ensure a safe working surface unless the space beneath the deck is filled with cargo to within a distance of 60 centimetres of such deck.

(2)When skeleton decks are not accessible from hold ladders, safe means of access such as portable ladders shall be provided.

32. Working spaces .-(1) Dock cargoes shall be stowed, or effective measures taken so that,--

(a)safe access is provided to the winches, hold ladders and to the signaller's stand; and(b)winches and cranes used during loading or unloading can be safely operated.(2)Safe access to the deck cargo, hold ladders and winches shall be ensured by securely installed steps or ladders.(3)When a signaller has to move from the square of the hatch to the ship's side, a space at least 90 centimetres wide shall be kept clear.(4)If the surface of the deck cargo is uneven, suitable measures shall be provided for the safe movement of dock workers.(5)When deck cargo is stowed against ship's bulwark or hatch coamings and at such a height that there is a danger to the dock worker of falling overboard or into the open hold, suitable fencing shall be provided to prevent such fall.(6)When there is a cargo on dock, it shall be ensured that the visibility between the signaller and crane or winch operator is not obstructed by making suitable arrangements.(7)All places, such as decks, stages, etc., shall be properly cleaned and kept free from objects which can cause slipping, stumbling and falling.(8)When the coaming is so high that signaller cannot see properly in the hold, a suitable step or platform shall be provided in such a manner that the distance between the top of the platform and the upper edge of the coaming is not less than one metre.(9)A clear and unobstructed space at least 90 centimetres wide and where this is not practicable as wide as is reasonably practicable shall be provided around every hatch.(10)Any part of the ship used in connection with the dock work shall be free from patent defect and maintained in good working order.

33. Fencing around hatchways .-(1) Every hatchway of a hold exceeding 1.5 metres in depth, which is not protected by coaming to a clear height of 75 centimetres shall, when not in use either be effectively fenced to a height of one metre or be securely covered to prevent dock workers from falling into the hold.

(2)If in any hatch dock work is carried on simultaneously at two decks, the open end of the hatch in the higher deck shall be protected to a height of one metre by means of planks or nets or in some other suitable manner to prevent fall of dock workers or cargo and the safety nets when rigged shall not be secured to the hatch covers.(3)When an edge of a hatch section or of stowed cargo more than 2.5 metres high is so exposed that it presents a danger to dock workers falling the edge shall be guarded by a taut rope, safety net or railing to a height of one metre.(4)Dock workers employed in a hold on a partly covered hatch or on a stack shall be protected by spreading a net or in some other

suitable way against the danger of falling down.

34. Hatch coverings, hatch beams, etc .-(1) All fore and aft beams and thwartship beams used for hatch covering shall have suitable gear for lifting them on and off without it being necessary for any dock worker to go upon them to adjust such gear.

(2) All hatch coverings and beams shall be kept plainly marked to indicate the deck and hatch to which they belong and their position therein. (3) All hatch coverings and beams shall be replaced according to their markings: Provided that this regulation shall not apply in cases where all the hatch coverings and beams of a ship are interchangeable or, in respect of marking of position, where all hatch coverings of a hatch are interchangeable. (4) All fore and aft beams and thwartship beams including sliding beams and the tracks used for hatch coverings and all hatch coverings shall be maintained in good condition. (5) Adequate handgrips shall be provided on all hatch coverings, having regard to their size and weight, unless construction of the hatch or the hatch covering is of a character rendering the provision of handgrips unnecessary. (6) Hatch coverings shall not be used in the construction of stages or for any other purpose which may expose them to damage. (7) Hatch covers and beams shall not be removed and replaced while dock work is in progress in the hold under the hatchway. Before loading or unloading takes place, any hatch cover or beam that is not adequately secured against displacement shall be removed. (8) Only an authorised person shall be permitted to open or close power operated hatch covers. (9) Folding hatch covers shall be fitted with locking devices to prevent covers from folding back. (10) Hatch covers shall not be opened or closed in such manner as is likely to cause injury to any dock worker.

35. Opening and closing of hatches .-(1) Hatchways shall be opened sufficiently to allow loads to be safely hoisted or lowered.

(2) No hatch cover or hatch beam shall be removed from or replaced on any hatch unless there is around the hatch coaming an unobstructed working space at least 60 centimeters wide or where this is not reasonably practicable, as wide as is reasonably practicable. (3) Before covering hatch with tarpaulin, it shall be ensured that there is no opening left uncovered by hatch covers and that all the hatch covers are resting securely.

36. Handling of hatch coverings and beams .-(1) All hatch cover exceeding 55 kilograms in weight and all beams of any hatch shall be removed or replaced only with a winch or other suitable mechanical means.

(2) When being replaced, hatch covers and beams shall be placed on the hatches in the position indicated by the markings thereon and shall be adequately secured. (3) Hatch covers and beams shall not be removed or replaced while a dock worker is below the level of the hatch in a position in which he is liable to be struck by a falling hatch covering or hatch beam. (4) Hatch covers, tarpaulins, fore and aft beams and thwartship beams which have been removed shall be so laid down, stacked or

secured that they cannot fall into the hold or otherwise cause danger.(5)Hatch covers and beams shall be so placed as to leave a safe walkway from bulwark to hatchcoaming or fore and aft.(6)Hatch covers shall be either arranged in neat piles not higher than the coaming and away from it or spread one high between coaming and rail with no space between them. The height of the stack shall be regulated so that, if accidentally struck by a sling, they will not endanger a dock worker below or overside.

37. Securing of hatch covering and hatch beams .-(1) Where any hatch beam is fitted with a permanent device for securing it in position in the hatch, that device and its corresponding fitting in the coaming shall be effectively and properly maintained.

(2)The beams of any hatch in use for the dock work shall, if not removed, be adequately secured to prevent their displacement.(3)Any sliding or rolling hatch beams supporting hatch coverings which are left in position in a partly opened hatch shall be adequately secured to prevent any horizontal movement of the hatch beams.(4)Every sliding or rolling hatch beams and its guides shall be so constructed and maintained that the hatch beam is not liable to be accidentally displaced from its guides.(5)Mechanically operated hatch coverings shall, when stowed be adequately secured to prevent movement.

38. Escape from holds .-Precautions shall be taken to facilitate the escape of dock workers when handling coal or other bulk cargo in a hold or in tween decks or bin or hooper.

39. Dangerous and harmful environment .-(1) When internal combustion engines exhaust into a hold or intermediate deck or any other working place where neither natural ventilation nor the ship's ventilation system is adequate to keep the carbon monoxide content of the atmosphere, below 50 parts per million, adequate and suitable measures shall be taken at such places in order to avoid exposure of dock workers to health hazards.

(2)No dock worker shall be allowed to enter any hold or tank of a vessel wherein there is given off any dust, fumes or other impurities of such a nature and to such an extent as is likely to be injurious or offensive to the dock workers or in which explosives, poisonous, noxious or gaseous cargoes have been carried or stored or in which dry ice has been used as a refrigerant or which has been fumigated, or in which there is possibility of oxygen deficiency, unless all practical steps have been taken to remove the dust, fumes or other impurities and dangers which may be present and to prevent any further ingress thereof, and such holds or tanks are certified to be safe and fit for dock workers to enter the same by the competent authority.(3)When dock workers are exposed to any dust in substantial quantities as if handling bulk grains fertilizers, cements and other similar cargoes, they shall be protected by suitable respiratory protective equipment.E.-LIFTING APPLIANCES AND GEAR

40. Construction and maintenance of lifting appliances .--

(1)General .-All lifting appliances including all parts and working gear thereof, whether fixed or movable, and any plant or gear used in anchoring or fixing such appliance, shall be--(a)of good construction, sound material, adequate strength for the purpose for which it is used and free from patent defects; and(b)maintained in good repair and working order.(2)Drums .-(a) Every drum or pulley round which the rope of any lifting appliances is carried, shall be of adequate diameter and construction in relation to the rope used.(b)Any rope which terminates at the winding drum of lifting appliance shall be securely attached to the drum and at least three dead turns of the rope shall remain on the drum in every operating position of the lifting appliance.(c)The flange of the drum should project twice the rope diameter beyond the last layer and if this height is not available, other measures such as anti-slackness guards shall be provided to prevent the rope from coming off the drum.(3)Brakes .-Every lifting appliance shall be provided with an efficient brake or brakes which shall,--(a)be capable of preventing fall of a suspended load (including any test load applied in accordance with these regulations) and of effectively controlling a load while it is being lowered;(b)act without shock;(c)have shoes that can be easily removed for relining; and(d)be provided with simple and easily accessible means of adjustment:Provided that this regulation shall not apply to steam winch which can be so operated that the winch is as safe as it would be if a brake or brakes were provided in accordance with this regulation.(4)Controls .-Controls of lifting appliance shall,--(a)be so situated that the driver at his stand or seat has ample room for operating and has an unrestricted view of dock work, as far as practicable, and remains clear of the load and ropes, and that no load passes over him;(b)be positioned with due regard to ergonomic considerations for easy operation;(c)be so located that the driver does not have to remain in the bight of the heel block;(d)have upon them or adjacent to them clear markings to indicate their purpose and mode of operation;(e)be provided, where necessary with a suitable locking device to prevent accidental movement or displacement;(f)as far as practicable, move in the direction of the resultant load movement; and(g)automatically come to a neutral position in case of power failure wherever automatic brakes are provided.

41. Test and periodical examination of lifting appliances .-(1) Before being taken into use for the first time or after it has undergone any alterations or repairs liable to affect its strength or stability and also once at least in every five years, all lifting appliances including all parts and gears thereof, whether fixed or movable, shall be tested and examined by a competent person in the manner set out in Schedule I.

(2)All lifting appliances shall be thoroughly examined by a competent person once at least in every 12 months. Where the competent person making this examination forms the opinion that the lifting appliance cannot continue to function safely, he shall forthwith give notice in writing of his opinion to the owner of the lifting appliance or in case of lifting appliance carried on board a ship not registered in India, to the Master or Officer-in-charge of the ship.(3)Thorough examination for the purpose of this regulation shall mean a visual examination, supplemented if necessary by other means such as hammer test, carried out as carefully as the conditions permit, in order to arrive at a

reliable conclusion as to the safety of the parts examined; and if necessary for this purpose, parts of the lifting appliance and gear shall be dismantled.

42. Automatic safe load indicators .-(1) Every crane, if so constructed that the safe working load may be varied by raising or lowering of the jib or otherwise, shall have attached to it an automatic indicator of safe working loads which shall also give a warning to the operator wherever the safe working load is exceeded.

(2)Cut-out shall be provided which automatically arrests the movement of the lifting parts of the crane in the event of the load exceeding the safe working load wherever possible.(3)The provisions of sub-regulation (1) shall not apply where it is not possible to instal an automatic safe load indicator, in which case, provision on the crane of a table showing the safe working loads as the corresponding inclinations or radii of the jib shall be considered sufficient compliance.

43. Rigging of ship's derricks .-(1) Every ship shall carry the current and relevant rigging plans and any other relevant information necessary for the safe rigging of its derricks and necessary gear.

(2)All such rigging plans shall be certified by a competent person.

44. Securing of derrick foot .-Appropriate measures shall be taken to prevent the foot of a derrick being lifted out of its socket or supports.

45. Winches .-(1) General .-(a) Winches shall not be used if control levers operate with excessive friction or excessive play.

(b)Double gear winches shall not be used unless a positive means of locking the gear shift is provided.(c)When changing gears on a two gear winch, there shall be no load other than the fall and the cargo hock assembly on the winch.(d)Adequate protection shall be provided to the winch operator against weather, where necessary.(e)Temporary seats and shelters for winch operators which create a hazard to the winch operator or other dock workers shall not be allowed to be used.(f)When winches are left unattended, control levers shall be secured in the neutral position and whenever possible, the power shall be shut off.(2)Steam winches .-In every steam winch used in dock work,--(a)measures shall be taken to prevent escaping steam, from obscuring any part of the decks or other work places or from otherwise hindering or injuring any dock worker;(b)extension control levers which tend to fall of their own weight shall be counter-balanced;(c)except for short handles on wheel-type controls, winch operations shall not be permitted to use the winch control extension levers unless they are provided by either the ship or the employer and such lever shall be of adequate strength and secure and fastened with metal connections at the fulcrum and at the permanent control lever.(3)Electric winches .-(a) In case of any defect, dock workers shall not be permitted to tamper with or adjust electric control circuits.(b)Electric wireless shall not be used for

dock work in cases where,--(i)the electro-magnetic brake is unable to hold the load; and(ii)one or more control points, either hoisting or lowering, is not operating properly.

46. Construction and maintenance of loose gears .-(1) Every loose gear shall be--

(a)of good design and construction, sound material and adequate strength for the purpose for which it is used and free from patent defects; and(b)properly maintained in good repair and working order.(2)Components of the loose gear shall be renewed if one of dimensions at any point has decreased by 10 per cent or more by user.(3)(a)Chains shall be withdrawn from use when stretched and increased in length exceeds five per cent or when a link of the chain is deformed or otherwise damaged or raised scarfs of defective welds appears.(b)Rings, hooks, swivels and end links attached to chains shall be of the same material as that of the chains.(4)The voltage of electric supply to any magnetic lifting device shall not fluctuate by more than ± 10 per cent.

47. Test and periodical examination of loose gears .-(1) All loose gears shall be initially tested for the manufacturer by a competent person, in a manner set out in Schedule I before taking into use or after undergoing any substantial alterations or renders to any part liable to affect its safety and shall subsequently be retested, for the owner of the gear, at least once in every five years.

(2)All loose gears shall be thoroughly examined once at least in every twelve months by a competent person. In addition, chains shall be thoroughly examined once at least every month by a responsible person.

48. Ropes .-(1) No rope shall be used for dock work unless--

(a)it is of suitable quality and free from patent defect, and(b)in the case of wire rope, it has been tested and examined by a competent person in the manner set out in Schedule 1.(2)Every wire rope of lifting appliance or loose gear used in dock work shall be inspected by a responsible person once at least in every three months, provided that after any wire has broken in such rope, it shall be inspected once at least in every month.(3)No wire rope shall be used in dock work if in any length of eight diameters the total number of visible broken wires exceed 10 per cent. of the total number of wires or the rope shows sign of excessive wear, corrosion or other defects which, in the opinion of the person who inspects it or Inspector, renders it as unfit for use.(4)Eye splices and loops for the attachment of hooks, rings and other such parts to wire ropes shall be made with suitable thimble.(5)A thimble or loop splice made in any wire rope shall conform to the following standard:--(a)wire rope or rope sling shall have at least three tucks with full strand of rope and two tucks with one-half of the wires cut-out of each strand and strands in all cases shall be tucked against the lay of the rope;(b)protruding ends of strands in any splice on wire rope and rope slings shall be covered or treated so as to leave no sharp points;(c)fibre rope or rope sling shall have at

least four tucks tail of such tuck being whipped in a suitable manner; and(d)synthetic fibre rope or rope sling shall have at least four tucks with full strand followed by further tuck with one-half filaments cut-out of each strand and final tuck with one-half of the remaining filaments, cut-out from strands. The portion of the splices containing the tucks with the reduced number of filaments shall be securely covered with suitable tape or other materials:-Provided that this sub-regulation shall not operate to prevent the use of another form of splice which can be shown to be as efficient as that laid down in this regulation.

49. Heat treatment of loose gears .-(1) All chains other than bridle chains attached 10 derricks on masts and all rings, hooks, shackles and swivels used in hoisting or lowering shall, unless they have been subjected to such treatment as an Inspector may, subject to confirmation by the Chief Inspector approve, be effectively annealed under supervision of a competent person and at the following intervals:--

(a)12.5 millimeter and smaller chains, rings, hooks, shackles and swivels in general use, once at least in every six months; and(b)all other chains, rings, hooks, shackles and swivels in general use, once at least in every twelve months:Provided that in the case of such gear used solely on cranes and other hoisting appliances worked by hand, twelve months shall be substituted for six months in sub-clause (a) and two years for twelve months in sub-clause (b):Provided further that where an Inspector is of the opinion that owing to the size, design, material or frequency of use of any such gear or class of such gear, the requirement of this regulation as to annealing is not necessary for the protection of dock workers, he may by a certificate in writing (which he may at his discretion revoke) and subject to confirmation by the Chief Inspector exempt such gear or class of gear from such requirement subject to such conditions as may be specified in such certificate.(2)Sub-regulation (1) shall not apply to:(i)pitched chains working on sprocket or sprocketed wheels;(ii)rings, hooks and swivels permanently attached to pitched chain, pulley block or weighing machines; and(iii)hooks and swivels having ball bearings or other case hardened parts.(3)All chains and loose gears made from high tensile steel or alloy steel be plainly marked with an approved mark indicating that they are so made. No chain or loose gear made from high tensile steel or alloy steel shall be subject to any form of heat treatment except where necessary for the purpose of repair and under the direction of a competent person.(4)If the past history of wrought iron gear is not known or if it is suspected that the gear has been heat treated at incorrect temperature, it shall be normalised before using the same for dock work.

50. Certificate to be issued after actual testing, examination, etc .-A competent person shall issue a certificate for the purpose of regulation 41, 47, 48 or 49 only after actual testing or, as the case may be, examination of the apparatus specified in the said regulation.

51. Register of periodical test and examination and certificates thereof .--(1) A register in Form II shall be maintained and particulars of test and examination of lifting appliances and loose gears and heat treatment, as required by regulations 41, 47 and 49 shall be entered in it.

(2) Certificates shall be obtained from a competent person and attached to the register in Form II, in respect of the following in the forms shown against each:--(a) initial and periodical test and examination under regulations 41 and 47, for--(i) winches, derricks and their accessory gear in Form III; (ii) cranes or hoists and their accessory gear in Form IV; (b) test, examination and re-examination of loose gears under regulation 47 in Form V; (c) test and examination of wire ropes under regulation 48 in Form VI; (d) heat treatment and examination of loose gears under sub-regulation (1) of regulation 49, in Form VII; (e) annual thorough examination of the loose gears under sub-regulation (2) of regulation 47, in Form VIII, unless required particulars have been entered in the register in Form II. (3) The register and the certificates attached to the register shall be--(a) kept on board the ship in case of ship's lifting appliances, loose gears and wire ropes; (b) kept at premises of the owner in respect of other lifting appliances, loose gears and wire ropes; (c) produced on demand before an Inspector; and (d) retained for at least five years after the date of the last entry. (4) No lifting appliance and loose gear in respect of which an entry is required to be made and certificates of test and examination are required to be attached in the register in Form II, shall be used for dock work unless and until the required entry has been made in the register and the required certificates have been so attached.

52. Marking of safe working load .--(1) Every lifting appliance and every item of loose gear shall be clearly marked with its safe working load and identification mark by stamping or, where this is impracticable, by other suitable means.

(2) (a) Every ship's derrick (other than derrick crane) shall be clearly marked with its safe working load when the derrick is used--(i) in single purchase, (ii) with a lower cargo block, and (iii) in union purchases in all possible block positions. (b) The lowest angle to the horizontal, that the derrick may be used, shall also be legibly marked. (3) Every lifting appliance (other than ship's derrick having more than one safe working load) shall be fitted with effective means enabling the operator to determine the safe working load under each condition of use. (4) Means shall be provided to enable any dock worker using loose gears to ascertain the safe working load for such loose gears under such conditions as it may be used and such means shall consist--(a) as regards chain slings, of marking the safe working load in plain figures or letters upon the sling or upon a tablet or ring of durable material attached securely thereto; and (b) as regards wire rope slings, either the means specified in clause (a) above or a notice or notices so exhibited as can be easily read by any concerned dock worker stating the safe working load for the various sizes of the wire rope slings used. (5) No lifting appliance or loose gear shall be used unless marked in accordance with the provisions of this regulation.

53. Loading of lifting appliances and loose gears .-(1) No lifting appliance, loose gear and wire rope shall be used in an unsafe way and in such a manner as to involve risk to life of dock workers, and, in particular, shall be loaded beyond its safe working load or loads, except for testing purposes as given in Schedule I and under the direction of a competent person.

(2) No lifting appliance and loose gears or any other cargo handling appliances shall be used, if--(a) the Inspector is not satisfied by reference to a certificate of test or examination or to an authenticated record maintained as provided under the regulations; and (b) in the view of the Inspector, the lifting appliance, loose gear and any other cargo-handling appliance is not safe for use in dock work.

54. Pulley blocks .-No pulley blocks shall be used in dock work unless the safe working load and its identification marks are clearly stamped upon it.

55. Vacuum and magnetic lifting device .-(1) No vacuum lifting device or magnetic lifting device, or any other lifting device where the load is held by adhesive power only, be used while workers are performing operations in the holds.

(2) Any magnetic lifting device used in connection with dock work shall be provided with an alternative supply of power, such as batteries, that come into operation immediately in the event of failure of the main power supply: Provided that the provisions under this sub-regulation shall not apply to magnetic lifting device that is being used to load or unload scrap metal or to other cargo handling operations of such a nature that there is no dock worker within the swinging zone of the load.

56. Knotting of chains and wire ropes .-No chain or wire rope shall be used in dock work with a knot in it.

F.-TRANSPORT EQUIPMENT AND OPERATIONS

57. Power trucks and hand trucks .-(1) All trucks/trailers and tractor equipment shall be of good material, sound construction, sufficiently strong for the purpose for which it is used and maintained in good state of repair:

Provided that trucks and trailer employed for transporting freight containers shall be of the size to carry the containers without overhanging and provided with twist locks conforming to national standards at all the four corners and these shall be--(i) approved by a competent person; and (ii) inspected by a responsible person once at least in every month and record maintained. (2) All trucks and other equipments shall be inspected at least once a week by a responsible person and

when any dangerous defect is noticed in an equipment, it shall be immediately taken out of use.(3)Power trucks and tractors shall be equipped with effective brakes, head lights and tail lamps and maintained in good repair and working order.(4)Side stanchions on power trucks and trailers for carrying heavy and long objects shall be--(a)of substantial construction and free from defects;(b)provided with the chains attached to the top across the loads for preventing the stanchions from spreading out; and(c)wherever necessary, the stanchions shall be in position while loading and unloading.(5)Safe gangways shall be provided for to and from movement of dock workers engaged in loading and unloading in lorries, trucks, trailers and wagons.(6)Trucks and other equipment shall not be loaded beyond their safe carrying capacity which shall be clearly and plainly marked on them.(7)Handles of hand trucks shall be so designed as to protect the hands of dock workers or else be provided with knuckle guards.(8)(a)Unauthorised persons shall not ride on transport equipment employed in connection with the dock work.(b)Driver of the transport equipment shall manoeuvre the equipment under the direction of a signaller only:Provided that this sub-regulation shall not apply in case vision of the driver is not obstructed.

58. Use of internal combustion engines in the holds .-(1) Internal combustion engines shall not be used in connection with the dock work in the holds or cargo space unless,--

(a)adequate means of ventilation and, where necessary, mechanical ventilation is provided;(b)suitable fire fighting equipment is readily available;(c)exhaust pipes, connections and mufflers are kept tight;(d)exhaust is so directed as not to cause inconvenience to the operator and dock workers;(e)it is ensured that no explosives, inflammable liquids, gases or similar dangerous cargo are present;(f)a spark arrestor is fitted on the exhaust of the engine and the bare heated surfaces of the engine, that are liable to ignite spilled fuel, are suitably protected;(g)the engine is refuelled above deck; and(h)the exhaust does not contain the carbon monoxide above TLY prescribed in the national standards.(2)The internal combustion engine shall be switched off when not in use in connection with the dock work.(3)Operators of internal combustion engines in cargo spaces or cargo holds shall not work alone.(4)Whenever internal combustion engines for use in dock work are to be brought on board, the master or the officer-in-charge of the ship shall be notified.

59. Use of fork-lifts, electric trucks or cars .-(1) Electrically driven trucks or cars, fork-lifts, etc., shall be fitted with at least one effective mechanical braking device and mechanically operated current cut-off that comes into operation automatically when the operator leaves the vehicle.

(2)Fork-lift trucks shall be fitted with overhead guard, to protect the operator from falling objects.(3)Fork-lift trucks or electric cars shall have their gross weight conspicuously marked upon them.(4)When a fork-lift truck or electric car is operated in intermediate deck, steps shall be taken to ensure that the working surface can support the load and the hatch covers cannot be dislodged by the movement of the truck.

60. Stability test .-All fork-lift trucks and electric cars shall be tested for stability as per national standards.

61. Dock railways .-(1) Sufficient clearance to ensure safety shall be allowed between structures or piles of cargo and railway track.

(2) Locomotive drivers shall act only on signals given by an authorised person: Provided that stop signals shall always be acted upon, irrespective of their source. (3) Locomotives pulling or pushing wagons shall move dead slow and shall be preceded by a man on foot when passing through an area where dock workers are employed. (4) No locomotive or wagon shall be moved on a railway line until an efficient sound signal as a warning has been given by the man preceding it on foot where dock workers are working and whose safety is likely to be endangered, or on approaching any curve where sight is intercepted, or any other point of danger to dock workers. (5) When a railway wagon or a group of wagons not directly connected to a locomotive is being moved, a person shall be appointed to control each wagon or a group of wagons. (6) Cranes, ship's winches and derricks shall not be used to move railway wagons. (7) Fly shunting in premises where dock workers are engaged in dock work shall be prohibited and all trains shall be brought to a full stop before any wagons are cut loose. (8) As far as practicable, idle wagons shall not be left standing on quays with short distances between them. (9) When dock workers are required to work between or beneath railway wagons, they shall be provided with a lookout man responsible for giving them necessary warnings. (10) Dock workers shall not be employed inside open wagon when--(a) bulk cargo is being handled by means of grabs; or (b) steel cargo is being handled by means of electro-magnets. (11) Locomotive used for pulling or pushing wagons shall be maintained in good repair and working order. (12) Before moving railway wagons, train crews shall make sure that all dock workers are out of the wagons and the danger zone.

62. Conveyers .-(1) Conveyers shall be of sound material, good construction and sufficient strength to support safely the loads for which they are intended, and shall be kept in good repair.

(2)(a) Conveying machinery shall be so constructed and installed as to avoid hazardous points between moving and stationary parts or objects. (b) When a passage way is adjacent to an open conveyer, a clearance of at least 90 centimetres shall be provided between the inner edge of the walkway and the conveyer. (3) When dock workers have to cross over conveyers, regular crossing facilities affording safe and adequately lighted passage shall be provided. (4) When conveyers that are not entirely enclosed cross over places where dock workers are employed or might pass beneath them, sheet or screen guards shall be provided to catch any material which might fall from the conveyers. (5) Power driven conveyers shall be provided at loading and unloading stations, at drive and take-up ends, and at other convenient places, with devices for stopping the conveyers machinery in an emergency. (6) Adequate fencing shall be provided at transfer point. (7) Conveyers which carry loads up-inclines shall be provided with mechanical devices, that will prevent machinery from reversing and carrying the loads back towards the loading point in the event of the power being cut off. (8) Where two or more conveyers are operated together, the controlling devices

shall be so arranged that no conveyer can feed on to a stopped conveyer.(9)Where the tops to hoppers for feeding conveyers are less than 90 centimetres above the floors, the openings shall be adequately guarded.(10)(a)Where conveyers extend to points not visible from the control stations, they shall be equipped with gongs, whistles or signed lights, to be use by the operators before starting the machinery so as to warn dock workers who might be in positions of danger;(b)Similar provisions shall be made where necessary to enable the dock workers to communicate with the operator.(11)Conveyers shall be provided with automatic and continuous lubrication systems, or with lubricating facilities so arranged that oiling and greasing can be performed without the oilers coming within dangerous proximity to moving parts.(12)Conveyers shall be thoroughly inspected once in every three months by a responsible person.(13)Dock workers shall not ride on conveyers.(14)Belt conveyers shall be provided with guards at the nips of the belts and drums.(15)Intake openings of blower or exhaust fans for pneumatic conveyers shall be protected with substantial metal screens or gratings.(16)Frames of gravity rollers and chutes shall be kept free of splinters, sharp edges and rough surfaces.(17)Gravity rollers and chutes shall not be used for the passage of dock workers.(18)Sideboards of chutes shall be of sufficient height to prevent cargo from falling off.(19)Suitable provision shall be made for the cleaning of conveyers and for clearing obstructions in a safe way.

63. Transport equipment operators .-No person shall be employed to operate transport equipment unless he is above 18 years of age and is sufficiently competent and reliable.

64. Qualification for mobile crane drivers, signallers, etc .-No person shall be employed to drive or operate lifting appliances whether driven by mechanical power or otherwise or to give signals to driver or operator of such lifting appliances or to work as rigger for ship's derricks unless he is above 18 years of age and is sufficiently competent and reliable.

G.-HANDLING OF CARGO

65. Loading and unloading operations .-(1) No cargo shall be loaded or unloaded by a fall or sling at any intermediate deck unless either the hatch at that deck is securely covered or a secure landing platform of a width not less than that of one section of hatch coverings has been placed across it:

Provided that this regulation shall not apply to any loading or unloading work the whole of which may be completed within a period of half an hour.(2)No loose gear or any other object shall be thrown in or out of the holds.(3)During the loading and unloading of bulk cargo a record of all dock workers employed in the hold shall be maintained and produced on demand to the Inspector.(4)Where necessary cargo shall be secured or blocked to prevent its shifting or falling. In breaking down, precautions shall be taken where necessary to prevent the remaining cargo from falling.(5)(a)Dragging of cargo shall be done with the ship's winches only when the runner is led

directly from the derrick heel block; and(b)Pulley blocks shall be used to provide a fair lead for the runner so as to prevent it from dragging against obstructions.(6)If the head room in the hold of a ship for the purpose of stacking and unstacking is less than 1.5 metres, suitable measures shall be taken to guard against accidents.(7)Loads shall be safely slung before being hoisted. Loose dunnage or debris hanging or protruding from loads shall be removed and suitable means shall be adopted to prevent cargo from falling out.(8)Cargo-handling bridles, such as pallet bridles, which are to remain attached to the lifting appliance while hoisting successive sling loads, shall be attached by shackles, or other positive means shall be taken to prevent them from becoming accidentally disengaged from the hook of the lifting appliance.(9)When lifting appliance is operating without a load on the slings:-(a)slings or chains shall be hooked securely to the appliances before the operators are given signal to move;(b)sharp hooks, multiple hooks and claws shall not hang at one end but shall be reeved through slings; and(c)the operators shall raise the appliance sufficiently to keep clear off dock workers and objects.(10)Effective measures shall be taken, by the use of suitable packing or otherwise, to prevent edges of any load from coming into contact with any rope or chain sling which is likely to cause any damage to the rope or chain sling.(11)Buckets, tubs and similar appliances shall not be loaded above their rims.(12)No loads shall be lifted at strappings unless such strappings are approved as proper and safe slinging points. Movement of such loads is allowed only if everybody has left the danger zone.(13)When working with lifting appliances, slopepulling, horizontal dragging and intentional swing of loads and lifting devices are prohibited.

66. Stacking and unstacking .-(1) Where stacking, unstacking, stowing or unstowing, stuffing or destuffing of cargo or handling in connection therewith cannot be safely carried out unaided, reasonable measures to guard against accidents shall be taken by shoring or otherwise.

(2)Stacking of cargo shall be made on firm foundation not liable to settle and the weight of the cargo shall be such as not overload the floors.(3)Cargo shall not be stacked against partition or walls of warehouses or storeplaces unless it is known that the partition or the wall is of sufficient strength to withstand the pressure.(4)Cargo shall not be stacked to such a height and in such a manner as would render the pile unstable.(5)Where the dock workers are working on stacks exceeding 1.5 metres in height, safe means of access to the stack shall be provided.(6)Stacking and unstacking work shall be performed under the supervision of an authorised person.

67. Handling objects having sharp and projecting parts .-Dock workers handling objects with sharp edges, fins, slivers, splinters or similar dangerous projecting parts shall be provided with suitable protective equipment.

68. Hooks for bales, etc .-When the working space in a hold is confined to the square of the hatch, hooks shall not be made fast in the bands or fastenings of bales of cotton, wool, cork, gunny bags, or other similar goods, nor shall hooks be used for raising or lowering a barrel when owing to the

construction or condition of the barrel or of the hooks, their use is likely to be unsafe.

69. Cargo platforms .-(1) Cargo platforms (except those formed by cargo itself) shall be made of sound material, substantially and firmly constructed, adequately supported and maintained in good repair.

(2) Cargo platforms shall--(a) be of sufficient size to receive cargo and to ensure the safety of dock workers working on them; (b) if of a height exceeding 1.5 metres, in addition to the requirements of (a) above, be protected on any side, which is not being used for receiving or delivering cargo, by substantial fencing to a height of one metre; and (c) be provided with safe means of access, such as ladders or stairs. (3) Cargo platforms shall not be overloaded. (4) Portable trestles shall be so placed as to be steady.

70. Restrictions on loading and unloading operations .-(1) No other work, for example, maintenance or repair work such as sand blasting or welding shall be performed at places where dock work is in progress if it is likely to endanger or obstruct the person carrying out dock work.

(2) When more than one gang of dock workers are employed in dock work simultaneously in a hold, it shall be ensured that,--(a) the operation of loading or unloading is harmonised to avoid dangers to the working gangs from one another; (b) the slung cargo of one gang will not endanger the dock workers of the other gang; (c) where gangs are working at different levels, a net shall be rigged and securely fastened to prevent dock workers from falling down or cargo falling on to dock workers below; (d) overcrowding of gangs in a section of the hold is avoided.

71. Dock work and midstream .-No dock worker shall be employed to handle cargo on any ship anchored in midstream whenever the working conditions are considered to be dangerous.

72. Work during berthing and shifting of ships .-(1) While ships are being berthed or shifted, no dock work shall be carried out by dock workers in the holds or hatches and on docks.

(2) When ships are being moored, dock workers shall be kept clear of the mooring ropes and, in particular, shall not be allowed to stand in the height of ropes being hauled by capstans.

73. Protective equipment .-(1) Where other means of protection against harmful agents are impracticable or insufficient, dock workers shall be provided with adequate protective clothing and personal protective

equipment to shield them from the effects of such agents.

(2)Protective clothing personal protective equipment shall be of suitable quality and maintained in good condition and shall be cleaned and disinfected at suitable intervals.(3)Where protective equipment and clothing may be contaminated by poisonous or other dangerous goods, it shall be stored in a separate accommodation where it will not contaminate the dock worker's clothing and other belongings.(4)Suitable protection equipment shall be issued to the dock workers employed in the reefer holds or chambers or reefer containers for affording complete body protection:

74. Winch and crane operators .-There shall be one winch or crane operator for each single or pair of loading winches or cranes which can be operated from the same point and he shall,--

(a)be not less than 18 years of age;(b)be competent and reliable;(c)possess the knowledge of the inherent risks of the winch/crane operation; and(d)be medically examined periodically as per the Schedule XI.

75. Signaller .-(1) When cargo is being-loaded or unloaded by a fall at a hatchway, a signaller shall be employed, and where more than one fall is being worked at a hatchway, a separate signaller shall be employed to attend to each fall:

Provided that:-(a)this regulation shall not apply, in cases where a barge, lighter or other similar vessel is being loaded or unloaded, if the operator of the crane or winch, working the fall has a clear and unrestricted view of those parts of the hold where dock work is being carried on; and(b)where the Inspector is of the opinion that owing to the nature of the crane or winch or other appliance in use or by reason of any special arrangements, the requirements of this regulation are not necessary for the safety of dock workers, he may by certificate in writing (which he may at his discretion revoke) suspend such requirements subject to such conditions as may be specified in such certificate.(2)More than one signaller shall be employed when in the opinion of the Inspector it is necessary to do so in the interest of the safety of workers.H.-HANDLING OF DANGEROUS GOODS

76. Notification .-(1) Before unloading of any dangerous goods, as categorised in Schedule II, from any ship is commenced, the master or officer-in--charge and the agent of the ship shall furnish the employer of the dock workers, Port Authority and the Inspector with a statement in writing identifying the goods and specifying the nature of the danger which they can give rise to and specifying the categories and obtain an acknowledgment of the receipt of the same.

(2) Before any dangerous goods are received for shipment, the shipper or his agent shall furnish the information as required by sub-regulation (1) above to the Port Authority, the Inspector and the employer of the dock workers handling the dangerous goods.

77. General precautions .-(1) Dangerous goods shall be loaded, unloaded handled and stored under the supervision of a responsible person who is familiar with the risks and the precautions to be taken. In case of doubt as to the nature of the risk or the precautions to be taken, necessary instructions shall be obtained from the Safety Officer appointed under these regulations.

(2) Dangerous goods shall not be loaded, unloaded or stored unless they are suitably packed and labelled showing the danger therefrom. The dock workers shall be given adequate information concerning the nature of the cargo and the special precautions to be observed in handling them. (3) Special precautions, such as provision of mats, sling nets, boxes and high sided pallets shall be taken to prevent breakage or damage to containers of the dangerous goods. (4) Dock workers employed in loading or unloading or otherwise handling dangerous goods shall be provided with suitable protective equipments. (5) Dock workers handling dangerous goods shall thoroughly wash their hands and faces with soap or some other cleaning agent before taking any food, drink, pan and supari or tobacco. (6) Only specially trained dock workers shall be employed for cleaning, sweeping or handling spillages or sweeping of dangerous goods.

78. Explosive and inflammable cargo .-(1) Where there is a risk of explosion from electrical equipment, the circuit shall be made dead and kept dead as long as the risk lasts unless such equipment and circuits are safe for use in the explosive atmosphere and non-sparking tools shall be provided and used in such atmosphere.

(2) When inflammable cargo is being loaded or unloaded, special measures shall be taken to ensure that an incipient fire can be controlled immediately.

79. Other dangerous goods .-(1) Before fumigated cargo such as grain is loaded or unloaded, adequate measures shall be taken to ensure that the cargo is safe to handle.

(2) Where caustic and corrosive substances are handled or stored, special precautions shall be taken to prevent damage to the containers and to render any spillage harmless. (3) If skins, wool, hair, bones, or other animal parts have not been certified by competent authority as having been disinfected, especially against anthrax, the dock workers concerned shall be--(a) instructed about the risk of infection and the precautions to be taken; (b) provided with suitable type of personal protective equipment; and (c) subjected to special medical supervision.

80. Handling of tetraethyl lead compound .-(1) Tetraethyl lead compound shall not be unloaded from a ship unless--

(a) it is packed in specially constructed steel drums of substantial construction, sealed with an inner and outer bung, and fitted with rolling roofs on to the shell as an added precaution; (b) all receptacles containing tetraethyl lead compound are distinctively and durably marked with the words "Tetraethyl Lead Compound Poison"; and (c) two sets of protective equipment comprising the following are provided and kept readily available for use in the event of any leakage of tetraethyl lead compound—(i) rubber gloves, (ii) rubber boots, (iii) rubber apron or oilskin suit, and (iv) suitable respirator, which should be either of canister type containing minimum of 50cc. of activated charcoal or an airline respirator with an independent fresh air supply. (2) Following measures shall be taken while unloading tetraethyl lead compound:—(a) no receptacle containing tetraethyl lead compound shall be opened within the limits of the port; (b) before commencement of the unloading operations, the consignment of tetraethyl lead compound shall be inspected on board the vessel by a responsible person. No tetraethyl lead compound drums showing any sign of leakage shall be unloaded until suitably repaired or placed in a larger receptacle or container offering sufficient precautions from leakage; (c) drums containing tetraethyl lead compound shall be discharged under the supervision of a responsible person; (d) drums containing tetraethyl lead compound shall be loaded discharged in rope slings with a maximum of two drums at a separate sling for each drum. Hooks shall on no account be used; (e) dock workers handling drums containing tetraethyl lead compound shall be provided with heavy gloves of canvas or leather and shall use such gloves; and (f) adequate quantities of non-inflammable solvent or kerosene a soap and water to deal with any leakages of tetraethyl lead compound shall be kept readily available where the work of handling of the tetraethyl lead compound is carried on. (3) Following measures shall be taken in the event of leakage of tetraethyl lead compound:—(a) the area on which the leakage of tetraethyl lead compound has occurred (including the outside of a drum) shall be treated as follows:—(i) flush with kerosene or some other light oil solvent followed by water. If the surface permits, wash thoroughly with soap working up as much lather as possible, and again flush with water; (ii) if it is possible to obtain quickly a supply of common bleaching lime (CaOCl_2) the area should first be treated generously with a mixture of bleaching lime and water in the form of thin slurry (NEVER use the dry powder) alternatively a five per cent solution of sulphuryl chloride (SO_2Cl_2) in kerosene may be used; (b) if contamination of absorbent material such as wooden flooring, dunnage, or other packing material has taken place, then such material shall, after treatment as above, be removed from the place where tetraethyl lead compound is being handled; (c) any clothing which becomes contaminated by tetraethyl lead compound shall be removed immediately and cleaned by repeated rinsing in a non-inflammable dry cleaning fluid; (d) if tetraethyl lead compound can be smelled, dock workers not assigned to deal with the leakage of tetraethyl lead compound shall be removed from that place; and (e) dock workers assigned to deal with leakage of tetraethyl lead compound shall wear the protective equipment described under sub-regulation 1 (c). (4) Suitable protective clothing shall be provided for handling of tetraethyl lead compound in refrigerated spaces.

81. Broken or leaking containers .-(1) When there is danger from broken or leaking containers of dangerous goods dock workers shall be evacuated from the area involved and the following steps taken before dock work is resumed:-

(a)if the cargo produces dangerous gases or vapour:-(i)suitable respiratory protective equipment shall be made available for dock workers who are to remove the defective containers;(ii)the area shall be ventilated if necessary and tested to ensure that the concentration of gases or vapours in the atmosphere is safe for dock work;(b)if the cargo is a corrosive substance,-(i)suitable personal protective equipment shall be made available to the dock workers engaged in the removal of damaged containers; and(ii)suitable absorbent or neutralizing materials shall be used in cleaning the spillage.

82. Toxic solvents .-Before any solvents are used, the toxic properties of such solvents shall be ascertained and adequate means to safeguard the health of the dock workers exposed to toxic solvents shall be provided.

I.-FREIGHT CONTAINER TERMINALS

83. Fencing of terminals .-(1) Except on water side, the perimeter of the container terminal shall be fenced, by wire mesh or some other suitable material of substantial construction, and of adequate strength and permanency, which shall be at least 1.5 metres in length.

(2)There shall be separate entry and exit points to the container terminal and shall be clearly marked.(3)Wherever the containers are stocked, the load bearing capacity of the floor shall be adequate.(4)Suitable signs or signals indicating terminal road and pedestrian traffic shall be erected and maintained at suitable points.(5)A special area or road-way or part thereof shall be provided for waiting of the vehicles. No private vehicle other than the container handling equipment and vehicles for transporting containers shall be allowed inside the container terminals.(6)All areas where mechanical handling appliances and transport equipment operate, shall be kept free of pot holes, unnecessary equipment and obstructions.(7)All operational areas and access to them shall be provided with sufficient and suitable lighting as specified under regulation 16.

84. Lifting appliances and other equipment .-(1) Container terminals shall be equipped with suitable lifting appliances and transport equipment which shall be maintained in good repair and working order.

(2)(a) In the case of fork-lift trucks employed for handling empty containers, the length of the forks shall be equal to the full width of the container and the capacity of the fork-lift shall be matching with the weight of the container.(b) No fork-lift trucks shall be employed for handling container

which do not have fork pockets.

85. Container operation .-(1) Prior to the use of container spreader, the work supervisor, foreman or any authorised person shall ensure that it is in good working order and has been tested as per the provisions under regulation 47 (1).

(2)Single or multi-legged slings shall not be used for lifting of containers.(3)The weight of the container and the spreader used shall be noted in relation to the safe working load of the lifting appliance or transport equipment used.(4)When loading or discharging, the container shall be hoisted squarely under the plumb to avoid swinging of the container.(5)The special lifting appliances employed in container handling shall be operated only by the operators possessing adequate knowledge and skill for these operations.(6)Lifting appliances employed in container handling shall be operated under the guidance of a signaller who shall be properly trained. When the signaller is not in a position to communicate effectively with the operator of the crane, other effective means of signalling like walkie-talkie, short wave radio, etc., shall be employed.(7)When a container is being lowered or hoisted from a chassis, no person shall remain in the cabin of its prime mover.(8)No person shall be standing on a container while,--(a)it is being lifted or lowered; and(b)another container is being lifted or lowered adjacent to it.(9)No person shall be lifted to the top of a container by a container spreader which is being lifted by a crane or any other appliance(10)When a ladder is used to climb to the top of a container the ladder shall be of sound construction provided with anti-skid devices or suitable securing arrangements and there shall be someone to hold the bottom of the ladder wherever necessary.(11)When workers have to work on top of the containers--(a)it shall be ensured that the surface is dry and clean to avoid slipping; and(b)suitable and safe means shall be provided to the workers for going on top of containers and attending to lashing and unlashings of containers.(12)Pedestrians shall not be allowed in any part of the container terminal other than the passages marked for their use.(13)The container shall be firmly secured to the chassis of truck by means of twist locks before it is transported.(14)All containers employed in dock work shall be tested, maintained, inspected and approved by a competent authority.

86. Stuffing and destuffing .-(1) The containers used for stuffing shall be clean, dry and free from odor.

(2)Proper lighting arrangements shall be provided for the stuffing of the containers and light fittings shall be safely located.(3)Containers mounted on chassis shall be properly secured and supported and proper bridge plates shall be used while the stuffing or destuffing operation is on.(4)Dangerous goods which are not recommended for grouping together shall not be stuffed in the same container.(5)Containers stuffed with dangerous goods shall be labelled with internationally approved levels.(6)When fork-lift is employed for stuffing or destuffing no other person shall be inside container.(7)No container shall be stuffed beyond its capacity which is marked on it and containers shall be stuffed in such a manner that weight distribution is uniform as far as possible, throughout the floor area of containers.(8)No smoking shall be permitted during stuffing or

destuffing operations inside the container.(9)Upon completion of the stuffing, the container door shall be properly secured with a lock or container seals.(10)When a container is to be destuffed, only one door shall be opened carefully at a time to prevent possibility of any cargo collapsing.(11)Dock workers employed in stuffing and destuffing of reefer containers shall be provided with proper protective clothing.J.-MISCELLANEOUS

87. Fencing of motors, etc .-(1) All motors, cogwheels, chains and friction gearing, flywheels, shaftings, every dangerous and moving part of machinery (whether or not driven by mechanical power) and steam pipes shall be securely fenced or lagged.

(2)The fencing of dangerous parts of machinery shall not be removed while the machinery is in motion or in use, but if removed, shall be replaced before the machinery is taken into normal use again.(3)No part of any machinery which is in motion and which is not securely fenced shall be examined, lubricated, adjusted or repaired except by persons duly authorised.(4)Machine parts shall only be cleaned when the machine is stopped.(5)When machinery is stopped for servicing or repairs, adequate means shall be taken to ensure that it cannot inadvertently be re-started.

88. Electrical equipment .-(1) Only duly authorised person shall be permitted to instal, adjust, examine, repair, displace or remove electrical equipment or circuits.

(2)Efficient and suitably located means shall be provided for cutting off all pressure from every part of the system, as may be necessary to prevent danger.(3)All portable electrical equipment shall be maintained in good working order and inspected by a responsible person at least once in every day before it is taken into use.(4)Portable electric light or equipment used in a confined space shall be of twenty-four volts or less.(5)Only flame-proof electrical equipment shall be used in a confined space where inflammable gas, fume or dust is likely to be present.(6)All non-current carrying metal parts of electrical equipment shall be earthed or other suitable measures shall be taken to prevent them from becoming live.(7)Portable or flexible electric conductors shall be of heavy duty type and shall be kept clear of loads, running gear and moving equipment.(8)All live conductors shall be adequately insulated or fenced to prevent danger by accidental contact of dock workers or non-current carrying parts of lifting appliances, conveyors, transport equipment and machinery.

89. Transport of dock workers on land .-Suitable means of safe transport shall be provided for the dock workers for their movement from their place of booking to the working area or between the two working areas when the distance between the points exceeds two kilometers.

90. Transport of dock workers by water .-(1) When any dock worker has to proceed to or from a ship by water for the purposes of carrying on a dock work, proper measures shall be taken to provide for his safe transportation. Vessels used for this purpose shall be in the charge of a responsible person, and shall be properly equipped for safe navigation and maintained in good condition.

(2)The means of transport referred to in sub-regulation (1) shall conform to the following:-(a)adequate protection is provided to the dock workers from inclement weather;(b)the vessel shall be manned by adequate and experienced crew, duly authorised by a competent authority;(c)if the bulwarks of the vessel are lower than 60 centimetres, the open edges shall be fitted with suitable fencing to a height of at least one metre above the deck. The posts, stanchions and similar parts used in the fencing shall not be spaced more than two metres apart;(d)the number of life buoys on deck shall be at least equal to the number of persons in the crew and shall not be less than two;(e)all life buoys shall be kept in good state of maintenance and be so placed that if the vessel sinks they remain afloat, one of the said buoys shall be within the immediate reach of the steerman and another shall, be situated after port; and(f)the position of the steerman of the vessel shall be such that he has a reasonably free view of all sides.(3)Maximum number of persons that can be safely carried in the vessel shall be certified by a competent authority and marked plainly and conspicuously on the vessel and such number shall not be exceeded.

91. Reporting of accidents .-(1) Notice of any accident in a dock which either,

(a)causes loss of life; or(b)disables a person from work on which he was employed for the rest of the day or shift in which the accident occurred, shall forthwith be sent by telegram, telephone or special messenger within four hours of the occurrence to,--(i)the Inspector;(ii)the relatives of the worker when the accident causes loss of life to the dock worker or is likely to disable the dock worker from work for more than ten days; and(iii)in the case of fatal accidents also to--(a)the Officer-in-Charge of the nearest police station; and(b)the District Magistrate or if the District Magistrate by order so directs, the Sub-Divisional Magistrate.(2)In the case of accidents falling under clause (b) of sub-regulation (1) the injured person shall be given first-aid and thereafter immediately transferred to a hospital or other place of treatment.(3)Where any accident causing disablement subsequently results in the death of dock worker, notice in writing of the death shall be submitted to the authorities mentioned in sub-regulation (1) within 72 hours after the death occurs.(4)The following classes of dangerous occurrences shall be reported to the Inspector, whether death or disablement is caused or not, in the manner prescribed in sub-regulation (1):--(a)collapse or failure of lifting appliances or conveyors or breakage or failure of ropes, chains or other loose gears and lifting devices or overturning of cranes, used in dock work, falling of headboards or cargo from slings, displacement of hatch beam resulting in the fall of hatch beams or coverings;(b)collapse or subsidence of any wall, floor, gallery, roof, platform, staging or means of access;(c)explosion of a receiver or vessel used for the storage, at a pressure greater than atmospheric pressure, of any gas or gases (including air) or any liquid or solid resulting from the compression of gas;(d)explosion or fire causing damage to any place in the dock in which dock workers are employed;(e)collapse, capsizing,

toppling or collision of the transport equipment;(f) spillage or leakage of dangerous goods and damage to their containers; and(g) breakage, buckling or damage of freight containers.(5) If a failure of lifting appliance, loose gear and transport equipment has occurred, the concerned appliance, gear or equipment and the site shall, as far as practicable, be kept undisturbed until inspected by the Inspector.(6) Every notice given under sub-regulation (1) and sub-regulation (4), shall be confirmed within seventy-two hours of the occurrence by submitting a written report to the inspector in Form XII and a proper acknowledgment obtained provided that in case of an accident under clause (b) of sub-regulation (1), such written report need be submitted only when the dock worker is disabled from work on which he was employed for more than forty-eight hours from the time of accident.

92. Notification of certain diseases .-(1) When a dock worker contracts any disease specified in Schedule IV, a notice in Form XIV shall be sent by the employer forthwith to the Inspector.

(2) If any medical practitioner attends on a dock worker suffering from any disease specified in the aforesaid Schedule, the medical practitioner shall without delay send, addressed to the Director-General, Directorate-General Factory Advice Service and Labour Institutes, Central Labour Institute Building, Sion, Bombay-400002, a notice stating the name and full particulars of the patient and the disease.

93. Safety officers .-(1) Every Port Authority and dock labour board shall employ safety officers as per the scale laid down in Schedule III.

(2) Every other employer of dock worker shall employ at least one safety officer, provided that the employers may form a group and appoint safety officers for the group as per the scale laid down in Schedule I with the written permission of the Chief Inspector.(3) The duties, qualifications and conditions of service of the safety officer shall be as provided in Schedule III.(4) The safety officer shall be assisted by suitable assistants and staff which got approved from the Chief Inspector.

94. Renewal of licences .-The Port Authorities before issue of renewal of the licences of employers of dock workers shall obtain a report from the Chief Inspector or the Inspector, regarding the safety performance and compliance of the regulations and take into consideration the report while granting the renewal of the licence.

Part IV – HEALTH

95. Cleanliness .-(1) Every place in the ship, dock and all areas which are in proximity to the place in the dock, where dock workers are employed, shall be kept clean and free from rubbish or effluvia arising from any drain, privy or other nuisance.

(2)All the accumulated garbages from the ships and the dock area shall be disposed of by burning in an incinerator or by other suitable means.(3)All the damaged or deteriorated cargo posing hazards to safety or health or nuisance shall be removed or disposed of from the work place where the dock workers are employed.

96. Drinking water .-(1)(a) On board every ship and in every dock, effective arrangement shall be made to provide and maintain at suitable points conveniently situated for all dock workers employed therein, sufficient supply of wholesome drinking water:

Provided that the drinking water point is available within 100 metres of the place where dock workers are employed.(b)Effective arrangement shall be made to provide and maintain adequate supply of wholesome drinking water on board every ship in midstream for all dock workers employed thereon.(c)The water provided for drinking shall be supplied from the public water supply system or otherwise from any other source approved in writing by the Health Officer of the port.(2)All such points shall be legibly marked "drinking water" in a language understood by a majority of the dock workers and no such point shall be situated within six metres of any washing place, urinal latrine unless a shorter distance is approved in writing by the Chief Inspector.(3)In every dock, the drinking water supplied to the dock workers shall during hot weather, be cooled by ice or other effective means:Provided that if ice is placed, in the drinking water, the ice shall be clean and wholesome and shall be obtained only from a source approved in writing by the health officer of the port.(4)Every drinking water centre shall be maintained in a clean and orderly condition and if necessary shall be in-charge of a suitable person who shall distribute the water. Such a person shall be provided with clean clothes while on duty.(5)The drinking water centres shall be sheltered from the weather and adequately drained.(6)Storage tanks or containers for drinking water shall always be kept in clean and hygienic condition.(7)The Inspector may, by order in writing, direct the port authority to obtain at such time or at such intervals as he may direct, a report from the health officer of the port as to the fitness for human consumption of the water supplied to the dock workers, and in every case to submit to the Inspector a copy of such report as soon as it is received from the health officer.

97. Latrines and urinals .-(1) In every dock, latrine and urinal accommodation shall be provided on the scale given in Schedule VIII and shall be conveniently situated and accessible to dock workers at all times while they are at work. Such accommodation and access to it shall be adequately lighted and ventilated.

(2)Separate latrines shall be provided where female dock workers are employed.(3)The floors and internal walls of the latrines and urinals and the sanitary blocks shall be laid in glazed tiles or otherwise finished to provide a smooth polished impervious surface upto height of at least 90 centimetres.(4)All such accommodation shall be maintained in a clean and sanitary condition at all times. The floors, side walls and the sanitary pans of latrines and urinals shall be thoroughly swept

and cleaned at least once in a day with suitable detergents or disinfectants or with both.(5)Every latrine shall be under cover and so partitioned off as to secure privacy and shall have a proper door and fastenings.(6)The walls, ceilings and partitions of every latrine and urinal shall be white-washed or colour-washed and the white-washing or colour-washing shall be repeated at least once in four months and record maintained.(7)Where piped water supply is available, sufficient number of water taps, conveniently accessible, shall be provided in or near such latrine accommodation.(8)Where piped water supply is not available, provision shall be made to store adequate quantity of water near the latrine.

98. Spittoons .-(1) In every portion of a dock including warehouses and store places, sufficient number of spittoons shall be provided in convenient places and they shall be maintained in a clean and hygienic condition.

(2)No person shall spit in the dock area except in the spittoons provided for the purpose and a notice containing this provision shall be prominently displayed at suitable places.(3)Whoever spits in contravention of sub-regulation (2) shall be punishable with a fine not exceeding one hundred rupees.(4)The spittoons shall be of an approved type.(5)The spittoons shall be emptied, cleaned and disinfected at least once in every day.

99. Ventilation and temperature in dock area including reefer holds on ships .-Effective and suitable provision shall be made in every dock for securing and maintaining in every building or an enclosure or a reefer hold or chamber or reefer container where dock workers are employed, adequate ventilation by the circulation of fresh air and such temperature and air movement as will secure to dock workers therein reasonable conditions of comfort and prevent injury to health.

Part V – WELFARE

100. Washing facilities .-(1) In every dock, rest shed, call stand and canteen, adequate and suitable facilities for washing shall be provided and maintained for the use of the dock workers and such facilities shall be conveniently accessible and shall be kept in clean and orderly condition. Washing facilities shall include glazed wash basins with taps attached thereto.

(2)Where dock workers are exposed to skin contamination by poisonous, infection or irritation substances or oil, grease or dust, adequate number of shower-baths enclosed in individual compartments, with entrances suitably screened shall be provided.(3)These facilities shall be provided in every dock on the scale laid down in Schedule VIII.(4)The floor or ground under and in the immediate vicinity of every wash basin, stand pipe and shower shall be so laid or finished as to provide a smooth impervious surface and shall be adequately drained.(5)The water supply of the

washing facilities shall be adequate having regard to the number of dock workers employed in the dock, and shall be from a source approved in writing by the health officer of the port.

101. First-aid boxes .-(1) In every dock and on board every ship there shall be provided and maintained so as to be readily accessible during all working hours, sufficient number of first-aid boxes or cupboards:

Provided that the distance of the nearest first-aid box or cupboard shall not be more than 200 metres from any working place.(2)Nothing except appliances or requisites for first-aid shall be kept in the boxes and cupboards. All such boxes and cupboards shall be so kept that they are protected against contamination by dust or other foreign matters and against penetration of moisture. They shall be kept in the charge of a responsible person who is trained in first-aid treatment and who shall always be readily available during working hours.(3)Each first-aid box or cupboard shall be distinctly marked "First-Aid" and shall be equipped with the articles specified in Schedule VI.

102. Ambulance room .-(1) In every dock or in any part of a dock where dock workers are ordinarily employed, there shall be provided and maintained an ambulance room with effective communication system and shall be in charge of a qualified nurse who shall always be readily available during all working hours and the ambulance room shall be in overall charge of a qualified medical practitioner.

(2)The ambulance room shall be a separate room used only for the purpose of first-aid treatment and rest. It shall have a floor area of at least ten square metres and smooth, hard and impervious walls and flooring and shall be adequately ventilated and lighted by both natural and artificial means. An adequate supply of wholesome drinking water shall be provided and the room shall be equipped with the articles specified in Schedule V.(3)A record of all cases of accidents and sickness treated at the ambulance room shall be kept and produced to the inspector on demand.

103. Ambulance carriage .-There shall be provided for use at every dock a suitably constructed motor ambulance carriage and launch which shall be maintained in good condition for the purpose of removal of serious cases of accident and sickness.

104. Stretchers .-A sufficient number of suitable stretchers including a Neil Robertson Stretcher or any other suitable sling stretcher, shall be provided at every dock at convenient places so as to be readily available in an emergency.

105. Shelters or rest sheds and lunch rooms .-(1) In every dock wherein more than 150 dock workers are ordinarily employed, adequate and suitable shelters or rest sheds and suitable lunch rooms with provision for drinking water and washing facilities, where dock workers can eat meals brought by them, shall be provided at convenient places and maintained for their use:

Provided that any canteen maintained in accordance with regulation 106 shall be regarded as part of the requirement of this regulation: Provided further that, where a lunch room is provided, no dock worker shall eat any food in the precincts of the dock except in such lunch rooms. (2) Covered receptacles shall be provided and used for disposal of food and litter in every rest shed. These receptacles shall be emptied at least once in every shift. (3) The shelters or rest rooms and lunch rooms to be provided under sub-regulation (1) shall be sufficiently lighted and ventilated and shall be maintained in a cool and clean condition.

106. Canteens .-(1) In any dock or in any part of dock wherein more than 250 dock workers are ordinarily employed, or are waiting to be employed, adequate canteen facilities in or near the work area shall be provided and maintained by the port authorities and dock labour boards for the use of all dock workers. The canteen shall function at all times when twenty-five or more dock workers are employed at a time.

(2) The canteens shall conform to the requirements laid down in Schedule IX. (3) An adequate number of mobile canteens shall be provided at every dock with provision for serving tea and light refreshments.

107. Medical examination of dock workers .-(1) It shall be ensured that all dock workers undergo medical examination,--

(a) before he is employed for the first time or is being selected or trained for the operation of lifting appliances and transport equipment; (b) periodically at such intervals as may be considered necessary by the Chief Inspector in view of the risks inherent in the dock work and the conditions under which the dock work is performed. (2) (a) Wherever considered necessary the medical examination shall also, include X-ray and pathological laboratory examination; and (b) the medical examinations prescribed under sub-regulations 1 (a), (b) and 2 (a) shall be in accordance with Schedule XI and no dock worker shall be charged for the same. (3) In the case of dock workers exposed to special occupational health hazards, the periodical medical examination shall include any special investigation deemed necessary for the diagnosis of occupational diseases. (4) The details of the medical examination shall be suitably recorded and shall be made available to the Inspector on demand. (5) If the medical officer is of the opinion that the dock worker so examined is required to be taken away from the dock work for health protection he may direct the port authorities or dock labour board or the other employers of dock workers accordingly, as the case may be. However, the dock worker so taken away shall be provided with alternate placement unless he is in the opinion of

the medical officer, fully incapacitated in which case the worker affected may be suitably rehabilitated.

108. Notices .-Notices shall be exhibited in prominent positions at every dock stating,--

(a)the position of nearest first-aid box or cupboard and the place where the person-in-charge thereof can be found;(b)the position of the ambulance room, the stretchers or other appliances; and(c)the position of the ambulance carriage and launch, the location of the nearest telephone and the name and telephone number of the hospital or other place from where such carriage or launch can be obtained.

109. Welfare officers .-(1) Every port authority and dock labour board shall employ a number of welfare officers with duties, qualifications and conditions of service as laid down in Schedule X.

(2)Every other employer of dock worker shall employ at least one welfare officer, provided that the employers may form a group and appoint welfare officer for the group as specified in Schedule X with the written permission of the Chief Inspector.

Part VI – SPECIAL PROVISIONS

110. Statement of accidents, etc .-The port authorities, the dock labour boards and other employers of dock workers shall furnish to the inspector the monthly statement of reportable accidents under these regulations in Form XIII.

111. Training of dock workers, responsible persons, etc .-(1) Initial and periodic training shall be imparted to all categories of dock workers, responsible and authorised persons depending upon their nature of work and skill required for performing their duties. Safety aspects and precautions to be taken in pursuance of the provisions under the Act and the regulations shall be covered in the training.

(2)All first-aid personnel shall be imparted training including refresher courses by a qualified medical officer authorised for the purpose.

112. Emergency action plans .-All the ports shall have an approved emergency action plan acceptable to the Chief Inspector to handle the emergencies like,--

(a)fires and explosions;(b)collapse of lifting appliances, buildings, sheds, etc;(c)gas leakages and spillage of dangerous goods;(d)drowning of dock workers, sinking of vessels, retrieval of transport equipment from dock basins; and(e)floods, storms and other natural calamities.

113. Display of abstracts .-The abstracts of the Act and of the regulations made thereunder in Forms X and XI shall be displayed in every dock.

114. Safety committee .-(1) At every port there shall be constituted a safety committee which shall be headed by an officer not below the rank of Deputy Chairman of the port. The main functions of the safety committee shall be--

(a)to investigate into the causes of accidents and unsafe practices in dock work and to suggest remedial measures;(b)to stimulate interest, of employers and workers in safety by organising safety weeks, safety competitions, talks and film shows on safety, preparing posters or taking similar other measures;(c)to go round the dock with a view to check unsafe practices and detect unsafe conditions and to recommend remedial measures for their rectification;(d)to organise training programmes for the supervisory staff and workers;(e)to look into the health hazards associated with handling different types of cargoes and to suggest remedial measures including use of proper personal protective equipment; and(f)to suggest measures for improving welfare amenities inside the docks and other miscellaneous aspects of safety, health and welfare in dock work.(2)The safety committee shall be constituted by the Chairman of the port and shall include besides port officials, representatives of port users, the recognised labour unions and the Chief Inspector.(3)The safety committee shall meet at regular intervals at least once in every quarter, and minutes of the meetings shall be circulated to the concerned departments of the port, agencies and organisations.(4)The decisions and recommendations of the safety committee shall be complied with by the port authorities, port users and the employers of dock workers.

115. Occupational health services for dock workers .-(1) In every port there shall be either a special medical service or an Occupational health service available at all times, and it shall have the following functions:--

(a)provision of first-aid and emergency treatment;(b)conducting pre-employment, periodical and special medical examinations of dock workers;(c)periodical training of first-aid personnel;(d)surveillance and rendering advice on conditions at work places and facilities that can affect the health of dock workers;(e)promotion of health education including family welfare among dock workers; and(f)co-operation with the competent authority or Inspector in the detection, measurement and evaluation of chemical, physical or biological factors suspected of being harmful to the dock workers.(2)The medical service shall collaborate with the labour department or any other concerned department or service of the port in matters of treatment, job placement, accident, prevention and welfare of dock workers.(3)The medical service shall be headed by a doctor specialised in occupational health and shall be provided with adequate staff, laboratory and other personnel.(4)The medical services shall be located at ground level, be conveniently accessible from all workplaces of the port or dock, be so designed as to allow stretcher cases to be handled easily

and, so far as practicable, shall not be exposed to excessive noise, dust or other nuisance.(5)The premises of the medical service shall comprise at least a waiting room, a consulting room, a treatment room and laboratory, apart from suitable accommodation for nurses and other personnel.(6)Rooms for waiting, consultation and treatment shall,--(a)be spacious, suitably lighted and ventilated, and wherever necessary heated or air cooled; and(b)have washable walls, floor and fixtures.(7)The medical service shall be provided with appropriate medical and laboratory facilities and such documentation as it may require for its work.(8)The medical service shall keep and maintain records pertaining to medical examination of dock workers and other activities and shall provide adequate information on,--(a)the dock worker's state of health; and(b)the nature, circumstances and outcome of occupational injuries.

116. The employer's general obligations .-(1) The employer shall take all necessary steps which, considering the kind of work, working conditions and the worker's age, sex, professional skill and other qualifications are reasonably necessary for protecting the worker from being exposed to risks of accidents or injury to health at work.

(2)The employer shall make sure that the work place, its approaches and means of access conform to these regulations and are also otherwise in a safe condition.(3)The employer shall take into account the workers' training, skill and experience when workers are set to work. A worker shall not be assigned a work for which he has not received sufficient instructions regarding possible dangers and precautions in the work, taking into account his training, skill and experience.

117. General safety .-No employer or dock worker shall negligently or wilfully do anything likely to endanger life, safety and health of dock workers, or negligently or wilfully omit to do anything necessary for the safety and health for the dock worker employed in dock work.

118. Repeal and saving .-The Indian Dock Laborious Regulations, 1948 and Dock Workers (Safety, Health and Welfare) Scheme, 1961 are hereby repealed:

Provided that any action taken or order issued under the said regulations or the Scheme shall, as the case may be in so far as it is not inconsistent with these regulations, be deemed to have been taken or issued under the corresponding provisions of these regulations.

I

[See regulations 41(1), 47(1) and 48(1)]MANNER OF TEST AND EXAMINATION BEFORE TAKING LIFTING APPLIANCE LOOSE GEAR AND WIRE ROPE INTO USE FOR THE FIRST TIME
Test loads : (1)Lifting appliance :Every lifting appliance with its accessory gear shall be subjected to a test

load which shall exceed the safe working load (SWL) as follows :-

Safe working load Test load

Up to 20 tonnes 25 per cent in excess of SWL

20 to 50 tonnes 5 tonnes in excess of SWL

Over 50 tonnes 10 per cent in excess of SWL

(2) Loose gear: (a) Every ring, lock, chain, shackle, swivel, eye-bolt, plate clamp, triangular plate or pulley block (except single sheave block) shall be subjected to a test load which shall not be less than the following :-

Safe working load (in tonnes) Test load (in tonnes)

Up to 25 2x safe working load

Above 25 $(1.22 \times \text{SWL}) + 20$

(b) In the case of a single sheave block, the SWL shall be the maximum load which can safely be lifted by the block when suspended by its head fitting and the load is attached to a rope which passes around the sheave of the block and a test load not less than four times the proposed safe working load shall be applied to the head of the block. (c) In the case of a multi sheave block, the test load shall not be less than the following:

Safe working load (in tonnes) Test load (in tonnes)

Up to 25 2xSWL

25 to 160 $(0.9933 \times \text{SWL}) + 27$

Above 160 1.1xSWL

(d) In the case of hand-operated pulley blocks used with pitched chains and rings, hooks, shackles or swivels permanently attached thereto, a test load not less than 50 per cent. in excess of the safe working load shall be applied. (e) In the case of a pulley block fitted with a bucket, the bucket shall be tested and the load applied to the bucket when testing that block will be accepted as test loading of the bucket. (f) In the case of a sling having two legs, the safe working load shall be calculated when the angle between the legs is 90°. In case of multi-legged slings, the safe working load shall be calculated as per national standards. (g) Every lifting beam, lifting frame, container spreader, bucket, tub, or other similar devices shall be subjected to a test load which shall not be less than that given in table below:

Proposed Safe working load (in tonnes) Test load (in tonnes)

Up to 10 2xSWL

10 to 160 $(1.04 \times \text{SWL}) + 9.6$

Above 160 1.1xSWL

(h) Wire ropes: In the case of wire ropes a sample shall be tested to destruction. The test procedure shall be in accordance with international or recognised national standards. The safe working load of the rope is to be determined by dividing the load at which the sample broke by a co-efficient of utilisation, determined as follows :

Item

Co-efficient of utilisation

(a) Wire rope forming part of sling

SWL of the sling:

SWL up to and equal to 10 tonnes.....	5
SWL above 10 tonnes and up and equal to 160 tonnes	10
	$(8.85 \times \text{SWL}) + 1910$
(b) SWL above 160 tonnes	3
Wire rope as integral part of a lifting appliance :	
SWL of the lifting appliance :	
SWL up to and equal to 160 tonnes	10
	$(8.85 \times \text{SWL}) + 1910$
SWL above 160 tonnes	3

(i) Before any test is carried out, a visual inspection of the lifting appliance or loose gear involved shall be conducted and any visible defective gear shall be replaced or renewed. (ii) After being rested, all the loose gears shall be examined to see whether any parts have been injured or permanently deformed by the test. Procedure for testing : (3) Ship's derricks: (a) A derrick shall be tested with its boom at the minimum angle to the horizontal for which the derrick is designed (generally 15 degrees), or at such greater angle as may be agreed. The angle at which the test has been carried out shall be mentioned in the test certificate. The test load shall be applied by hoisting movable weights. During the test, the boom shall be swung with the test load as far as practicable in both directions. (b) A derrick boom designed to be raised with power with the load suspended shall, in addition to the above tests at (a), be raised (with the load suspended) to its maximum working angle to the horizontal and the two outermost positions. (c) While test loading of a heavy lift derrick, the competent person responsible for test using movable weights shall ascertain from the master that the ship's stability will be adequate for the test. (4) The derricks tested under clause (3) shall not be used in union purchase rig unless- (a) the derricks rigged in union purchase are tested with the test load appropriate to the SWL in union purchase (at the designed headroom and with the derrick booms in their approved working positions); (b) the safe working load of that derrick in union purchase rig has also specified by a competent person in a report in Form III; (c) any limitations or conditions specified in the said report are complied with; and (d) the two hoist ropes are coupled together by a suitable swivel assembly. Note.- The safe working loads of derricks (for each method of rig including union purchase) shall be shown on the certificate of test and marked on the derrick booms. (5) Lifting appliance other than ship's derricks and winches : (a) The test load shall be lifted and swung as far as possible in both directions. If the jib or boom of the crane has a variable radius, it shall be tested with test loads at the maximum and minimum radius. In case of hydraulic cranes, when owing to the limitation of pressure it is impossible to lift a test load in accordance with the table under paragraph (1), it will be sufficient to lift the greatest possible load which shall be more than safe working load. (b) The test shall be performed at maximum, minimum and intermediate radius points as well as such points in the arc of rotation as the competent person may decide. The test shall consist of hoisting, lowering, breaking and swinging through all positions and operations normally performed. An additional test shall be made by operating the machinery at maximum working speed with the SWL suspended. (6) Use of spring or hydraulic balances, etc., for test loading : All tests normally shall be carried on with the help of dead weights. Test loading of gear on new ships shall always be with dead weights. In case of periodical tests, replacements or renewals, test load may be applied by means of a suitable springs or hydraulic balances; In such case, test load shall be applied with the boom as far as practicable in both directions. The test shall not be taken as

satisfactory unless the balance has been certified for accuracy by the competent authority within 2.0 per cent. and the pointer of the machine has remained constant at the test load for a period of at least five minutes.(7)Testing machines and dead weights:(a)A suitable testing machine shall be used for testing of chains, wire ropes and other cargo gear;(b)Testing machines and balances to be used in test loading, testing and checking shall not be used unless they have been certified for accuracy at least once in the preceding 12 months by the competent authority.(c)Movable weights used for the test loading of the lifting appliances having a safe working load not exceeding 20 tonnes shall be checked for accuracy by means of suitable weighing machine of certified accuracy.(8)Thorough examination after testing or test loading:After being tested or test loaded, every lifting appliance and associated gear shall be thoroughly examined to see that no part has been damaged or permanently deformed during the test. For this purpose, the lifting appliance or gear shall be dismissed to the extent considered necessary by the competent person.

II

[See regulation 76]CLASSIFICATION OF DANGEROUS GOODSClass 1 ExplosivesClass 2 Gases: compressed, liquefied and dissolved under pressure.Class 3 Inflammable liquids.Class 4.1 Inflammable solids.Class 4.2 Inflammable solids or substances liable to spontaneous combustion.Class 4.3 Inflammable solids, or substances, which in contact with water emit flammable gases.Class 5.1 Oxidising substances.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.Dangerous substances belong to class 9 above include any such substance which cannot be referred to any other class but which experience has shown to be so dangerous that these regulations shall apply to it.

III

(See regulation 93)RULES RELATING TO THE APPOINTMENT OF SAFETY OFFICERS(1)Number of safety officers.-Within six months of coming into operation of these regulations every port authority, dock labour board and every other employer shall appoint safety officers, as laid down in the scale given below :

1. Up to 2000 dock workers - One safety officer

2. Up to 5000 dock workers - Two safety officers

3. Up to 10000 dock workers - Three safety officers

4. For every additional five thousand dock workers or part thereof. -

One safety officer.Any appointment, when made shall be notified to the inspector giving full details of the qualifications and terms and conditions of service.(2)Qualifications.- (a) A person shall be eligible for appointment as a safety officer unless he- (i) possesses a recognised degree in any branch of engineering or technology and had practical experience of working in a port of similar place in a

supervisory capacity for a period of not less than two years; or possesses a recognised degree in physics or chemistry and has had practical experience of working in a port or similar place in a supervisory capacity for a period of not less than five years; or possesses a recognised diploma in any branch of engineering or technology and has had practical experience of working in a port or similar place in a supervisory capacity for a period of not less than five years; and(ii)possesses a degree or diploma in industrial safety recognised by the Central Government in this behalf; and(iii)has adequate knowledge of the language spoken by majority of the workers in the port in which he is to be appointed.(b)Notwithstanding the provisions contained in clause(a), any person who--(i)possesses a recognised degree or diploma in engineering or technology and has had experience of not less than five years in a department of the Central Government which deals with the administration of the Indian Dock Labourers Act, 1934, and or the Dock Workers (Safety, Health and Welfare) Act, 1986;(ii)possesses a recognised degree or diploma in engineering or technology and has had experience of not less than five years, full time, or training, education, consultancy, or research in the field of accident prevention in industry or in any port or any institution, shall also be eligible for appointment as a safety officer :Provided that, in the case of a person who has been working as a safety officer in an industry or any institution for a period of not less than three years on the date of commencement of these regulations, the Chief Inspector may, subject to such conditions as he may specify, relax all or any of the above said qualifications.(3)Conditions of service.-(a) Where the number of safety officers appointed exceeds one, of them shall be designated as the chief safety officer and shall have a status higher than that of the others. The chief safety officer shall be in overall charge of the safety functions as envisaged in sub-clause (4) as also the other safety officers working under his control.(b)The chief safety officer or the safety officer where only one safety officer is appointed, shall be given the status of a senior executive and he shall work directly under the control of his chief executive. All other safety officers shall be given appropriate status to enable them to discharge their functions effectively.(c)The scale of pay and allowances to be granted to the safety officers including the chief safety officer, and the other conditions of their service shall be the same as those of the other officers of corresponding status in the port, dock labour board or firm as the case may be.(4)Duties of safety officers.-(a) The duties of a safety officer shall be to advise and assist the management in the fulfilment of its obligations, statutory or otherwise, concerning prevention of personal injuries and maintaining a safe working environment. These duties shall include the following, namely :-(i)to advise the concerned departments in planning and organising measures necessary for the effective control of personal injuries;(ii)to advise on safety aspects in all dock work, and to carry out detailed job safety studies of selected dock work;(iii)to check and evaluate the effectiveness of the action taken or proposed to be taken to prevent personal injuries;(iv)to advise the purchasing and stores departments in ensuring high quality and availability of personal protective equipment;(v)to carry out safety inspections of dock work in order to observe the physical conditions of work and the work practices and procedures followed by workers and to render advice on measures to be adopted for removing the unsafe physical conditions and preventing unsafe actions by workers;(vi)to investigate all fatal and other selected accidents;(vii)to investigate the cases of occupational diseases contracted and reputable dangerous occurrences;(viii)to advice on the maintenance of such records as are necessary relating to accidents, dangerous occurrences and occupational diseases;(ix)to promote setting up of safety committees and act as adviser and catalyst of such committees;(x)to organise, in association with the concerned departments, campaigns, competitions, contests and other activities which will

develop and maintain the interest of the workers in establishing and maintaining safe conditions of work and procedures;(xi)to design and conduct either independently or in collaboration with the training department, suitable training and educational programmes for the prevention of accidents to dock workers;(xii)frame departmental safety rules and safe working practices in consultation with the various departments or authorises; and(xiii)supervise and guide in respect of safety precautions to be taken while handling dangerous cargo.(5)Facilities to be provided to safety officers.-The management shall provide each safety officer with such facilities, equipment and information as are necessary to enable him to discharge his duties effectively.(6)Prohibition of performance of other duties.-No safety officer shall be required or permitted to do any work which is inconsistent with or detrimental to the performance of the duties prescribed in sub-clause (4).(7)Exemption.-The chief inspector may in writing exempt any port authority, dock labour board or any other employer or a group of employers from any or all provisions of this regulation subject to compliance with such alternate arrangements as may be approved by him.

IV

[See regulation 92(1)]LIST OF NOTIFIABLE DISEASES(1)Lead poisoning including poisoning by any preparation or compound of lead or their sequelae.(2)Lead tetraethyl poisoning.(3)Manganese poisoning or its sequelae.(4)Carbon disulfide poisoning.(5)Benzene poisoning, including poisoning by any of its homologue, their nitre or amide derivatives or its sequelae.(6)Anthrax.(7)Pneumoconiosis.(8)Poisoning by halogens or halogen derivatives of the hydrocarbons of the aliphatic series.(9)Primary epitheliomatous cancer of the skin.(10)Occupational dramatist.(11)Noise induced hearing loss (exposure to high noise levels).

V

[See regulation 102(2)]ARTICLES REQUIRED FOR AN AMBULANCE ROOM(i)A glazed sink with hot and cold water always available(ii)A table with a smooth top at least 180 cms. x 105 cms.(iii)Means for sterilizing instruments.(iv)A couch.(v)Two stretchers.(vi)Two buckets or containers with close fitting lids.(vii)Two rubber hot water bags.(viii)A kettle and spirit stove or other suitable means for boiling water.(ix)Twelve plain wooden splints 900 cms. x 100 cms. x 6 cms.(x)Twelve plain wooden splints 350 cms. x 75 cms. x 6 cms.(xi)Six plain wooden splints 250 cms. x 50 cms. x 12 cms.(xii)Six wooden blankets.(xiii)Three pairs artery forceps.(xiv)One bottle of spirits anemia aremations (120 ml.).(xv)Smelling salt (60 gms.).(xvi)Two medium size sponges.(xvii)Six hand towels.(xviii)Four "kidney" trays.(xix)Four cakes of toilet, preferably antiseptic soap.(xx)Two glass tumblers and two wine glasses.(xxi)Two clinical thermometers.(xxii)Two tea spoons.(xxiii)Two graduated (120 ml.) measuring glasses.(xxiv)Two minimum measuring glasses.(xxv)One wash bottle (1000 cc.) for washing eyes.(xxvi)One bottle (one liter) carbolic lotion 1 in 20.(xxvii)Three chairs.(xxviii)One screen.(xxix)One electric hand torch.(xxx)Four first-aid boxes or cupboards stocked to the standards prescribed in the Schedule.(xxxi)An adequate supply of anti-tetanus toxoid.(xxxii)Injections-morphia, pethidine, atrophine, adrenaline, coramine, novocan (6 each).(xxxiii)Coramine liquid (60 ml.).(xxxiv)Tablets-antibistamhnie antispasmodic (25 each).(xxxv)Syringes with needles-2cc, `5cc, 10cc and 50cc.(xxxvi)Three surgical scissors.(xxxvii)Two needle holders, big and small.(xxxviii)`Suturing needles and materials.(xxxix Three dissecting forceps.(xl)Three dressing

forceps.(xli)Three scalpels.(xlii)One stethoscope.(xliii)Rubber bandage-pressure bandage.(xliv)Oxygen cylinder with necessary attachments.

VI

[See regulation 101(3)]EQUIPMENT REQUIRED FOR A FIRST-AID BOX OR

CUPBOARD(i)Twenty-four small sterilised dressings.(ii)Twelve medium size sterilised dressings.
-(iii)Twelve large size sterilised dressings.(iv)Twelve large size sterilised burn dressings.(v)Twelve (15 gms.) packets of sterilised cotton wool.(vi)One (200 ml.) bottle of cetrimide solution (1 per cent) or a suitable antiseptic solution.(vii)One (200 ml.) bottle of mercurochrome (2 per cent) solution in water.(viii)One (120 ml.) bottle of salvolatile having the dose and mode of administration indicated on the label.(ix)One pair of scissors.(x)One roll of adhesive plaster (6 cms. x 1 m.).(xi)Two rolls of adhesive plaster (2 cms. x 1 m.).(xii)Twelve pieces of sterilised eye pads in separate sealed packets.(xiii)A bottle containing 100 tablets (each of 325 mg.) of aspirin (or any other analgesic).(xiv)One polythene wash bottle (500 cc.) for washing eyes.(xv)Twelve roller bandages 10 cms. wide.(xvi)Twelve roller bandages 5 cmsn wide.(xvii)Six triangular bandages.(xviii)One tourniquet.(xix)A supply of suitable splints.(xx)Two packets of safety pins.(xxi)Kidney tray.(xxii)A snake-bite lancet.(xxiii)One (30 ml.) bottle containing potassium permanganate crystals.(xxiv)One copy of first-aid leaflet issued by the Director-General of Factory Advice Service and Labour Institutes, Government of India, Bombay.

VII

(See regulation 18)PERMISSIBLE EXPOSURE IN CASES OF CONTINUOUS NOISE

(1)	(2)
8	90
6	92
4	95
3	97
2	100
1-1/2	102
1	105
3/4	107
1/2	110
1/4	115

Notes.-1. No exposure in excess of 115 dBA is to be permitted.

2. For any period of exposure falling in between any figure and the next higher or lower figure as indicated in column 1, the permissible sound pressure level is to be determined by extrapolation on a proportionate basis.

VIII

(See regulations 97 and 100) **SCALE FOR PROVIDING LATRINES, URINALS, WASHING AND BATHING FACILITIES A DOCK** Latrines.-One for every 50 dock workers and minimum of three in each block. Urinals.-One for every 100 dock workers and minimum four urinals in each block. Washing facilities :Washing taps. - Up to 200 dock workers-Four taps. Over 200 dock workers - Four taps plus one tap for every 100 workers or part thereof. Shower baths.-Up to 200 dock workers-Two shower baths. Above 200-Up to 500 dock workers - Four shower baths. Over 500 dock workers - Four plus one shower bath for every 200 workers or part thereof. With a minimum of two shower baths in a block.

IX

(See regulation 106) **REQUIREMENTS FOR CANTEENS** (1) Plans and site plans of the building to be constructed or adopted for use as a canteen shall be submitted and got approved from the Chief Inspector. (2) The canteen building shall be constructed according to the approved plans and shall provide accommodation for a dining hall, kitchen, store rooms, pantry and washing places separately for workers and for utensils. The minimum height of the building shall not be less than 4 metres and all the walls and roofs shall be of suitable heat resisting material and shall be water proof. (3) The canteen building shall be situated not less than 15 metres from any latrine, urinal or any other source of dust, smoke or obnoxious fumes: Provided that the Chief Inspector may in any particular case relax the provisions of this rule to such an extent as may be reasonable in the circumstances and may require measures to be adopted to secure the essential purpose of this provision. (4) In a canteen the floor and the inside walls up to a height of 1.25 metres from the floor shall be made of smooth and impervious material and the remaining portion of inside walls shall be made smooth by cement plaster or in any other suitable manner. (5) The doors, windows and ventilators of a canteen building shall be fire-proof construction and shall allow adequate ventilation. (6) The canteen shall be adequately lighted at all times when any person has access to it. (7) In every canteen, -(a) (i) all inside walls of rooms and all ceilings and passages and staircases shall be lime washed or colour washed at least once in each year or painted once in three years dating from the period when last lime washed or painted, as the case may be; (ii) all wood work shall be varnished or painted once in three years dating from the period when last varnished or painted; (iii) all internal structural iron or steel work shall be varnished or painted once in three years dating from the period when last varnished or painted : Provided that inside walls of the kitchen shall be lime washed once in every four months. (b) Records of dates on which lime washing, colour washing or painting is carried out shall be maintained in a register in a form approved by the Inspector. (c) The floor of all rooms shall be kept clean at all times by sweeping and mopping. (8) The precincts of the canteen shall be maintained in a clean and sanitary condition. Waste water shall be carried away in a suitable covered drain and shall not be allowed to accumulate so as to cause a nuisance. Covered receptacles shall be provided and used for the disposal of garbage and the receptacles shall be fully cleaned and disinfected once at least in every shift. (9) Dining hall. -(a) The dining hall shall accommodate at a time at least 10 per cent of the dock workers at any time in any dock or any part of dock for which the canteen is provided : Provided that in any particular dock, the Chief Inspector may, alter the percentage of workers to be accommodated in a canteen. (b) The floor

area of the dining hall, excluding the area occupied by the service counter and any furniture except tables and chairs, shall be not less than one square metres per dinner to be accommodated as prescribed in sub-rule (a) :Provided that where it is impracticable owing to the lack of space to provide one square metre of floor area for each person, such reduced floor area may be provided as approved in writing by the Chief Inspector.(c)A portion of the dining hall and service counter shall be partitioned off and reserved for women workers in proportion to their numbers. Washing places for women shall be separate and screened to secure privacy.(d)Sufficient tables, chairs or benches shall be available for the number of dinners to be accommodated as prescribed in sub-rule (a).(e)Soaps and towels shall be provided at the washing places in the canteen for the use of the workers.(10)Equipment.-(a) There shall be provided and maintained utensils, crockery, cutlery, furniture and any other equipment necessary for the efficient running of the canteen. Suitable uniforms for the employees serving in the ca teen shall provided and maintained in ` clean condition.(b)Food and food materials shall be stored in flyproof cupboards and handled with the help of wooden ladles or suitable metal forceps, whichever is convenient. Vessels used once shall be cleaned before being used again.(c)The furniture, utensils and other equipment shall be maintained in clean and hygienic condition. The service counter and all the dining tables shall have a ` top of smooth and impervious materials. Suitable facilities including an adequate supply of hot water shall be provided for cleaning of the utensils and equipment.

X

(See regulation 109)RULES RELATING TO THE APPOINTMENT OF WELFARE OFFICER PRESCRIBED UNDER REGULATION 109 OF THE DOCK WORKERS (SAFETY, HEALTH AND WELFARE) REGULATIONS, 1989(1)Number of Welfare Officers.-(a) The port authority, dock labour board and ever other employer shall appoint at least one welfare officer in every port where 500 or more dock workers are ordinarily employed :Provided that, where the number of dock workers exceeds 2000 there shall be additional welfare officer, as indicated in the scale given below :(i)2000 to 5000 dock workers-2 welfare officers.(ii)for every additional 5000 dock workers or fraction thereof over 500-1 welfare officer.(b)Where there are more than one welfare officer appointed, one of them shall be called the chief welfare officer and the others as welfare officers.(2)Qualifications.-No person shall be appointed as a welfare officer unless he or she-(a)is a graduate from a recognised university.(b)has either a degree or diploma in social science from a recognised university or any other institution recognised by the Central Government in this behalf, and(c)has adequate knowledge of the language spoken by the majority of dock workers in the port to which he/she is attached :Provided that in the case of a person who has been employed as a welfare officer for one year or more before the day of commencement of these regulations, the chief inspector may, on request the port authority, dock labour board or any other employer, in writing relax all or any of the aforesaid qualifications, subject to such conditions as he may specify in the order.(3)Conditions of service.-(a) A welfare officer shall be given appropriate status as a member of the executive staff of the port authority, dock labour board or firm, as the case maybe.(b)The conditions of service of a welfare officer shall be the same as those of other members of the staff or equivalent status under the port authority, dock labour board or firm, as the case may be :Provided that in the case of discharge or dismissal, the welfare officer shall have a right of appeal to the chief inspector or whose decision thereon shall be final and binding on the port authority, dock labour board or firm, as the case may be. This appeal shall be preferred within thirty days from the date of

receipt by the welfare officer of the order of discharge or dismissal.(4)Duties of welfare officers. - The duties of the welfare officer shall be,--(a)to ensure fulfilment on the part of the port authority, dock labour board or firm of obligations under the provisions of these regulations and maintaining a liaison with the inspector;(b)to ascertain what further welfare facilities are needed, how best they can be provided and make suggestions for their establishment;(c)to make sure that the available welfare facilities provided under the regulation or otherwise are being properly maintained and utilised;(d)to ensure adequate supervision of the amenities provided especially as regards canteens, rest rooms, washing and toilet facilities and drinking water;(e)to examine grievances voiced by the dock workers in respect of welfare facilities and other amenities;(f)to ensure first aid, medical treatment and other assistance for dock workers who are injured in the course of their employment in dock work and are in need of vocational rehabilitation due to disablement caused due to injury;(g)to assist in the organisation of recreational facilities and educational courses and advise on individual personnel problems and education of children;(h)to promote relations between the port authority dock labour board or a firm and dock workers which will ensure productive efficiency as well as amelioration in the working conditions and to help dock workers to adjust and adapt themselves to their working environments;(i)to take interest in the working of safety committee of the port; and(j)to encourage and assist in the organisation of safety propagation, safety weeks, training courses, suggestion schemes, safety awards, etc., and such other duties as may be assigned`by the port authority, dock labour board or a firm which have a bearing on the welfare of the dock workers.(5)No welfare officer shall deal with any disciplinary cases against workers or appear before a conciliation officer in a Court or Tribunal on behalf`of the management against a worker or workers.(6)Exemption. - The chief inspector may in writing exempt port authority, dock labour board or any other employer or a group of employers from any or all provisions of this regulation subject to compliance with such alternative arrangements as may be approved by him.

XI

[See regulations 74(d) and 107(2)(b)]

FOR MEDICAL EXAMINATION OF DOCK WORKERS

1. The employer shall arrange a medical examination of all the dock workers employed as drivers/operators of lifting appliances and transport equipment before employing, after illness or injury`if it appears that the illness or injury may affect his fitness and thereafter once in every two years up to the age of 40 and once in a year, thereafter.

2. Complete and confidential records of medical examination shall be maintained by the employer or the physician authorised by him.

3. The medical examination shall include:

(a)full medical and occupational history,(b)clinical examination with particular reference to,--(i)General physique :(ii)Sight :(1)Distant vision, either eye should not be less than snellen 6/12

corrected or uncorrected and not less than 6/36 uncorrected in the worse eye.(2)Near vision, not less than 6/36 corrected or uncorrected (in either eye).(3)Binocular vision.(4)No diplopia.(5)No limitation of visual fields.(6)Stereopsis must be column 4,5 or 6 in key-stone vision screening test.(7)Testing of colour vision (especially the ability to distinguish between red and green) by a suitable test.(iii)Hearing:Persons with normal hearing must be able to hear a forced whisper at 24 feet. Persons using hearing aids must be able to hear a warning shout under noisy working conditions.(iv)Upper limbs. Adequate arm function and grip (both arms).(v)Lower limbs. Adequate leg and foot function.(vi)Spine. Adequate flexible for the job concerned.(vii)General Mental alertness and stability with good eye, hand and foot co-ordination.(c)Any other tests which the examining doctor considers necessary.FORM I[See regulations 7(4) and 33]DOCK WORKERS (SAFETY, HEALTH AND`WELFARE) REGULATIONS, 1990 NOTICE TO THE OWNER, MASTER OR OFFICER-IN-CHARGE (NAME OF SHIP)I hereby give notice that the dock work involving loading or unloading or coaling have been completed (for the time being) at the hatches named below, and that the hatches in question have been--

left fenced or covered as required by regulation [Delete whichever is required.]	taken into use by you or on your behalf
Hatchway	Dock

SignatureTimeDateFORM II

Part I

(See regulations 41 and 51)INITIAL AND PERIODICAL LOAD TEST OF LIFTING APPLIANCES AND THEIR ANNUAL THOROUGH EXAMINATION"Thorough examination" means a detailed visual examination by a competent person; supplemented if necessary by other means such as a hammer test, carried out as carefully`as the conditions permit, in order to arrive at a reliable conclusion as to the safety of the parts examined and if necessary for this purpose parts of the machines and gear must be dismantled.

(A)	(B)
Initial and periodical load tests of lifting appliances	Annual thorough examination

Situation and description of	No.of Certificate of	I certify that on the	Remarks(to be signed	Remarks(to be signed
------------------------------	----------------------	-----------------------	----------------------	----------------------

lifting appliances tested with distinguishing number or makes (if any).	test and examination of competent person	date on which I have appended my signature the lifting appliance shown in column(1) was tested and no defects affecting its safe working condition were found other than those shown in column (5)	and dated)	date on which I have appended my signature, the lifting appliance shown in column (1) was thoroughly examined and no defects affecting its safe working conditions were found other than those shown in column (12)						
Date and signature with seal (1)	Date and signature with seal (2)	Date and signature with seal (3)	Date and signature with seal (4)	Date and signature with seal (5)	Date and signature with seal (6)	Date and signature with seal (7)	Date and signature with seal (8)	(9)	(10)	(11)
(1)(2)										

Note.-If all the lifting appliances are thoroughly examined on the same date it will be sufficient to enter in column (1) "All lifting appliances". If not, the parts which have been thoroughly examined on the dates stated must be clearly indicated.

Part II

(See regulations 47 and 51) INITIAL AND PERIODICAL LOAD TEST OF LOOSE GEARS AND ANNUAL THOROUGH EXAMINATION
List of loose gears: The following classes of loose gears, namely:

- 1. Chains made of malleable cast iron;**
- 2. Plate link chains;**
- 3. Chains, rings, hooks, shackles and swivels made of steel;**
- 4. Pitched chains;**
- 5. Rings, hooks, shackles and swivels permanently attached to pitched chains, pulley blocks, container spreaders, trays, slings, baskets, etc., and any other similar gear;**
- 6. Hooks and swivels having screw-threaded parts or ball bearings or other case-hardened parts; and**
- 7. Bordeaux connections.**

Initial test and periodical load test of loose gears	Annual thorough examination of loose gears					
Distinguishing No. or marks	Discretion of loose gear tested and examined	No. of certificates of test and examination of competent person	I certify that on the date to which I have appended my signature the loose gears shown in cols. (1) and (2) were tested and no defects affecting the safe working condition	Remarks(to be signed and dated)	I certify that on the date to which I have appended my signature the loose gears shown in columns (1) and (2) were thoroughly examined by me and no defects affecting the	Remarks(to be signed and dated)

			were found other than those shown in col. (6)	working conditions were found other than those shown in column (10)				
Date and signature with seal	Date and signature with seal	Date and signature with seal	Date and signature with seal	Date and signature with seal				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) (10)
(1)(2)(3)(4)(5)								

Part III

(See regulations 49 and 51) ANNEALING OF CHAINS, RINGS, HOOKS, SHACKLES AND SWIVELS [OTHER THAN THOSE EXEMPTED - (See PART II)]

12.5 mms. and smaller chains, rings, hooks, shackles and swivels in general use If used with lifting appliance driven by power, must be annealed once at least in every six months. If used solely with lifting appliance worked by hand, must be annealed once at least in every 12 months.

Other chains, rings, hooks, shackles and swivels in general use If used with lifting appliance driven by power, must be annealed once at least in every 12 months. If used solely with lifting appliance worked by hand, must be annealed once at least in every two years.

Note. - It is recommended though not required by the Regulations-that annealing should be carried out in a suitably constructed furnace heated to temperature between 1100° and 1300°F or 600° and 700°C, for a period between 30 and 60 minutes.

			I certify that on the date to which I have appended my signature, the gear described in columns (1) and (2) was effectually annealed under my supervision, that after being so annealed every article was carefully inspected and that no defects affecting its safe working condition were found other than those shown in column (7)	Remarks(to be signed dated)		
Distinguishing No. or mark	Description of gear and annealed examination	No. of the certificate or test and				
Date and signature with seal	Date and signature with seal	Date and signature with seal				
(1)	(2)	(3)	(4)	(5)	(6)	(7)

FORM III[See regulations 41 and 51(2)]CERTIFICATE OF INITIAL AND PERIODICAL TEST AND EXAMINATION OF WINCHES, DERRICKS AND THEIR ACCESSORY GEARTest Certificate No(a)In case of dock, wharf or quay-Name of the dock, wharf or quay where lifting appliances are fitted(b)In case of ship-Name of the shipOfficial numberCall signPort of registryName of owner

Situation and description of lifting appliances and gear with distinguishing number marks(if any), which have been tested, thoroughly examined	Angle to the horizontal of deffick boom at which test load applied	Test load applied	Safe working load at the angle shown in column (2)
(1)	(2) (Degrees)	(3) (Tonnes)	(4) (Tonnes)

5. Name and address of public service, association, company or firm or testing establishment making the test and examination.....

6. Name and position of the competent person of public service, association, company or firm or testing establishment.

I certify that on theday of.....20.....the lifting appliance shown in column (1) together with its necessary gear was tested in the manner set forth overleaf in my presence that a careful examination of the said lifting appliances after the test showed that it had withstood the test load without injury or permanent deformation and that the safe working load of the said lifting appliance and accessory gear is as shown in column (4).Date

.....Signature of the competent person*Seal (see Note 3)Registration/Authority number of the competent person.Notes.-1. Column (1)-Sufficient particulars must be given to identify the gear, for example, in the case of a winch or derrick, the number of the hold, etc., should be shown.

2. Column (2)-As a rule, a derrick should be tested with its boom at the minimum angle to the horizontal for which the derrick system is designed (generally 15*), or at such greater angle as may be agreed.

"competent person" means-(i)a person belonging to a testing establishment in India who is approved by the Chief Inspector for the purposes of testing, examination or annealing and certification of lifting appliances, loose gears or wire ropes;.(ii)any other person who is recognised under the relevant regulations in force in other countries as competent for issuing certificates for any of the purposes mentioned in sub-clause (i) for implementation of the Protection Against Accidents (Dockers) Convention (Revised), 1932 (No. 32) and the Convention concerning the Occupational Safety and Health in Dock Work (No. 152), 1979, adopted by International Labour

Conference.INSTRUCTIONS

1. Lift appliances :

Every lifting appliance with its accessory gear, shall be subjected to a test load which shall exceed the safe working load (SWL) as follows :-

Safe working load	Test load
Up to 20 tonnes	25 per cent in excess
20 to 50 tonnes	5 tonnes in excess
Over 50 tonnes	10 per cent in excess

2. Ship's derricks :

(a) In the case of derrick system the test load shall be lifted with the ship's normal tackle with the derrick at the minimum angle to the horizontal for which the derrick system is designed (generally 15 degrees), or at such greater angle as may be agreed. The angle at which the test was made should be stated in the certificate of test. After the test load has been lifted, it should be swung as far as possible in both the directions. (b) A derrick boom designed to be raised with power with the load suspended shall in addition to the above tests at (a), be raised (with the load suspended) to its maximum working angle to the horizontal at the two outer most positions. (c) While test load testing of a heavy lift derrick, the competent person responsible for latest using movable weights shall ascertain from the master that the ship's stability will be adequate for the test.

3. The derrick tested under clause (2) shall not be used in union purchasing unless,--

(a) the derricks rigged in union purchase are tested with the test load appropriate to the SWL in union purchase (at the designed head room and with the derrick booms in their approved working positions), (b) the safe working load of that derrick in union purchase rig has also been specified by a competent person in a report in Form III, (c) any limitations or conditions specified in the said reports are complied with, and (d) the two hoisting ropes are coupled together by a suitable swivel assembly. Note.-The safe working load of derricks (for each method of rig including union purchase) shall be shown on the certificate of test and marked on the derrick booms.

4. Use of spring or hydraulic balances, etc., for test load testing :

All tests normally shall be carried on with the help of dead weights. Tests load testing on new ships shall always be with dead weights. In case of periodical tests, replacements or renewals, test load may be applied by means of a suitable spring or hydraulic balances. In such case, test load shall be applied with the boom as far as practicable in both directions. The test shall not be taken as satisfactory unless the balance has been certified for accuracy by competent authority, within \pm two per cent and the pointer of the machine has remained constant as the test load for a period of at

least five minutes.

5. Testing machines and dead weights :

(a) A suitable testing machine shall be used for testing of chains, wire ropes, loose gears and other cargo gear. (b) Testing machines and balances to be used in test loading, testing and checking shall not be used unless they have been certified for accuracy at least once in the preceding 12 months by competent authority. (c) Movable weights used for the test loading of the lifting appliance, loose gears and lifting device having a safe working load not exceeding 20 tonnes shall be checked for accuracy by means of suitable weighing machine.

6. Thorough examination after testing or test loading :

After being tested or test loaded, every lifting appliance, with their accessory gear shall be thoroughly examined to see that no part has been damaged or permanently deformed during the test. For this purpose, the lifting appliance or gear shall be dismantled to the extent considered necessary by the competent person.

7. In the case of heavy derricks, care should be taken to ensure that the appropriate shroud and stays are rigged.

8. The test and examination must be made by a competent person.

FORM IV[See regulations 41 and 51(2)] CERTIFICATE OF INITIAL AND PERIODICAL TEST AND EXAMINATION OF CRANES, HOISTS AND THEIR ACCESSORY GEAR
Test Certificate No
.....(a) In case of dock, Wharf or quay--Name of the dock, wharf or quay where lifting appliances are fitted
.....(b) In case of the ship--Name of the ship
Official number
Call sign
Port of registry
Name of owner

Situation and description	For jib cranes radius at the test load was applied	Test load applied	Safe working load for jib cranes at radius shown in column (2)
(1)	(2)	(3)	(4)
	(Metres)	(Tonnes)	(Tonnes)

5. Name and address of public service, association, company or firm or testing establishment making the test and examination

6. Name and position of the competent person of public service, association, company or firm or testing establishment.....

I certify that on theday of.....20.....the lifting appliance together with its accessory gear, was tested in the manner set forth overleaf that a careful examination of the said lifting appliance and gear after the test showed that it had withstood the test load without injury or permanent deformation and that the safe working load of the said lifting appliance and accessory gear is as shown in column (4).

..... *Seal Date.....

Signature of the competent person

Registration/Authority number of the competent person. Notes.-1. Column (1)-Sufficient particulars must be given to identify the crane or hoist.

2. Column (2)-If the jib has a variable radius, test loads must be applied at the maximum and minimum radii.

"competent person" means : (i) a person belonging to a testing establishment in India who is approved by the Chief Inspector for the purposes of testing, examination or annealing and certification of lifting appliances, loose gears or wire ropes; (ii) any other person who is recognised under the relevant regulations in force in other countries as competent for issuing certificates for any of the purposes mentioned in sub-clause (i) for implementation of the Protection Against Accidents (Dockers) Convention (Revised), 1932 (No. 32) and the Convention Concerning the Occupational Safety and Health in Dock Work (No. 152), 1979, adopted by International Labour Conference. INSTRUCTION Every crane and other hoisting machine with its accessory gear shall be tested with a test load which shall exceed the safe working load (SWL) as follows :

Safe working load	Test load
Up to 20 tonnes	25 per cent in excess of SWL
20 to 50 tonnes	5 tonnes in excess of SWL
Over 50 tonnes	10 per cent in excess of SWL

2. Lifting appliance other than ship's derricks and winches :

(a) The test load shall be lifted and swung as far as possible in both directions. If the jib or boom of the crane has a variable radius, it shall be tested with test loads at the maximum and minimum radii. In case of hydraulic cranes, when owing to the limitation of pressure it is impossible to lift a test load in accordance with table under paragraph 1, it will be sufficient to lift the greatest possible load. (b) The test shall be performed at maximum, minimum and intermediate radius points as well as such points in the arc of rotation as the competent person may decide. The test shall consist of hoisting, lowering, braking and swinging through all positions and operations normally performed. (c) An additional tests shall be made by operating the crane or hoist at maximum working speed with the SWL suspended.

3. Use of spring or hydraulic balances, etc., for test load testing :

All tests normally shall be carried on with the help of dead weights. Test load testing on new ships shall always be with dead weights. In case of periodical tests, replacements or renewals, test load may be applied by means of a suitable spring or hydraulic balances. In such case, test load shall be applied with the boom as far out as practicable in both directions. The test shall not be taken as satisfactory unless the balance has been certified for accuracy by competent authority, within \pm two per cent and the pointer of the machine has remained constant as the test load for a period of at least five minutes.

4. Testing machines and weights :-

(a) A suitable testing machine shall be used for testing of chains, wire ropes, loose gears and other cargo gear. (b) Testing machines and balances to be used in test loading, testing and checking shall not be used unless they have been certified for accuracy at least once in the preceding 12 months by competent authority. (c) Movable weights used for the test loading of the lifting appliances, having a safe working load not exceeding 20 tonnes shall be checked for accuracy by means of suitable weighing machine.

5. Thorough examination after testing or test loading :

After being tested or test loaded, every lifting appliance and associated gears shall be thoroughly examined to see that no part has been damaged or permanently deformed during the test. For this purpose, the lifting appliance or gear shall be dismantled to the extent considered necessary by the competent person.

6. The test and examination must be made by a competent person.

FORM V[See regulations 47 and 51(2)] CERTIFICATE OF INITIAL AND PERIODICAL TEST AND EXAMINATION OF LOOSE GEAR

Test certificate No (1) In case of dock, wharf or quay--Name of the dock, wharf or quay where lifting appliances are fitted

..... (2) In case of ship--Name of the ship Official number

..... Call sign Port of registry

..... Name of owner

Distinguishing number or mark	Description, dimension and material of gear/device	Number tested	Date of test	Test load applied (tonnes)	Safe working load (SWL) (tonnes)
(1)	(2)	(3)	(4)	(5)	(6)

7. Name and address of manufacturer or suppliers.....

8. Initial test and examination certificate No. and date (only in case of periodical test and examination).....

9. Name and address of public service, association, company or firm or testing establishment making the test and examination.....

10. Name and position of the competent person of public service, association, company or firm or testing establishment.....

I certify that on the day of.....20..... the above gear was tested and examined in the manner set forth overleaf that the examination of the said gear/device withstood the test load without injury or permanent deformation and that the safe working load of the said gear/device is as shown in column (6).

.....

Signature of the competent person

*Seal Date.....

*(see Note 3)Registration/Authority number of the competent person.Notes.-Column (2)-The dimensions of the loose gear, the type of material of which it is made and where applicable, the heat treatment received in manufacture should be stated (unless Form No. VII is used for the purpose)."competent person" means-(i)a person belonging to a testing establishment in India who is approved by the Chief Inspector for the purposes of testing, examination or annealing and certification of lifting appliances, loose gears or wire ropes;(ii)any other person who is recognised under the relevant regulations in force in other countries as competent for issuing certificates for any of the purposes mentioned in sub-clause (i) for implementation of the Protection against Accidents (Dockers) Convention (Revised), 1932 (No. 32) and the Convention concerning the Occupational Safety and Health in Dock Work (No. 152),1979, adopted by International Labour Conference.INSTRUCTIONS(1)Loose gear :(a)Every ring, hook, chain, shackle, swivel, eye-bolt, plate clamps, triangular plate or pulley block (except single sheave block) shall be subjected to a test load which shall be subjected to a test load which shall not be less than the following :-

SWL (in tonnes) Test load (in tonnes)

Up to 25 2xsafe working load (SWL)

Above 25 (1.22xSWL)+20

(b)In the case of a single sheave block, the SWL shall be the maximum load which can safely be lifted by the block when suspended by its head fitting and the load is attached to a rope which passes around the sheave of the block and a test load not less than four times the proposed safe working load shall be applied to the head of the block.(c)In the case of a multi sheave block, the test load shall not be less than the following :-

SWL (in tonnes) Test load (in tonnes)

Up to 25 2xsafe working load (SWL)

Above 25 to 160 $(0.9933 \times \text{SWL}) + 27$

Above 160 $1.1 \times \text{SWL}$

(d) In the case of hand-operated pulley blocks used with pitched chains and rings, hooks, shackles or swivels permanently attached thereto, a test load not less than 50 per cent. in excess of the safe working load shall be applied. (e) In the case of a pulley block fitted with a bucket, the bucket shall be tested and the load applied to the bucket while testing that block will be accepted as test loading of the bucket. (f) In the case of a sling having two legs, the safe working load shall be calculated when the angle between the legs is 90° . In the case of multi-legged slings, the safe working load shall be calculated as per national standards. (g) Every lifting beam, lifting frame, container spreader, bucket, tub and other such gears shall be subjected to a test load which shall not be less than that given in table below :

SWL (in tonnes) Test load (in tonnes)

Up to 10 $2 \times \text{safe working load (SWL)}$

Above 10 to 160 $(1.04 \times \text{SWL}) + 9.6$

Above 160 $1.1 \times \text{SWL}$

(h)(i) Before any test is carried out, a visual inspection of the lifting appliances or loose gear or lifting devices involved shall be conducted and any vitiable defective gear shall be replaced or renewed. (ii) After being tested, all the loose gear and other such gears shall be examined. All the sheaves and the pins of the pulley blocks shall be removed to see whether any part has been injured or permanently deformed by the test.

2. The test and examination must be made by a competent person.

FORM VI [See regulations 48 and 51(2)] CERTIFICATE OF TEST AND EXAMINATION OF WIRE ROPE BEFORE BEING TAKEN INTO USE Test certificate No

1. Name and address of maker or supplier

2. (a) Circumference/diameter of rope

(b) Number of strands (c) Number of wires per strand (d) Lay (e) Core

3. Quality of wire (e.g., best plough steel)

4. (a) Date of test of sample of rope

(b) Load at which sample broke (tonnes) (c) Safe working load of rope (tonnes) (Please see Instruction 1) (d) Intended use

5. Name and address of public service, association, company or firm or testing establishment making the test and examination

.....

6. Name and position of the competent person in public service, association, company or firm or testing establishment making the test and examination

.....

I certify that the above particulars are correct, and that the test and examination were carried out by me and no defects affecting its safe working load (SWL) were found.

.....

Signature of the competent person *Seal Date.....

*(see Note below)Registration/Authority number of the competent person.Note.-"competent person" means--(i)a person belonging to a testing establishment in India who is approved by the Chief Inspector for the purposes of testing, examination or annealing and certification of lifting appliances, loose gears or wire ropes;(ii)any other person who is recognised under the relevant regulations in force in other countries as competent for issuing certificates for any of the purposes mentioned in sub-clause (i) for implementation of the Protection Against Accidents (Dockers) Convention (Revised), 1932 (No. 32) and the Convention Concerning the Occupational Safety and Health in Dock Work (No. 152),1979, adopted by International Labour Conference.**INSTRUCTIONS**

1. Wire rope shall be tested by sample, a piece being tested to destruction, and the safe working load of rope is to be determined by dividing the load at which the sample broke by a co-efficient of utilisation determined as follows

:-

Item	Co-efficient of utilisation
(a) Wire rope forming part of sling SWL of the sling :	
SWL up to and equal to 10tonnes.....	5
SWL above 10tonnesand up to and equal to 160tonnes	104
	(8.85xSWL)+1910
(b) SWL above 160tonnes	3
Wire rope as integral part of a lifting appliance :	
SWL of the lifting appliance :	
SWL up to and equal to 160tonnes	104
	(8.85xSWL)+1910
SWL above 160tonnes	3

2. The test procedure shall be in accordance with recognised national standards.

3. The test must be made by a competent person.

FORM VII[See regulations 49 and 51(2)]**CERTIFICATE OF ANNEALING OF LOOSE GEARS**(1)In case of dock, wharf or quay--Name of the dock, wharf or quay where lifting appliance is fitted(2)In case of ship--Name of the shipOfficial numberCall sign.....Port of registry.....Name of owner.....

Distinguishing number or mark	Description gear	Number of the certificate of test and examination	Number annealed	Date of annealing	Defects found at careful inspection after annealing
(1)	(2)	(3)	(4)	(5)	(6)

7. Name and address of public service, association, company or firm or testing establishment carrying out the annealing and inspection.....

8. Name and position of the competent person of public service, association, company or firm or testing establishment.....

I certify that on the date shown in column (5) the gear described in columns (1) to (4) was effectively annealed under my supervision, that after being so annealed every article was carefully inspected, and that no defects affecting its safe working condition were found other than those indicated in column (6).

.....
Signature of the competent person *Seal Date.....

*(see Note 2)Registration/Authority number of the competent person.Notes.-1. Column (2)-The dimensions of the gear, the type of material of which it is made and the heat treatment received in manufacture should be stated.

2. "competent person" means :

(i)a person belonging to a testing establishment in India who is approved by the Chief Inspector for the purposes of testing, examination or annealing and certification of lifting appliances, loose gears or wire ropes;(ii)any other person who is recognised under the relevant regulations in force in other countries as competent for issuing certificates for any of the purposes mentioned in sub-clause (i) for implementation of the Protection against Accidents (Dockers) Convention (Revised), 1932 (No.

32) and the Convention concerning the Occupational Safety and Health in Dock Work (No. 152), 1979, adopted by International Labour Conference.

3. For requirements as to annealing see instructions below :

This certificate is optional. The above particulars may be entered in Part IV of the Register (Form II). INSTRUCTIONS

1. Chains (other than bridle chains attached to derricks or masks), rings, hooks, shackles and swivels in general use of hoisting or lowering must be effectively annealed at the following intervals :

Class of gear	If used on lifting appliance driven by power	If used solely on lifting appliances worked by hand
(1)	(2)	(3)
(12.5 mm) and smaller gear	6 months	12 months
Other gears	12 months	2 years

2. The annealing must be carried out under the supervision of a competent authority.

3. (a) It is recommended though not required by the Regulations, that annealing should be carried out in a suitably constructed furnace, heated to a temperature between 600° and 700° C for a period between 30 and 60 minutes.

(b) It is recommended though not required by Regulations that normalising should be carried out in suitably constructed furnace, heated to a temperature between 920° and 950°C.

4. The requirements of annealing does not apply to bridle chains attached to derricks or masks, and the following classes of gears have been exempted from annealing subject to the conditions stated below :

(a) Chains made of malleable cast iron; (b) Plate link chains; (c) Chains, rings, hooks, shackles and swivels made of steel; (d) Pitched chains; (e) Rings, hooks, shackles and swivels permanently attached to pitched chains, pulley blocks; (f) Hooks and swivels having screw-threaded parts of ball bearings or other case hardened parts; (g) Bordeaux connections. These classes of gears have been exempted from annealing subject to the conditions that such gear shall be thoroughly examined by a competent person once at least in every twelve months and that before the gear is subsequently taken into use, the prescribed certificates of such emanation shall be attached to the prescribed register (Form II) or alternatively the required particulars may be entered in Part III of the

register. FORM VIII Certificate No[See regulations 47(2) and 51(2)] CERTIFICATE OF ANNUAL THOROUGH EXAMINATION OF LOOSE GEARS EXEMPTED FROM ANNEALING (1) In case of dock, wharf or quay--Name of the dock, wharf or quay where lifting appliance is fitted (2) In case of ship--Name of the ship Official number Call sign Port of registry Name of owner

Distinguishing number or mark (1)	Description of gear (2)	Number of the certificate of initial and periodical tests and examination (3)	Remarks (4)
--------------------------------------	----------------------------	----------------------------------------------------------------------------------	----------------

5. Name and address of public service, association, company or firm or testing establishment making the test and examination.....

6. Name and position of the competent person of public service, association, company or firm or testing establishment.....

I certify that on the.....day of.....20.....the above gear described in column (2) was thoroughly examined and that no defects affecting its safe working conditions were found other than those indicated in column (4).

.....

Signature of the competent person *Seal Date.....

*(See Note 2.) Registration/Authority number of the competent person. Notes.-1. Column (2)-The dimensions of the gear, the type of OS material of which it is made and the heat treatment received in manufacture should be stated.

2. "Competent person" means--

(i) a person belonging to a testing establishment in India who is approved by the Chief Inspector for the purposes of testing, examination or annealing and certification of lifting appliances, loose gears or wire ropes; (ii) any other person who is recognised under the relevant regulations in force in other countries as competent for issuing certificates for any of the purposes mentioned in sub-clause (i) for implementation of the Protection Against Accidents (Dockers) Convention (Revised), 1932 (No. 32) and the Convention concerning the Occupational Safety and Health in Dock Work (No. 152), 1979, adopted by International Labour Conference.

3. For list of gear not required to be annealed and definition of "thorough examination" see below.

4. This certificate is optional. The above particulars may be entered in Form II of the Register.

INSTRUCTIONS

1. The following classes of gears have been exempted from annealing but required to be thoroughly examined by a competent person at least once in every twelve months :

(a)Chains made of malleable cast iron;(b)Plate link chains;(c)Chains, rings, hooks, shackles and swivels made of steel;(d)Pitched chains;(e)Rings, hooks, shackles and swivels permanently attached to pitched chains, pulley blocks, container spreaders, trays, slings, baskets, etc., and any other similar gear;(f)Hooks and swivels having screw threaded parts or ball bearings or other case hardened parts;(g)Bordeaux connections.

2. "Thorough examination" means a visual examination supplemented, if necessary by other means, carried out as carefully as the conditions permit, in order to arrive at a reliable conclusion as to the safety of the parts examined; and if necessary for the purpose, parts of the gear must be dismantled.

FORM IX PROHIBITION ORDER

Part I

[See section 5(1) of the Dock Workers (Safety, Health and Welfare) Act, 1986, and regulation 4]Inspector's notice on inspection of dock, ship, lifting appliance, loose gears and other such gears, equipments, ladders and stagings, Inspector's notice to the owner, master, officer-in-charge, or agents of the ship, port authority, owner of lifting appliances, loose gears and lifting devices or the person who, by himself, his agents, or his employers, carried on the dock work, as the case may be.

Name of the dock, ship, lifting appliance, loose gear, lifting device, transport equipment, ladders and stagings	Where situated lying/used	Port of registry of ship	Official No. (if any) of ship
(1)	(2)	(3)	(4)

An inspection of the above named dock, ship, lifting appliances, loose gears, lifting devices, transport equipment, ladders and stagings, was made onThe activities connected with dock work which are being carried on by you/about to be carried on by you/under your control involve a risk or danger to the life, safety and health of dock workers and involve the following contraventions:CONTRAVENTIONSTherefore, I hereby direct that the said activities shall not be

carried on by you or under your control unless the said contraventions and matters mentioned have been remedied to the satisfaction of the Inspector. This order is being issued without prejudice or any legal action which may be taken for these contraventions. On hearing from you that the requirements have been complied with the dock/ship/lifting appliance, loose gear or similar gear/transport equipment/ladders/staging shall again be visited with a view to the inspection being completed. No Dated at this day of

..... 20..... Inspector under the Dock Workers (Safety, Health and Welfare) Act, 1986. REQUIREMENTS On compliance with all or any of the above contraventions, the Inspector shall be informed in the manner prescribed overleaf, of the date and place at which the dock, ship, lifting appliance, loose gears or similar gear, transport equipment, ladders and staging can be reinspected. Sir, The contravention notified by you have been effectively attended to. The dock, ship, lifting appliance, loose gears or similar gear, transport equipment, ladders and stagings shall be ready for inspection on the date and place named below :

Date of inspection

Place

Dated at.....

this..... Day

of.....20.....

Owner, master, officer-in-charge or agents of the ship, port authority, owner of machinery and gear or the person, who by himself, his agents or his employers, carried on the dock work.

To The Inspector under the Dock Workers (Safety, Health and Welfare) Act, 1986. Notes.-1. Failure to comply with a prohibition order is an offence as provided by section 21(4) of the Dock Workers (Safety, Health and Welfare) Act, 1986, and renders the offender liable to a fine not exceeding Rs. 5,000 on each conviction or to an unlimited fine as per section 18 of the Act or to an imprisonment for a term not exceeding six months or both fine and imprisonment, and a further fine not exceeding Rs. 100 per day per conviction if the offence is continued as given under section 16(2) of the Act.

2. As per section 14(4) of the Act a person who has been convicted for an offence punishable under any of the provisions of the Act or the regulations framed thereunder, is again convicted for an offence committed within two years of the previous conviction and involving the contravention of the same provisions, he shall be punishable for each subsequent conviction with double imprisonment to which he would have been liable of the first contravention of such provision.

3. The Chief Inspector has the power to cancel or modify the order or to extend the period specified in the order before the end of the period specified in it without waiting for an appeal from the concerned employer or worker of premises/dock worker.

4. Any person aggrieved by a prohibition order issued under section 5 of the Act may, within 15 days from the date on which the order is communicated to him, prefer an appeal to the Chief Inspector, Directorate-General, Factory

Advice Service and Labour Institute, Sion, Bombay-400 022, as provided under section 8 of the Act, where such order is by the Chief Inspector, an appeal shall be made to the Secretary in the Ministry of Labour, New Delhi.

5. An appeal to the Chief Inspector by any aggrieved person must be commenced by sending in writing to the Chief Inspector a notice containing the following particulars---

(a)the name of the appellant and his address for service of documents;(b)date of a prohibition order or orders appealed against and the addresses of the premises or place concerned;(c)the name and address (as shown in a prohibition order) of the respondent;(d)particulars of the requirements or directions appealed against;(e)the grounds of an appeal.

6. The entering of an appeal does not have the effect to suspend this prohibition order. The application can be made for the suspension of the prohibition order to the Chief Inspector, but the prohibition order continues in force until the Chief Inspector otherwise directs.

7. The issue of this prohibition order does not relieve the aggrieved person of any legal action resting upon him for failure to comply with any provision of this or any other enactment, before ordering issue of this order.

Part II

IMPORTANT NOTICE(See regulation 4)Inspector's notice on inspection of dock, ship, lifting appliance, loose gear or similar other gears, equipment, ladders and stagings.Inspector's notice to the owner, master, officer-in-charge, or agents of the ship, port authority, owner of lifting appliances, loose gears and lifting devices or the person who, by himself, his agents, or his employer, carries on the dock work, as the case may be.

Name of the dock, ship, lifting appliance, loose gear, lifting device, transport equipment, ladders and stagings	Where situated lying/used	Port of registry of ship	Official No. (if any) of ship
(1)	(2)	(3)	(4)

An inspection of the above named dock, ship, lifting appliances, loose gears, lifting devices, transport equipment, ladders and stagings was made onThe following contraventions were observed. You are required to remedy the said contraventions and send the compliance report in writing withindays.This notice is being issued without prejudice to any legal action which may be taken for these contraventions.On hearing from you that the requirements have been complied with the dock/ship/lifting appliance/loose gear or similar other gear/transport

equipment/ladders/staging will again be visited with a view to the inspection being completed. **CONTRAVENTIONS** No Dated this day of 20..... Inspector under the Dock Workers (Safety, Health and Welfare) Act, 1986 **REQUIREMENTS** On compliance with all or any of the above requirements, the Inspector shall be informed in the manner prescribed overleaf, of the date and place at which the dock, ship, lifting appliance, loose gears or similar gear, transport equipment, ladders and stagings can be reinspected. Sir, The requirements noted by you have been effectively fulfilled. The dock, ship, lifting appliance, loose gears lifting devices, transport equipment, ladders and stagings shall be ready for inspection on the date and place named below :

Date of inspection

Place

Dated at this day of 20.....

Owner, master, officer-in-charge or agents of the ship, port authority, owner of machinery and gear or the person, who by himself, his agents or his employers, carried on the dock work.

To The Inspector under the Dock Workers (Safety, Health and Welfare) Act, 1986. **FORM X** (See regulation 113) **ABSTRACTS OF DOCK WORKERS (SAFETY, HEALTH AND WELFARE) ACT, 1986**

3.

(1) The appropriate Government may, by notification in the Official Gazette, appoints such person as it thinks fit to be the Chief Inspector of dock safety and such persons as it thinks fit to be inspectors subordinate to the Chief Inspector for the purposes of this Act at such ports as may be specified in the notification. (2) The Chief Inspector shall also exercise the powers of an inspector. (3) The Chief Inspector and all inspectors shall be deemed to be public servants within the meaning of the Indian Penal Code.

4. An inspector may, at any port for which he is appointed,

(a) enter with such assistance (if any), as he thinks fit, any ship, dock, warehouse or other premises, where any dock work is being carried on, or where he has reason to believe that any dock work is being carried on; (b) make examination of the ship, dock, lifting machinery, cargo gear, stagings, transport equipment, warehouses or other premises, used or to be used for any dock work; (c) require the production of any register, muster roll or other document relating to the employment of dock workers and examine such document; (d) take on the spot or otherwise such evidence of any person which he may deem necessary : Provided that no person shall be compelled under this section to answer any question or give any evidence tending to incriminate himself; (e) take copies of registers, records or other documents or portions thereof as he may consider relevant in respect of any offence which he has reason to believe has been committed or for the purpose of any inquiry; (f) take photograph, sketch, sample, measure or record as he may consider necessary for the purpose of any examination or inquiry; (g) hold an inquiry into the cause of any accident which he has reason to believe was the result of the collapse or failure of lifting machinery, transport equipment, staging or non-compliance with any of the provisions of this Act or the regulations; (h) issue show-cause notice relating to the safety, health and welfare provisions arising under this Act or the

Regulations;(i)prosecute, conduct or defend before any Court, any complaint or other proceeding arising under this Act or the regulations;(j)exercise such other powers as may be conferred upon him by the regulations.

5.

(1)If it appears to an inspector that any place at which any dock work is being carried on is in such a condition that it is dangerous to life, safety or health of dock workers, he may, in writing, serve on the owner or on the person in charge of such place and order prohibiting any dock work in such place until measures have been taken to remove the cause of the danger to his satisfaction.

6. The owner or the person in charge of the place at which any dock work is being carried on shall afford the chief inspector or the inspector all reasonable facilities for making any entry, inspection, survey, measurement examination or inquiry under this Act or regulations.

13. No suit, prosecution or other legal proceeding shall lie against any person of anything which is in good faith done or intended to be done under this Act.

14.

(1)Whoever,---(a)wilfully obstructs an inspector in exercise of any power conferred by or under this Act or fails to produce on demand by an inspector any register or other documents kept in pursuance of the regulations or otherwise in connection with any dock work or conceals or prevents or attempts to prevent any person from appearing before, of being examined by, an inspector; or(b)unless duly authorised or in case of necessity, removes any fencing, gangway, gear, ladder, life-saving means or appliance, light, mark, stage or other thing required to be provided by or under, the regulations; or(c)having in case of necessity removed any such tenting, gangway, gear, ladder, life-saving means or appliance, light, mark, stage or other things, omits or restore it at the end of the period for which its removal was necessary, shall be punishable with imprisonment for a term which may extend to six months, or with fine which may extend to five thousand rupees, or with both.(2)If any person, being a person whose duty is to comply with any of the regulations, contravenes such regulations and such contravention results(a)in any fatal accident to a dock worker, or(b)an accident which incapacitates a dock worker from earning his full wages for more than a fortnight, such person shall be punishable with imprisonment for a term which may extend to six months or with fine which shall not be less than two thousand rupees in a case falling under clause (a) and five hundred rupees in a case falling under clause (b) but which may extend, in either case, to five thousand rupees, or with both, and the Court may order the whole or part of the fine to be paid to the dependent of the deceased dock worker or, as the case may be, to the injured dock worker.Explanation.-The provisions of this sub-section shall be in addition to any provisions which may be made under sub-section (4) of section 21.FORM XI(See regulation 113)Abstracts Of The

Dock Workers (Safety, Health And Welfare) Regulations, 1989

Part 1

General

2. Definitions.-"Inspector" means a person appointed by the Central Government under section 3 of the Act and includes the Chief Inspector.

3. Powers of Inspector.-(a) An Inspector may, at any port for which he is appointed,--

(i)enter, with such assistance (if any) as he thinks fit, any ship, dock, warehouse or other premises where any dock work is being carried on or where he has reason to believe that any dock work is being carried on;(ii)make examination of the ship, dock, lifting appliance, loose gear, lifting device, staging, transport equipment, warehouse or other premises, used or to be used for any dock work;(iii)require the production of any register, muster roll or other document relating to the employment of dock workers and examine such document;(iv)take on the spot or otherwise such evidence of any person which he may deem necessary :Provided that no person shall be compelled under sub-regulation 3(a)(iv) to answer any question or give any evidence tending to incriminate himself;(v)take copies of registers, records or other documents portions thereof as he may consider relevant in respect of any offence which he has reason to believe has been committed or for the purpose of any inquiry;(vi)take photograph, sketch, sample, weight, measure or record as he may consider necessary for the purpose of any examination or inquiry;(vii)hold an inquiry into the cause of any accident or dangerous occurrence which he has reason to believe was the result of the collapse or failure of any lifting appliance, loose gear, transport equipment, staging or non-compliance with any of the provisions of the Act or the regulations;(viii)issue show-cause notice relating to the safety, health and welfare provisions arising under the Act or the regulations;(ix)prosecute, conduct or defend before any Court any complaint or other proceedings arising under the Act or the regulations; and(x)direct the port authority, dock labour board and other employers of dock workers for getting the dock workers medically examined if considered necessary.(b)A person having general management and control of the premises or the owner, master, officer-in-charge or agents of the ship, as the case may be, shall provide such means as may be required by the inspector for entry, inspection, examination, inquiry, or otherwise for the exercise of his powers under the Act and the regulations in relation to that ship or premises which shall also include the provisions of launch or other means of transport.

4. Notice of inspection.-(1) An inspector may notify any defects or deficiencies which may come to his notice during his inspection and examination which he wishes to point out together with any orders passed by him under the Act or the regulations in Form IX to---

(i)the owner, master, officer-in-charge or agents of the ship; or(ii)the port authority; or(iii)the owner of lifting appliance, loose gears, lifting devices and transport equipment; or(iv)the employer of dock workers.(2)When an inspector serves notice under sub-regulation 4(1) above in relation to any dock, lifting appliance, loose gear, lifting device, transport equipment, ladder or staging, he may, in the notice, prohibit the dock work where conditions are dangerous to life, safety or health of dock workers and the use of the same in connection with the dock work, and such dock, lifting appliances, loose gears, lifting devices, transport equipment, ladders or stagings shall not be used until the defect or defects specified in the notice have been remedied and the inspector has withdrawn the prohibitory order.

6. Penalties.-Save as is otherwise expressly provided in these Regulations, whoever being a person responsible to comply with any of the regulations commits a breach of such regulations shall be guilty of an offence and punishable with imprisonment for a term which may extend to six months or with fine which may extend to five thousand rupees or with both, and, if the breach is continued after conviction, with a further fine which may extend to one hundred rupees for each day on which the breach is so continued.

Part II

Responsibilities

7. Responsibilities.-(5) It shall be the duty of every dock worker to comply with the requirements of such of these regulations as relate to the performance of, or refraining from an act by him and to co-operate in carrying out requirements of these regulations and if he discovers any defects in the lifting appliance, loose gear, lifting device, conveying and transport equipments or other equipment to report such defects without unreasonable delay to his employer or foreman or other person in authority.

(6)No person shall, unless duly authorised or in case of necessity, remove or interfere with any fencing, gangway, gear, ladder, hatch, covering life saving appliance, lighting, or other thing whatsoever required by the Act and these regulations to be proved of the period during which their removal was needed. If removed, such things shall be restored at the (sic) by the persons last engaged in that work was necessitated such removal.(9)Every dock worker shall use the means of access provided in accordance with these regulations, and no person shall authorise or order another on or off nor shall any person authorise or order (sic) accordance therewith.(10)No person shall go upon any hatch beam for the purpose of adjusting the gear for lifting them on or off nor shall any person authorise or order another to do so.

Part III

Safety A.-WORKING PLACES

9. Surfaces.-(1) Every regular approach over a dock which the dock workers have to use for going to or from a working place and every such working place inside the dock shall be--

(a) kept clean and free from objects that can cause slipping, stumbling or falling; (b) maintained in good repair with due regard to the safety of the dock workers. (2) All areas of a dock shall be kept properly drained and graded in order to facilitate safe access to sheds, warehouses and store places and safe handling of cargo and equipment. (3) Drain pools and catch basins shall be properly covered or enclosed. (4) All areas of a dock and all approaches on which lifting appliances and transport equipment are used shall be soundly constructed, surfaced with good wearing material and sufficiently even and free from holes and cracks to afford safe transport of cargo, shall be properly maintained. (5) Any working area in a dock which is damaged or under repair shall be effectively blocked off from other areas and, when necessary, warning lights shall be provided at night. (6) All landing places used by dock workers for embarking or disembarking from crafts meant for transport by water shall be maintained in good repair with due regard to the safety of the persons using them.

10. Fencing of dangerous places.-(1) The following parts of a dock and approaches shall, as far as practicable, having regard to the traffic and working be securely fenced so that the height of the fence shall in no place be less than one metre and the fencing shall be maintained in good condition :--

(a) all brakes, dangerous corners and other dangerous parts or edges of a dock; (b) both sides of such footways, overbridges, caissons and dock gates as are in general use by dock workers and each side of the entrance at each end of such footway for sufficient distance not exceeding 4.5 metres : Provided that, in case of fences which were constructed before the date of commencement of this regulation, it shall be sufficient if the height of the fence is in no place less than 75 cms. (2) The ditches, pits, trenches for pipes and cables and other hazardous openings and excavations shall be securely covered or adequately fenced. (3) Where wharves or quays slope steeply towards the water, the outer edge shall be protected as far as practicable.

11. Passage to be kept clear.-(1) Cargo shall not be stored or transporting equipment or lifting appliances so placed on any areas of a dock where dock workers are employed so as to obstruct access to ships, cranes, life-saving appliances, fire fighting equipment and welfare facilities provided under these regulations.

(2)Where any space is left along the edge of any wharf or quay, it shall be at least 90 cms. wide and shall be kept clear of all obstructions other than fixed structures, plant and appliances in use.(3)Where working areas of a dock are enclosed and the traffic warrants, a separate gate or passage shall be provided for pedestrians.

12. Railings and fencings.-(1) All railings for the fencing of hatchways accommodation ladders, gangways, stairway for embarking, disembarking and any other dangerous place shall be of sound material, good construction and possess adequate strength and unless specified in these regulations--

(a)be at least one metre in height; and(b)consist of two rails or two taut ropes or chains supporting stanchions and to be boards.(2)Intermediate rails, ropes or chains shall be 50 centimetres high.(3)Stanchions shall not be more than two metres apart and shall be secured against inadvertent lifting out.(4)The toe board shall be at least 15 centimetres in height.(5)Railings shall be free from sharp edges.(6)Temporary fencing of hatchways, elevated platforms, etc., shall as far as reasonably practical, extend to a height of one metre and consist of either---(a)two taut ropes or chains with stanchions; or(b)a properly rigged and securely fastened safety net.(7)Stairs giving access to transport vessel shall be equipped with wooden or rubber tenders so that a gap of more than 30 centimetres is maintained between the side of the steps and side of the vessel.

15. Life-saving appliances.-Provision for rescue from drowning of dock workers shall be made and maintained, and shall include---

(a)a supply of life-saving appliance, kept in readiness on the wharf or quay, which shall be reasonably adequate having regard to all the circumstances; and(b)means at or near the surface of the water at reasonable intervals for enabling a person in water to support himself or escape from the water which shall be reasonably adequate having regard to all the circumstances.

16. Illumination.-(1) All areas in a dock and on a ship where dock work is carried on and all approaches to such areas and to places to which dock workers may be required to go in the course of their employment shall be safely and efficiently lighted in an appropriate way.

(2)The general illumination in areas on the dock where dock workers have to pass shall be at least 10 lux and at places where dock workers are employed, the illumination shall be at least 25 lux without prejudice to the provision of any additional illumination needed at particularly dangerous places.(3)The means of artificial lighting shall so far as is practicable be such and so placed as to prevent glare or formation of shadows to such an extent as to cause risk of accident to any dock worker.(4)The portable lights shall be maintained in good condition and shall--(a)be equipped with substantial reflectors and guards; and(b)be equipped with heavy duty electric cords with connection and insulation maintained in safe condition.

18. Excessive noise, etc.-Adequate precautions shall be taken to protect dock workers against the harmful effects of excessive noise, vibrations and air pollution at the work place. In no case the noise levels shall exceed the limits laid down in Schedule VII.

B.-WAREHOUSES AND STORE PLACES

27. Fencing of and means of access to lifting appliances.-(1) Safe means of access to every part of a lifting appliance shall be provided.

(2)The operator's platform on every crane or tip driven by mechanical power shall be securely fenced and shall be provided with safe means of access. In particular, where access is by a ladder,(a)the sides of the ladder shall extend to a reasonable distance beyond the platform or some other suitable handhold shall be provided;(b)the landing place on the platform shall be maintained free from obstruction and slipping; and(c)in case where the ladder is vertical and exceeds six metres in height, a resting place shall be provided, after every six metres and part thereof.D.-DECKS, HATCHWAYS, ETC.

29. Bulwarks or rails.-(1) All upper decks to which dock workers may have access for the purpose of carrying on dock work shall be provided on the outer edge up to a height of one metre above the deck with a bulwark or guard rails so designed constructed and placed, as to prevent any dock worker from accidentally falling overboard.

(2)The bulwark or guard rails shall be continuous except where sections have to be removed for the purpose of dock work and such sections shall not extend beyond the minimum distance necessary.

33. Fencing around hatchways.-(1) Every hatchway of a hold exceeding 1.5 metres in depth, which is not protected by coming to a clear height of 75 centimetres shall, when not in use, either be effectively fenced to a height of one metre or to be securely covered to prevent dock workers from falling into the hold.

(2)If, in any hatch, dock work is carried on simultaneously at two decks, the open end of the hatch in the higher deck shall be protected to a height of one metre by means of planks or nets or in some other suitable manner to prevent fall of dock workers or cargo and the safety nets when rigged shall not be secured to the hatch covers.(3)When an edge of a hatch section or of stowed cargo more than 2.5 metres high is so exposed that it presents a danger to dock workers falling, the edge shall be guarded by a taut rope, safety net or railing to a height of one metre.(4)Dock workers employed in a hold on a partly covered hatch or on a stack shall be protected by spreading a net or in some other suitable way, against the danger of falling down.

34. Hatch coverings, hatch beams, etc. - (1) All fore and beams and thwartship beams used for hatch covering shall have suitable gear for lifting them on and off without it being necessary for any dock worker to go upon them to adjust such gear.

(2) All hatch coverings and beams shall be kept plainly marked to indicate the deck and hatch to which they belong and their position therein. (3) All hatch coverings and beams shall be replaced according to their markings : Provided that this regulation shall not apply in cases where all the hatch coverings and beams of a ship are interchangeable or, in respect of marking of position, where all hatch coverings of a hatch are interchangeable. (4) All fore and aft beams and thwartship beams including sliding beams and the tracks used for hatch coverings and all hatch coverings shall be maintained in good condition. (5) Adequate handgrips shall be provided on all hatch coverings, having regard to their size and weight, unless construction of the hatch or the hatch covering is of a character rendering the provision of handgrips unnecessary. (6) Hatch coverings shall not be used in the construction of stages or for any other purpose which may expose them to damage. (7) Hatch covers and beams shall not be removed and replaced while dock work is in progress in the hold under the hatchway. Before loading or unloading takes place, any hatch cover or beam that is not adequately secured against displacement shall be removed. (8) Only an authorised person shall be permitted to open or close power-operated hatch covers. (9) Folding hatch covers shall be fitted with locking devices to prevent covers from folding back. (10) Hatch covers shall not be opened or closed in such manner as is likely to cause injury to any dock worker.

37. Securing of hatch covering and hatch beams.-(1) Where an hatch beam is fitted with a permanent device for securing it in position in the hatch, that device and its corresponding fitting in the coaming shall be effectively and properly maintained.

(2) The beams of any hatch in use for the dock work shall, if not removed, be adequately secured to prevent their displacement. (3) Any sliding or rolling hatch beams supporting hatch coverings which are left in position in a partly opened hatch shall be adequately secured to prevent any horizontal movement of the hatch beams. (4) Every sliding or rolling hatch beam and its guides shall be so constructed and maintained that the hatch beam is not liable to be accidentally displaced from its guides. (5) Mechanically operated hatch coverings shall, where stored, be adequately secured to prevent movement. E.-LIFTING APPLIANCES AND GEARS

41. Test and periodical examination of lifting appliances.-(1) Before being taken into use for the first time or after it has undergone any alterations or repairs liable to affect its strength or stability and also once at least in every five years, all lifting appliances including all parts and gears thereof, whether fixed or movable, shall be tested and examined by a competent person in the manner set out in Schedule I.

(2) All lifting appliances shall be thoroughly examined by a competent person once at least in every 12 months. Where the competent person making this examination forms the opinion that the lifting appliance cannot continue to function safely, he shall forthwith give notice in writing of his opinion to the owner of the lifting appliance or in case of lifting appliance carried on board a ship not registered in India to the master or officer-in-charge of the ship. (3) Thorough examination for the purpose of this regulation shall mean a visual examination, supplemented, if necessary, by other means such as hammer test carried out as carefully as the conditions permit, in order to arrive at a reliable conclusion as to the safety of the parts examined and, if necessary for this purpose, parts of the lifting appliance and gear shall be dismantled.

48. Ropes.-(1) No rope shall be used for dock work unless--

(a) it is of suitable quality and free from patent defects, and (b) as regards wire rope slings, either the (sic) and examined by a competent person in the manner set out in Schedule I. (2) Every wire rope of lifting appliance or loose gear used in dock work shall be inspected by a responsible person once at least in every three months, provided that after any wire has broken in such rope, it shall be inspected once at least in a month. (3) A thimble or loop splice made in any wire rope shall conform to the following standard : (a) wire rope or rope sling shall have at least three tucks with full strand of rope and two tucks with one-half of the wires cut out of each strand and strands in all cases shall be tucked against the lay of the rope; (b) protruding ends of strands in any splice on wire rope and rope slings shall be covered or treated so as to leave no sharp points; (c) fibre rope or rope sling shall have at least four tucks tail of such tuck being whipped in a suitable manner; and (d) synthetic fibre rope or rope sling shall have at least four tucks with full strand followed by further tuck with one-half filaments cut out of each strand and final tuck with one-half of the remaining filaments, cut out from strand. The portion of the splices containing the tucks with the reduced number of filaments shall be securely covered with suitable tape or other material : Provided that this sub-regulation shall not operate to prevent the use of another form of splice which can be shown to be as efficient as that laid down in this regulation.

52. Marking of safe working load.-(1) Every lifting appliance and every item of loose gear shall be clearly marked with its safe working load and identification mark by stamping or, where this is impracticable, by other suitable means.

(2) (a) Every ship's derrick (other than derrick crane) shall be clearly marked with its safe working load when the derrick is used : (i) in single purchase; (ii) with a lower cargo block; and (iii) in union purchases in all possible dock positions. (b) The lowest angle to the horizontal, that the derrick may be used shall also be legibly marked. (3) Every lifting appliance (other than ship's derrick) having more than one safe working load shall be fitted with effective means enabling the operator to determine the safe working load under each condition of use. (4) Means shall be provided to enable any dock worker using loose gears to ascertain the safe working load for such loose gears under such conditions as it may be used and such means shall consist of : (a) as regards chain slings, of marking the safe working load in plain figures or letters upon the sling or upon a tablet or ring of durable

material attached securely thereto; and(b)as regards wire rope slings, either the means specified in clause (a) above or notice or notices so exhibited as can be easily read by any concerned dock worker stating the safe working load for the various sizes of the wire rope slings used.(5)No lifting appliance or loose gears shall be used unless marked in accordance with the provisions of this regulation.

54. Pulley blocks.-No pulley blocks shall be used in dock work unless the safe working load and its identification marks are clearly stamped upon it.

56. Knotting of chains and wire ropes.-No chain or wire shall be used in dock work with a knot in it.

F.-TRANSPORT EQUIPMENT AND OPERATIONS

58. Use of internal combustion engines in the holds.-(1) Internal combustion engines shall not be used in connection with the dock work in the holds or cargo spaces unless,

(a)adequate means of ventilation and, where necessary, mechanical ventilation is provided;(b)suitable fire-fighting equipment is readily available;(c)exhaust pipes, connections and mufflers are kept tight;(d)exhaust is so directed as not to cause inconvenience to the operators and dock workers;(e)it is ensured that no explosives, inflammable liquids, gases or similar dangerous cargo are present;(f)a spark arrestor is fitted on the exhaust of the engine and the bare heated surfaces of the engine, that are liable to ignite spilled fuel, are suitably protected;(g)the engine is refuelled above deck; and(h)the exhaust does not contain the carbon monoxide above TLV prescribed in the national standards.(2)The internal combustion engine shall be switched off when not in use in connection with the dock work.(3)Operators of internal combustion engines in cargo spaces or cargo holds shall not work alone.(4)Whenever internal combustion engines for use in dock work are to be brought on board, the master or the officer-incharge of the ship shall be notified.G-HANDLING OF CARGO

65. Loading and unloading operations.-(I) No cargo shall be loaded or unloaded by a fall or sling at any intermediate deck unless either the hatch at the deck is securely covered or a secure landing platform of a width not less than that of one section of hatch coverings has been placed across it.

Provided that this regulation shall not apply to an loading or unloading work the whole of which may be completed within a period of half an hour.(2)No loose gear or any other object shall be thrown in or out of the holds.(3)During the loading and unloading of bulk cargo a record of all dock workers employed in the hold shall be maintained and produced on demand to the Inspector.(4)Where necessary, cargo shall be secured or blocked to prevent its shifting or falling. In breaking down, precautions shall be taken where necessary to prevent the remaining cargo from falling.(5)(a)Dragging of cargo shall be done with the ship's winches only when the runner is led

directly from the derrick heel block; and (b) Pulley blocks shall be used to provide a fair lead for the runner so as to prevent it from dragging against obstructions. (6) If the head room in the hold of a ship for the purpose of stacking and unstacking is less than 1.5 metres, suitable measures shall be taken to guard against accidents. (7) Loads shall be safely slung before being hoisted. Loose dunnage or debris hanging or protruding from loads shall be removed and suitable means shall be adopted to prevent cargo from falling out. (8) Cargo-handling bridles, such as pallet bridles, which are to remain attached to the lifting appliance while hoisting successive sling loads, shall be attached by shackles, or other positive means shall be taken to prevent them from becoming accidentally disengaged from the hook of the lifting appliance. (9) When lifting appliance is operating without a load on the slings--(a) slings or chains shall be hooked securely to the appliance before the operators are given signal to move; (b) sharp hooks, multiple hooks and claws shall not hang at one end but shall be reeved through slings; and (c) the operators shall raise the appliance sufficiently to keep clear of dock workers and objects. (10) Effective measures shall be taken by the use of suitable packing or otherwise, to prevent edges of any load from coming into contact with any rope or chain sling which is likely to cause any damage to the rope or chain sling. (11) Buckets, tubs and similar appliances shall not be loaded above their rims. (12) No loads shall be lifted at strappings unless such strappings are approved as proper and safer slinging points. Movements of such loads is allowed only if everybody has left the danger zone. (13) When working with lifting appliances, slope pulling, horizontal dragging and intentional swing of loads and lifting devices are prohibited.

66. Stacking and unstacking.-(1) Where stacking, unstacking, stowing or unstowing, stuffing or destuffing of cargo or handling in connection therewith cannot be safely carried out unaided reasonable measures to guard against accidents shall be taken by shoring or otherwise.

(2) Stacking of cargo shall be made on firm foundation not liable to settle and the weight of the cargo shall be such as not to overload the floors. (3) Cargo shall not be stacked against partition or walls of warehouses or storeplaces unless it is known that the partition or the wall is of sufficient strength to withstand the pressure. (4) Cargo shall not be stacked to such a height and in such a manner as would render the pile unstable. (5) Where the dock workers are working on stacks exceeding 1.5 metres in height, safe means of access to the stack shall be provided. (6) Stacking and unstacking work shall be performed under the supervision of an authorised person.

68. Hooks for bales, etc.-When the working space in a hold is confined to the square of the batch, hooks shall not be made fast in the bonds or fastenings of bales of cotton, wool, cork, gunny bags, or other similar goods, nor shall hooks be used for raising or lowering a barrel when, owing to the construction or condition of the barrel or of the hooks, their use is likely to be unsafe.

70. Restrictions on loading and unloading operations.-(1) No other work, for example, maintenance or repair work such as sand blasting or welding shall be performed at places where dock work is in progress if it is likely to endanger or obstruct the person carrying out dock work.

(2)When more than one gang of dock workers are employed in dock work simultaneously in a hold, it shall be ensured that,--(a)the operation of loading or unloading is harmonised to avoid dangerous to the working gangs from one another;(b)the slung cargo of one gang will not endanger the dock workers of the other gang;(c)where gangs are working at different levels, a net shall be rigged and securely fastened to prevent dock workers from falling down or cargo falling on to dock workers below;(d)overcrowding of gangs in a section of the hold is avoided.

71. Dock work at midstream.-No dock worker shall be employed to handle cargo on any ship anchored in midstream whenever the working conditions are considered to be dangerous.

72. Work during berthing and shifting of ships.-(1) While ships are being berthed or shifted, no dock work shall be carried out by dock workers in the holds or hatches and on decks.

(2)When ships are being moored, dock workers shall be kept clear of the mooring ropes and, in particular, shall not be allowed to stand in the bight ropes being hauled by capstans.

73. Protective equipment.-(1) Where other means of protection against harmful agents are impracticable or insufficient, dock workers shall be provided with adequate protective clothing and personal protective equipment to shield them from the effects of such agents.

(2)Protective clothing and personal protective equipment shall be of suitable quality and maintained in good condition and shall be cleaned and disinfected at suitable intervals.(3)Where protective equipment and clothing may be contaminated by poisonous or other dangerous goods, it shall be stored in a separate accommodation where it will not contaminate the dock workers clothing and other belonging.(4)Suitable protective equipment shall be issued to the dock workers employed in the reefer holds or chambers or reefer containers for affording complete body protection.H.-HANDLING OF DANGEROUS GOODS

77. General precautions.-(1) Dangerous goods shall be loaded, unloaded, handled and stored under the supervision of a responsible person who is familiar with the risks and the precautions to be taken. In case of doubt as to the nature of the risk or the precautions to be taken, necessary instructions

shall be obtained from the Safety Officer appointed under these regulations.

(2) Dangerous goods shall not loaded, unloaded or stored unless they are suitably packed and labelled showing the danger therefrom. The dock workers shall be given adequate information concerning the nature of the cargo and the special precautions to be observed in handling them. (3) Special precautions, such as provision of mats, sling nets, boxes and high sided pallets shall be taken to prevent breakages or damage to containers of the dangerous goods. (4) Dock workers employed in loading or unloading or otherwise handling dangerous goods shall be provided with suitable protective equipment. (5) Dock workers handling dangerous goods shall thoroughly wash their hands and faces with soap or some other cleaning agent before taking any food, drink, pan and supari or tobacco. (6) Only specially trained dock workers shall be employed for cleaning, sweeping or handling spillages or sweeping of dangerous goods.

79. Other dangerous goods.-(1) Before fumigated cargo such as grain is loaded or unloaded, adequate measures shall be taken to ensure that the cargo is safe to handle.

(2) Where caustic and corrosive substances are handled or stored, special precautions shall be taken to prevent damage to the containers and to render any spillage harmless. (3) If skins, wool, hair, bones, or other animal parts have not been certified by competent authority as having been disinfected, especially against anthrax, the dock workers concerned shall be--(a) instructed about the risk of infection and the precautions to be taken; (b) provided with suitable type of personal protective equipment; and (c) subjected to special medical supervision.

81. Broken or leaking containers.-(1) When there is danger from broken or leaking containers of dangerous goods, dock workers shall be evacuated from the area involved and the following steps taken before dock work is resumed--

(a) if the cargo produces dangerous gases or vapours--(i) suitable respiratory protective equipment shall be made available for dock workers who are to remove the defective containers; (ii) the area shall be ventilated if necessary and tested to ensure that the concentration of gases or vapours in the atmosphere is safe for dock work; (b) if the cargo is a corrosive substance, (i) suitable personal protective equipment shall be made available to the dock workers engaged in the removal of damaged containers; and (ii) suitable absorbent or neutralizing materials shall be used in cleaning the spillage.

82. Toxic solvents.-Before any solvents are used, the toxic properties of such solvents shall be ascertained and adequate means to safeguard the health of the dock workers exposed to toxic solvents shall be provided.

J.-MISCELLANEOUS

87. Fencing of motors, etc.-(1) All motors, cogwheels, chains and friction gearing, flywheels, shaftings, every dangerous and moving part of machinery (whether or not driven by mechanical power) and steam pipes shall be securely fenced or lagged.

(2)The fencing of dangerous parts of machinery shall not be removed while the machinery is in motion or in use, but if removed, shall be replaced before the machinery is taken into normal use again.(3)No part of any machinery which is in motion and which is not securely fenced shall be examined, lubricated, adjusted or repaired except by persons duly authorised.(4)Machine parts shall only be cleaned when the machine is stopped.(5)When machinery is stopped for servicing or repairs, adequate means shall be taken to ensure that it cannot inadvertently be restarted.

88. Electrical equipment.-(1) Only duly authorised person shall be permitted to install, adjust, examine, repair, displace or remove electrical equipment or circuits.

(2)Efficient and suitably located means shall be provided for cutting off all pressure from every part of the system, as may be necessary, to prevent danger.(3)All portable electrical equipment shall be maintained in good working order and inspected by a responsible person at least once in every day before it is taken into use.(4)Portable electric light or equipment used in a confined space shall be of twenty four volts or less.(5)Only flame-proof electrical equipment shall be used in a confined space where flammable gas, fume or dust is likely to be present.(6)All non-current carrying metal parts of electrical equipment shall be earthed or other suitable measures shall be taken to prevent them from becoming live.(7)Portable or flexible electric conductors shall be of heavy duty type and shall be kept clear of loads, running gear and moving equipment.(8)All live conductors shall be adequately insulated or fenced to prevent danger by accidental contact of dock workers or non-current carrying parts of lifting appliances, conveyors, transport equipment and machinery.

89. Transport of dock workers on land.-Suitable means of safe transport shall be provided for the dock workers for their movement from their place of booking to the working area or between the two working areas when the distance between the points exceeds two kilometres.

90. Transport of dock workers by water.-(1) When any dock worker has to proceed to or from a ship by water for the purposes of carrying on a dock work, proper measures shall be taken to provide for his safe transportation Vessels used for this purpose shall be in the charge of a responsible person and shall be properly equipped for safe navigation and maintained in good condition.

(2)The means of transport referred to in sub-regulation (1) shall conform to the following :-
(a)adequate protection is provided to the dock workers from inclement weather;(b)the vessel shall be manned by adequate and experienced crew, duly authorised by a competent authority;(c)if the bulwarks of the vessels are lower than 60 centimetres, the open edges shall be fitted with suitable fencing to a height of at least one metre above the dock. The posts, stanchions and similar parts used in the fencing shall not be spaced more than two metres apart;(d)the number of life buoys on deck shall be at least equal to the number of persons in the crew and shall not be less than two;(e)all life buoys shall be kept in good state of maintenance and be so placed that if vessel sinks they remain afloat, one of the said buoys shall be within the immediate reach of the steerman and another shall be situated as far as aft part; and--(f)the position of the steerman of the vessel shall be such that he has a reasonably free view of all sides.(3)Maximum number of persons that can be safely carried in the vessel shall be certified by a competent authority and marked plainly and conspicuously on the vessel and such number shall not be exceeded.

Part IV

Health

90. Cleanliness.-(1) Every place in the ship, dock and all areas which are in proximity to the place in the dock, where dock workers are employed, shall be kept clean and free from rubbish or effluvia arising from any drain, privy or other nuisance.

(2)All the accumulated garbages from the ships and the dock area shall be disposed of by burning in an incinerator or by other suitable means.(3)All the damaged or deteriorated cargo posing hazards to safety or health or nuisance shall be removed or disposed of from the work place where the dock workers are employed.

96. Drinking water.-(1)(a) On board every ship and every dock effective arrangement shall be made to provide and maintain at suitable points conveniently situated for all dock workers employed therein, sufficient supply of wholesome drinking water :

Provided that the drinking water point is available within 100 metres of the place where dock workers are employed.(b)Effective arrangement shall be made to provide and maintain adequate supply of wholesome drinking water on board every ship in midstream for all dock workers employed thereon.(c)The water provided for drinking shall be supplied from the public water supply system or otherwise from any other source approved in writing by the health officer of the port.(2)All such points shall be legibly marked "drinking water" in a language understood by a majority of the dock workers, and no such point shall be situated within six metres of any washing place, urinal or latrine unless a shorter distance is approved in writing by the Chief Inspector.(3)In every dock, the drinking water supplied to the dock workers shall, during hot weather, be cooled by

ice or other effective means: Provided that if ice is placed in the drinking water, the ice shall be clean and wholesome and shall be obtained only from a source approved in writing by the health officer of the port. (4) Every drinking water centre shall be maintained in a clean and orderly condition and if necessary shall be in-charge of a suitable person who shall distribute the water. Such a person shall be provided with clean clothes while on duty. (5) The drinking water centres shall be sheltered from the weather and adequately drained. (6) Storage tanks or containers for drinking water shall always be kept in clean and hygienic condition. (7) The Inspector may, by order in writing, direct the port authority to obtain, at such time or at such intervals as he may direct, a report from the health officer of the port as to the fitness for human consumption of the water supplied to the dock workers, and in every case to submit to the inspector a copy of such report as soon as it is received from the health officer.

97. Latrine and urinals.-(1) In every dock, latrine and urinal accommodation shall be provided on the scale given in Schedule VIII and shall be conveniently situated and accessible to dock workers at all times while they are at work. Such accommodation and access to it shall be adequately lighted and ventilated.

(2) Separate latrines shall be provided where female dock workers are employed. (3) The floors and internal walls of the latrines and urinals and the sanitary blocks shall be laid in glazed tiles or otherwise finished to provide a smooth polished impervious surface upto a height of at least 90 centimetres. (4) All such accommodation shall be maintained in a clean and sanitary condition at all times. The floors, side walls and the sanitary pans of latrines and urinals shall be thoroughly swept and cleaned at least once in a day with suitable detergents or disinfectants or with both. (5) Every latrine shall be under cover and so partitioned off as to secure privacy and shall have a proper door and fastenings. (6) The walls, ceilings and partitions of every latrine and urinal shall be whitewashed or colour-washed and the white-washing or colour washing shall be repeated, at least once in four months and record maintained. (7) Where piped water supply is available, sufficient number of water taps, conventionally accessible shall be provided in or near such latrine accommodation. (8) Where piped water supply is not available, provision shall be made to store adequate quantity of water near the latrine.

99. Ventilation and temperature in dock area including reefer holds on ships.-Effective and suitable provision shall be made in every dock for securing and maintaining in every building or an enclosure or a reefer hold or chamber or refer container where dock workers are employed, adequate ventilation by the circulation of fresh air and such temperature and air movement as will secure to dock workers therein reasonable conditions of comfort and prevent injury to health.

Part V

Welfare

100. Washing facilities.-(1) In every dock, rest shed, call stand and canteen, adequate and suitable facilities for washing shall be provided and maintained for the use of the dock workers and such facilities shall be conveniently accessible and shall be kept in clean and orderly condition. Washing facilities shall include glazed wash basins with taps attached thereto.

(2) Where dock workers are exposed to skin contamination by poisonous, infectious or irritant substances or oil, grease or dust, adequate number of shower-baths enclosed in individual compartments, with entrances suitably screened shall be provided. (3) These facilities shall be provided in every dock on the scale laid down in Schedule VIII. (4) The floor or ground under and in the immediate vicinity of every wash basin, stand pipe and shower shall be so laid or finished as to provide a smooth impervious surface and shall be adequately drained. (5) The water supply to the washing facilities shall be adequate having regard to the number of dock workers employed in the dock and shall be from a source approved in writing by the health officer of the port.

101. First-aid boxes.-(1) In every dock and on board every ship there shall be provided and maintained so as to be readily accessible during all working hours, sufficient number of first aid boxes or cupboards :

Provided that the distance of the nearest first-aid box or cupboard shall not be more than 200 metres from any working place. (2) Nothing except appliances or requisites for first-aid shall be kept in the boxes and cupboards. All such boxes and cupboards shall be so kept that they are protected against contamination by dust or other foreign matters and against penetration of moisture. They shall be kept in charge of responsible person who is trained in first-aid treatment and who shall always be readily available during working hours. (3) Each first-aid box or cupboard shall be distinctly marked "First-aid" and shall be equipped with the articles specified in Schedule VI.

103. Ambulance carriage.-There shall be provided for use at every dock a suitably constructed motor ambulance carriage and launch which shall be maintained in good condition for the purpose of removal of serious cases of accident and sickness.

104. Stretchers.-A sufficient number of suitable stretchers including a Neil Robertson Stretcher or any other, suitable sling stretcher, shall be provided at every dock at convenient places so as to be readily available in an emergency.

105. Shelters or rest sheds and lunch rooms.-(1) In every dock wherein more than 150 dock workers are ordinarily employed, adequate and suitable shelters or rest sheds and suitable lunch rooms with provision for drinking water and washing facilities, where dock workers can eat meals brought by them, shall be provided at convenient places and maintained for their use :

Provided that any canteen maintained in accordance with regulation 106 shall be regarded as part of the requirement of this regulation: Provided further that where a lunch room is provided, no dock worker shall eat any food in the precincts of the dock except in such lunch rooms. (2) Covered receptacles shall be provided and used for disposal of food and litter in every rest shed. These receptacles shall be emptied at least once in every shift. (3) The shelters or rest rooms and lunch rooms to be provided under sub-regulation (1) shall be sufficiently lighted and ventilated and shall be maintained in a cool and dean condition.

106. Canteens.-(1) In any dock or in any part of the dock wherein more than 250 dock workers are ordinarily employed, or are waiting to be employed, adequate canteen facilities inbr near the work area shall be provided and maintained by the port authorities and dock labour boards for the use of all dock workers. The canteen shall function at all times when twenty-five or more dock workers are employed at a time.

(2) The canteens shall conform to the requirements laid down in Schedule IX. (3) An adequate number of mobile canteens shall be provided at every dock with provision for serving tea and light refreshments.

Part VI

Special Provisions

111. Training of dock workers, responsible persons, etc.-(1) Initial and periodic training shall be imparted to all categories of dock workers, responsible and authorised persons depending upon their nature of work and skill required for performing their duties. Safety aspects and precautions to be taken in pursuance of the provisions under the Act and the Regulations shall be covered in the training.

(2) All first-aid personnel shall be imparted training including refresher courses by a qualified medical officer authorised for the purpose.

112. Emergency action plans.-All the ports shall have an approved emergency action plan acceptable to the Chief Inspector to handle emergencies like--

(a)fires and explosions;(b)collapse of lifting appliances, buildings, sheds, etc.;(c)gas leakages and spillage of dangerous goods;(d)drowning of dock workers, striking of vessels, retrieval of transport equipment from dock basins; and(e)floods, storms and other natural calamities.FORM XI
TO BE SENT TO THE INSPECTOR, DOCK SAFETY
Address:Report Of Accident Of Dangerous Occurrence
[Required by regulation 91 of the Dock Workers (Safety, Health and Welfare) Regulations, 1990, in pursuance of section 22 of the Dock Workers (Safety, Health and Welfare) Act, 1986](See instruction overleaf)

1. Name of the employer

2. Address of the employer

3. Ship, or other exact place where accident or dangerous occurrence happened

4. Date, shift and hour of accident or dangerous occurrence

5. (i) Name and address of injured person Date

Sex

(ii) Nature and extent of injuries (e.g., fatal, loss of finger, fracture of legs)

(iii) By whom treatment was

given?

(iv) Was the injured person disabled for more than forty-eight hours?

(v) Type and name of cargo handled

6. Hour at which the injured person started work

7. Cause of accident or dangerous occurrence

8. Accident:

(a) If caused by machinery, state:

(i) Name of machine and part causing the accident

(ii) If moved by mechanical power at the time

(b) State exactly what the injured person was doing?

9. Dangerous occurrence:

(a) Nature of collapse or failure of lifting appliance

(b) Nature of the breakage of rope, chain or other appliances

(c) Nature of collapse or failure of means of access to or from a ship

(d) Nature of any other dangerous occurrences as

covered under
regulation 90 other
than 9(a), 9(b) and
9(c) above

Signature_____

Date_____

(To be filled in by
Inspector)

Port _____

Date of receipt _____

Accident/dangerous
occurrence No. _____

Causation _____

Sex _____

Remarks _____

INSTRUCTIONS Reporting Of Accidents And Dangerous Occurrences Reporting of accidents
:(1) Notice of any accident in dock which either : (a) causes loss of life to a dock worker; or (b) disables a dock worker from work on which he was employed for the rest of the day or shift in which the accident occurred, shall forthwith be sent by telegram, telephone or special messenger within four hours of the occurrence to,--(i) the Inspector; (ii) the relatives of the workers when the accident causes loss of life to the dock worker or is likely to disable the dock worker from work for more than ten days; and (iii) in the case of fatal accidents only, the officer-in-charge of the nearest police station, and the District Magistrate or if the District Magistrate by order so directs, the sub-divisional Magistrate. (2) In case of accidents falling under clause (b) of sub-regulation (1), the injured person shall be given first-aid and thereafter immediately conveyed to a hospital or other place of treatment. (3) Where any accident causing disablement results in the death of dock worker disabled, notice in writing of the death shall be submitted to the authorities mentioned in sub-regulation (1) within 72 hours after the death occurs and acknowledgement obtained. (4) The following classes of dangerous occurrences shall be reported to the Inspector, whether death or disablement is caused or not, in the manner prescribed in sub-regulation (1) : (a) collapse or failure of lifting appliances or breakage or failure of ropes, chains or loose gears, including slings, lifting beams, container spreaders, etc., or overturn or displacement of cranes used in dock work falling of hatch boards or beams or cargo slings, displacement of hatch beam resulting in the fall of hatch beams or coverings; (b) collapse or subsidence of any wall, floor, gallery, roof, platform, staging or means of access; (c) explosion of a receiver or vessel used for the storage, at a pressure greater than atmospheric pressure, of any gas or gases (including air) or any liquid or solid resulting from the compression of gas; (d) explosion or fire causing damage to any place in the docks in which dock workers are employed; (e) failure, capsizing, toppling or collision of transport equipment; (f) spillage or leakage of dangerous cargoes or damage to their containers; (g) breakage, buckling or damage of freight containers. (5) If a failure of lifting appliance, loose gear or similar other gears and transport equipment has occurred, the concerned equipment shall as far as practicable be kept undisturbed until inspected by an Inspector; (6) In addition every notice given under sub-regulation (1) and

sub-regulation (4), shall be confirmed within seventy-two hours of the occurrence by submitting a written report to the Inspector in Form XII: Provided that in case of an accident under clause (b) of sub-regulation (1) such written report need be submitted only when the dock worker is disabled from work on which he was employed for more than forty-eight hours from the time of the accident. FORM XIII (See regulation 110) Dock Workers (Safety, Health And Welfare) Regulations, 1990 Statement of Accidents for the month of

1. Name and address of the employer _____

2. Number of reportable accidents under regulation during the month Fatal _____ Non-fatal _____

3. Number of man-shifts worked during the month (see Note 1)

4. Number of man-days lost on account of absence due to reportable non-fatal accidents in case of persons who returned to work (see Note 2)

5. Number of man-days lost on account of permanent disabilities (see Note 3)

Signature Designation Date

..... To The Inspector
Notes.-1. Item (3).-The total number of man-shifts worked is the sum of the number of persons at work on each shift during the month.

2. Item (4).-Number of man-days lost should include days lost due to injury in previous months, that is, if any accident which occurred in previous months is still causing loss of time in the month under review, such loss of time is also to be included in the month under review.

3. Item (5).-Calculation of man-days should be used on the following :-

(a) Man-days lost according to schedule of charges for permanent disabilities as given in appendix B to IS: 3786-1966. In case of multiple injury, the sum of a schedule charges shall not be taken to exceed 6000 man-days. (b) If any injury is treated as a lost time injury in one month and subsequently turns out to be a permanent disability, the man-days charged due to the injury should be subtracted from the schedule charge for the injury when permanent disability becomes known. FORM XIV [See regulation 92(1)] Dock Workers (Safety, Health And Welfare) Regulations, 1990 To be filled in by the Inspector No. of case Remarks
..... Notice Of Poisoning Or Disease

- 1. Name and address of the employer**
- 2. Name of the patient and his work no., if any**
- 3. Address of the patient**
- 4. Sex and age of the patient**
- 5. Precise occupation of the patient**
- 6. State exactly what the patient was doing at the time of contracting disease
.....**
- 7. Nature of poisoning or disease from which the patient is suffering
.....**

.....Signature of the employerDateNotification Of Certain
Diseases[Extract from regulation 91 of the Dock Workers (Safety, Health and Welfare) Regulations,
1990]

**1. When a dock worker contracts any disease specified in Schedule IV a
notice in Form XIV shall be sent forthwith to the Inspector.**