

# SAFETY GUIDE LINES FOR PORT USERS OF MUMBAI PORT



# मुंबई पोर्ट ट्रस्ट MUMBAI PORT TRUST

## FOREWORD



It is the legal and moral responsibility of an organisation to provide safe and healthy working environment within its jurisdiction. In keeping with the spirit and intent of this goal and to ensure its compliance, Mumbai Port has been taking various steps from time to time. The Safety Guidelines for Port Users which are being brought out now for the first time in the Port is a further step in this direction.

I am sure that these guidelines will prove to be the torch-bearer for the workmen and other users in reducing and eventually eliminating the mistakes that generally lead to fatalities. The observance of these guidelines in the right earnest by all concerned will result in preventing loss of precious lives in particular and loss to port property in general.

It is very important that we observe safety norms as our individual safety affects the safety of our family and our family's safety affects the safety of society at large. Let each one of us, therefore, take the pledge to abide by the safety guidelines for a safe and pleasant work environment which will lead to a happy and peaceful life.

I congratulate all the concerned Safety Cell officials, especially the Sr. Safety Officer, Shri Pramod Gunthey, for the painstaking work done in compiling and publishing these guidelines, which I am sure, with periodical updation as may be required, will go a long way in maintaining a safe working environment in the port.

Mumbai 5<sup>th</sup> February 2008

hi A. Jadhav) CHAIRMAN



## मुंबई पोर्ट ट्रस्ट MUMBAI PORT TRUST

#### MESSAGE



The overall performance of the Mumbai Port has been steadily improving during the last five years. The traffic handled by the Port has witnessed a strong and sustained increase from nearly 26 million tonnes in 2002-03 to more than 56 million tonnes in 2006-07. This has been possible due to the support and co-operation of the port users, employees and port workers. The improved performance of the Port requires better safety standards and practices.

As Chairman of Dock Safety Committee, I have been chairing the Dock Safety Committee meeting held on a quarterly basis where safety performance of the Port is reviewed. Accidents, whether minor or major, are always a matter of concern. Even with the improved safety performance, proactive support and participation of all stakeholders is required to ensure that the number of accidents is minimised, leading to an accident free, safe working environment in the Port. We are firmly of the belief that there cannot be any compromise on safety aspects of working in the Port.

Ensuring safety is a collective commitment and shared responsibility of all stakeholders working in the Port. During my interaction with the port users, I have noticed that some of the port users are not aware of the causes of accidents and there are somewhat indifferent to safety requirements. In this context, the Safety Officers of the Port, after analysing the different types of cargo handling processes, have finalised Safety Guidelines for the benefit of port users and also for port employees. Everyone needs to be adequately sensitised to these guidelines, meticulous compliance of which will be highly beneficial to all.

Mumbai 5ª February 2008

(A.K. Bal) DY. CHAIRMAN

### **Objectives**

To make Mumbai Port free of accidents and dangerous occurrences by putting in collective efforts of all stakeholders of the Port.

We propagate –

- Safety of all dock workers is our prime concern
- Prevention of accidents is important rather than taking corrective measures after occurrence.
- All the persons working in the docks should know dangers/hazards involved in port working.
- Safety and productivity go hand in hand.

## EXPECTATIONS FROM PORT USERS

We expect from our port users -

- Use of Personal Protective Equipments (PPEs) in cargo handling areas.
- Compliance of Set Safety Rules or Norms
- No misuse of any equipment.
- Help port in maintaining Safe Working Environment
- Deployment of only trained personnel in the docks.
- Availability/appointment of a Safety Officer who will be well conversant with statutory provisions and relevant safe operating practices.

## Safety Policy of Mumbai Port

The Chairman and Board of Trustees of Port of Mumbai believe in human life as a great resource to the organization. The main objective of the organization is to develop safety consciousness and to ensure that employees at all times are kept familiar with the general and special rules, procedures and practices for safe conduct of their work in particular and to the community in general.

#### The policy of the organization is:-

- Acceptance of safety as an integral part of a job. It is as much important as one's daily work. It is as essential as completing the work assigned to each employee.
- Avoiding of accidents to persons and property.
- Train and motivate employees for safe work practices.
- To maintain neat, clean, safe, healthy and attractive working conditions.

AND

• To comply with statutory safety requirements

#### Chairman

#### SAFETY ORGANIZATION SET-UP

A safety Cell has been constituted as per the provisions of 'The Dock Workers' (Safety, Health and Welfare) Regulation, 1990, for the enforcement of safety regulations in the docks and other cargo handling areas. The Safety Cell is located at Ambedkar Bhavan, Indira Dock and has the following set-up.

1. Senior Safety Officer, I/C Safety Cell		Tel.No.6656 5068
2. Safety Officer	Zone-I	Tel.No.6656 5070
3. Safety Officer	Zone-II	Tel.No.6656 5067
4. Safety Officer	Zone-III	Tel.No.6656 5078
5. Welfare Officer	Docks	Tel.No.6656 5071
6. Welfare Officer	Ex. Docks	Tel.No.6656 5066

#### SAFETY REGULATORY AUTHORITY

Deputy Director (Safety), Inspectorate of Dock Safety, Mumbai is the safety enforcement/regulatory Authority for the Port. The Office of Inspectorate of Dock Safety is located at Operations Service Centre Building, opp. GPO, P. D'mello Road, Mumbai.

Dy. Director (O)	Ins. of Dock Safety	Tel.No.6656 5511
Dy. Director (R)	Ins. of Dock Safety	Tel.No.6656 6950
Asstt. Director	Ins. of Dock Safety	Tel.No.6656 5558

#### UNDERSTANDING ABOUT ACCIDENTS

#### DEFINITION

Accident is unforeseen, uncontrolled and unplanned event, which interferes with work and may or may not cause injury to person or damage to property. Accidents do not just happen, they are caused.

#### HOW ACCIDENTS OCCURRED

- 1) An accident is the occurrence in sequence of events that usually produce unintended injury, death or property damage.
- 2) An analysis of the Industrial accidents revealed that the accidents do not just happen, but they are caused.

#### **CAUSES OF ACCIDENTS**

#### 1. Unsafe Act:

#### Not following applicable safety norms:

- Safety rules
- Working guidelines
- Safety Instructions
- Dock Workers (Safety, Health & Welfare) Regulations 1990

#### Not using:

- Personal Protective Equipments (PPE)
- Safety guards
- Safety gadgets
- Right tool for right job / Use of worn out tools / Misuse of tools etc.
- Good house keeping practice

#### Personal attitude:

- Faulty attitude
- Accident will not happen to me, happens to other only
- Accident is an act of God, a punishment
- Failure to recognise potential dangers
- Horseplay at work place
- Disturbing the concentration of others by talking
- Operating without training, without knowing, without experience or without orders etc.

#### Personal factors:

- Impulsiveness
- Lack of attention
- Irresponsibility
- Defective vision
- Lack of sleep
- Temperamental dash
- Accident proneness
- Food habits and drinks/drug habits
- Psychophysical characteristics
- Worry and emotion
- Age, Sex, Physical fitness

#### 2. Unsafe Conditions:

- Bad selection of man, machine, material and methods
- Faulty design of machine
- Insufficient and inadequate safety guards
- Inadequate air supply and light
- Absence of Caution boards/Notice boards
- Improper maintenance or no periodical maintenance
- Faulty purchase / Lowest Quotation

#### 3. Natural Calamities:

- Heavy down pour
- Lighting
- Floods
- Landslide
- Collapsing of building
- Earth Quake
- Tornado etc.

#### **CONSEQUENCES OF ACCIDENTS**

- (i) To the workers:
  - Pain from injury
  - Loss of incentives
- (ii) Direct Losses
  - Loss of Limb
  - Loss of earning capacity
  - Expenditure for medical treatment
  - Compensation
- (iii) Indirect Losses
  - No peace of mind in family
  - Frustration in life
  - Future plans upset
  - Loss to the family if death or disablement occurs
- (iv) Social Losses
  - Children become orphans
  - Loss of parent of son/daughter
  - Burden of society

#### PREVENTION OF ACCIDENTS

Accidents can be prevented by use of the following systems:

#### 1. Engineering Methods:

- To keep danger zones on continuous watch/guard
- To keep persons away from danger zone
- To maintain the work place in good condition

#### 2. Enforcement (Statutory):

Through legislations:

- International
- National
- State
- Associations
- Institutions
- Standing orders

#### 3. Education and Training:

Safety orientation programme for new recruits about safety rules, safety procedures, accident reporting systems etc.

Workers Training

- Intensive training
- Need based training
- Special training

**Demonstration / Presentation Management** 

- Seminar
- Industrial visits etc.

#### **IMPORTANCE OF SAFETY TRAINING**

Working in the docks is considered to be accident prone, world over. As per Regulation-111 of the Dock Workers (Safety, Health and Welfare) Regulations, 1990, it is essential that workers deployed in the docks are trained.

The Safety Cell of Mumbai Port conducts regular training courses for its employees and port users employees.

#### ACCIDENTS REPORTING AND INVESTIGATIONS

As per Regulations 91 of the Dock Workers (Safety, Health and Welfare) Regulations, 1990, it is mandatory on the part of port users (all employers) to report accidents involving their employees while carrying out duties inside the port. The accident shall be reported to the area in-charge immediately in Form-XII.

Each and every accident that occurred in our port is investigated and therefore, it is essential on part of every port users to co-operate and provide all evidences to the Investigation Officer during the course of investigation.

#### **GENERAL SAFETY TIPS**

- 1. Do not enter the docks without a valid Dock Entry Permit or Smart Card.
- 2. Do not smoke in the port premises.
- 3. Obey Traffic signals. Do not drive your personal vehicles like bike, car etc. on the wharves.
- 4. Maintain driving speed limit on the dock roads at 20 Kmph and on wharf at 8 Kmph.
- 5. All the vehicles be parked in the earmarked parking areas only.
- 6. Resting/sleeping/climbing on stacked cargo is prohibited.
- 7. Do not sleep below vehicles or on the heap/pile of cargo.
- 8. On getting injured, ensure to have "FIRST AID FIRST" and inform your supervisor.
- 9. Keep gangways and aisles free from obstructions.
- 10. Walk carefully on a wet or oily floor.
- 11. Do not take short cuts, when a safe road or safe method is available.
- 12. If you observe any unsafe working conditions or unsafe methods practiced by a colleague, report immediately to your supervisor.
- 13. Practice good teamwork and have mutual cooperation among the workers.
- 14. Do not distract the attention of a worker while he is working.
- 15. Comply with the warning signs displayed in the port.

- 16. Do not use make-shift arrangements, like using a barrel as a Ladder, Spanner for plies etc.
- 17. While climbing down the stairs, hold the railings and climb down slowly.
- 18. Comply with all safety practices/rules and take active part in all safety activities. Also insist on observance of safety.
- 19. Sleeping inside the dock is prohibited during break or shift change over.
- 20. After completion of shift, no worker should continue to remain on board without valid permission from approval authority.
- 21. Authorised security guards be only deployed for security of cargoes and containers.
- 22. While operating the hatch covers, the ship's Officer/crew members shall enure that nobody is on the hatch cover.
- Nobody should be allowed to rest or sit or sleep on the hatch cover, irrespective of whether loading/unloading operations are going on or not.
- 24. The contractors engaged by the agents for lashing, supply of dunnage, etc. should be directed to have strict control and supervision on their workers.
- 25. Driver of the vehicle / equipment should ensure that no one is sleeping below / near vehicle/equipment before starting his vehicle.
- 26. Two-wheeler riders should invariably use helmets while riding their vehicles inside the docks and CFS areas.
- 27. Do not leave your trucks/trailers parked in the Docks without drivers / cleaners.
- 28. Encourage the workers to use the nearby rest shelters.

# GUIDELINES FOR HANDLING OF DIFFERENT TYPES OF CARGOES IN THE PORT.

#### (A) <u>GUIDELINES FOR HANDLING STEEL CARGO</u>

#### 1. <u>Handling on board the ship:</u>

- (a) Slings / chains used for handling cargo shall conform with statutory requirements.
- (b) All slings / Chains / Belts used for handling cargo shall be duly tested by competent person. Also test certificate / Register etc. shall be made available to the Port authorities as and when demanded.
- (c) All equipment / machines used on board shall conform to the statutory requirement.
- (d) Winchmen and signal foremen deployed on board shall be well trained.
- (e) All employees deployed on board must wear PPEs. (use of helmet, Safety Shoes and Hand gloves are mandatory while working on board the ship).
- (f) While preparing kachha/pacca sling, no person should go below the cargo to pull sling or chain etc. A pulling device or metallic stick shall be used to pull the sling/chain to other end.
- (g) No unauthorised person shall be allowed to enter inside the hatch.
- (h) No person should be allowed to take rest or sleep inside the hatch or ship.
- (i) No person should be allowed to read or listen to music on board vessel.
- (j) While loading cargo inside hatch, stacking should be done as per stowage plan.
- (k) While stacking cargo inside the hatch, proper dunnage should be used and lashing shall be done under strict supervision.
- (I) Loitering on board is strictly prohibited.
- (m) Sitting/walking on hatch cover or beam is prohibited.

#### 2. While unloading the steel cargo:

- (a) Sling/chain belt etc. used shall be in conformity with statutory requirement.
- (b) Sling/chain/Belt etc. used for operations shall be tested by a competent person.
- (c) Winchmen and Signalmen shall be trained and shall use standard signals during hoisting lowering slinging operations etc.
- (d) No person shall walk or stand below hanging cargo.

#### 3. <u>Transportation of steel cargo</u>:

- (a) Vehicle deployed for transportation of steel cargo shall be certified fit by RTO Authorities to carry steel cargo.
- (b) Only licensed drivers shall drive vehicles in the docks, and should be accompanied by a cleaner.
- (c) No vehicle is allowed to carry load beyond it's designed capacity.
- (d) Stanchions shall be provided on trailers used for transportation of cargo like angles, steel pipes etc.
- (e) All steel cargo, especially coils shall be lashed properly on the trailer during transportation.
- (f) Vehicles shall not be parked in prohibited area or in between road causing traffic jam.
- (g) Cooking inside vehicle is prohibited.
- (h) No vehicle shall overtake queues or line. Breaking lines /queues is a serious offence.

#### 4. <u>Storing of steel cargo in the shed and open spaces</u>:

- (a) Floor strength shall be examined before stacking steel cargo in multi-layer or stages.
- (b) Proper wedges should be provided to prevent stack failure.

#### 5. <u>Delivery of steel cargo</u>:

- (a) At the time of delivery of steel cargo, no person shall be allowed to stand below the slinging path of steel coil.
- (b) All persons shall wear PPE

#### (B) <u>GUIDELINES FOR HANDLING PROJECT CARGO</u>

While Handling Project Cargo following safety procedure shall be taken

#### 1. <u>Safe Unloading from ship to Vehicle or Shore:</u>

- (a) The Vessel Supervisor or Foreman shall supervise the activity continuously. If any unsafe action and condition is noticed, immediate action should be taken in consultation with the sectional Asst. Manager.
- (b) Project cargo shall be engaged for lifting or shifting as per directives given on packing. Proper size of gears shall be used to lift cargo.
- (c) The Vehicle used for carrying project cargo shall have all required facilities like multi wheels, special braking system etc.
- (d) Prior to unloading of cargo on the trailer, condition of trailer bed shall be examined for stability of cargo.
- (e) Cargo shall be lashed properly on truck/trailer before the movement of truck / trailer from the unloading point.
- (f) If cargo is to be unloaded on wharf or to be stored in the dock premises, strength of surface should be examined first for assessment of load capacity. Also cargo shall be supported from all directions, if it does not have solid stable base.
- (g) While delivering project cargo, the concerned Shed Supt./ Labour Supervisor of MbPT and supervisor/s of port user shall take all necessary precautions for safety of cargo.

#### (C) <u>GUIDELINES FOR HANDLING DRY BULK CARGO</u>

- (a) The wire ropes used for fixing grabs should be in good condition and tested and certified by a competent person.
- (b) The 'save all' net used for ship to shore transfer should be in good condition and properly fastened by means of nylon ropes.
- (c) The hoppers / sling nets wherever used should be in good condition and free from defects.
- (d) Trucks used for transportation should be in good condition and must be driven by authorised driver only.

- (e) Truck should be loaded only up to the body level, properly trimmed and covered by tarpaulin to avoid spillage and flying of dust.
- (f) Spilled over cargo should be cleared immediately.
- (g) Speed limit of trucks should not exceed 20 kmph on roads inside docks and 8 kmph on wharf.
- (h) Transportation of workers in the bucket of JCB / Pay Loader is totally prohibited.
- (i) Better co-ordination between Winch Operator and Signalman is necessary.
- (j) Use of Personal Protective Equipment like safety helmet, safety shoes, hand gloves and dust mask etc. is compulsory.

#### (D) <u>GUIDELINES FOR HANDLING OF CONTAINERS</u>

- (a) Always make use of suitable, tested and certified spreaders for handling containers.
- (b) Trailers with twist lock facility should only be used for transporting containers, to prevent them from falling off the chassis.
- (c) Containers shall be firmly secured on the chassis of the Truck/ Trailers by means of twist locks before transporting.
- (d) Use ladders only of sound construction, provided with anti-skid devices to reach the top of the containers, whenever necessary.
- (e) Do not use single or multi legged slings for lifting containers.
- (f) Do not permit men / workers to ride over spreaders / containers while handling at berth / yard.
- (k) The speed limit of trucks / trailers should not exceed 20 kmph on roads inside docks and 8 kmph on wharf.
- (g) Observe corners of containers while lifting, clewing and lowering operations.
- (h) Better co-ordination be maintained between Winch Operator, Signalman and workers.
- (i) Use of Personal Protective Equipment is compulsory.

- (j) Container's twist locks should be removed before discharging/loading of containers from/to vessels.
- (k) No employee or worker shall sleep or relax in empty container.
- (I) Loitering in container yard is prohibited.
- (m) Use of mobile phone is prohibited while handling containers on board/on shore and driving of Container Trailers/Equipments and other vehicles.
- (n) Cooking in the cabin of Container Trailer is prohibited.
- (o) Container Trailers shall be driven only by licenced drivers. Instructions should be issued to drivers not to hand over keys of the vehicles to cleaners.
- (p) No employee / worker should sleep below/near Container Trailer/Equipment.

#### (E) <u>GUIDELINES FOR HANDLING OF AUTOMOBILES</u>

- (a) Vehicles brought inside the docks should be parked in such an order, that, at time of loading, there is a smooth movement.
- (b) Drivers deployed to load the vehicles should drive vehicles at slow speed complying with the safety norms.
- (c) Drivers deployed to load the vehicle should be trained for loading vehicles on board.
- (d) High speed driving is prohibited.
- (e) Agents should post their own staff to control vehicle movement.

#### (F) <u>GUIDELINES FOR USE OF TRANSPORTATION EQUIPMENT</u>

- (a) Forklift trucks/Automobiles speed should not exceed 20 kmph and 8 kmph respectively on the dock roads & wharves.
- (b) Drivers must sound horn at all intersections, blind corners and while reversing.
- (c) At the junctions of road, the drivers should stop, observe and then proceed.
- (d) Nobody shall get 'IN" or get "OUT" of moving vehicles.

- (e) Vehicles shall NOT be parked near gangways, aisles or close to the wharf.
- (f) Travel at a safe distance when you are driving behind another truck and at a safe speed that will allow you to stop in case of an emergency.
- (g) Driving in standing position and horseplay should be avoided.
- (h) Driver should look behind and be sure all is clear while reversing.
- No passenger or fellow worker should be permitted to sit on a Forklift Truck. It is the responsibility of the driver to keep off the rider.
- (j) If the truck is left on the gradient, set the brakes/gears and block the wheel.
- (k) The driver of the mobile crane handling containers must not allow anybody to ride on spreader.
- (I) The cargo handling equipment operators operating cranes, fork-lifts, pay loaders, etc should not leave the keys of the equipment on the unattended equipment but should hand over the same to the reliever or the operator of the next shift.

#### (G) <u>GUIDELINES FOR USE OF GEARS</u>

- (a) Gears shall be of apt for the type of cargo handled.
- (b) Gear shall be made of sound material and have adequate strength.
- (c) Each gear to be used in cargo handling shall be tested for Safe Working Load (SWL) by a competent person.
- (d) Gears used in cargo handling shall not be over loaded.
- (e) A responsible person shall regularly inspect gears used in cargo handling and if any defect in noticed during work, it should be reported to the supervisor immediately.
- (f) Tandem lifting should be done preferably in day shift only under strict supervision.

#### (H) GUIDELINES FOR HANDLING HAZARDOUS CHEMICALS

- (a) Acids and alkalies are highly corrosive. If a chemical falls on the skin, it may cause burns. Do not handle them without wearing protective equipment.
- (b) When there is an acid or alkali splash, flush it with lot of cold water and thereafter get medical attention.
- (c) Absorb acid spillages with a mixture of sand and soda ash only.
- (d) Do not smoke or carry open flame where inflammable solvents/chemicals are handled or stored.
- (e) Before starting maintenance work on chemical / gas pipelines etc where chemicals are handled or stored, ensure upmost safety precautions.
- (f) A person required to work in a gas tank/holder where there is possibility of poisonous gas existing, MUST wear Gas Mask with life belt attached with a safety line and at least one man at the top of gas tank/holder should stay as a watchman who can control the safety line, if it is necessary to pull him out.
- (g) When you are suspect existence of a poisonous gas, do not enter the area without wearing suitable gas mask.
- (h) If any gas leakage occurs or is suspected, immediately inform the concerned authority.
- (i) If light is required in a chemical/gas tank for maintenance work, use only a 6V torch or flameproof light.

#### (I) <u>GUIDELINES FOR USE OF CRANES</u>

- (a) A crane should not be loaded beyond its rated load capacity.
- (b) The load should be attached to the hooks by means of tested slings or other devices approved by a competent person.
- (c) The load should be well secured and balanced in the sling or lifting device before it is lifted.
- (d) While hoisting, care should be taken that there is no sudden acceleration or deceleration of the load and also that load does not cause any obstruction.

- (e) The operator should test the brake each time by raising the load a few inches and applying the brakes.
- (f) The crane should not be used for side pulls.
- (g) Before hoisting / lifting a load, the operator should ensure that slingers and others are well clear of the load.
- (h) The load should not be lowered below the point where less that two full turns of rope remain on the drum.
- (i) The operator should not leave his position at the control while the load is suspended.
- (j) The hoist limit switch should never be used as an operating control.
- (k) Only one person should be authorised to give signals to the crane operator.
- (I) Before commencing travelling or when the hook approaches near or over personnel, warning signal should be sounded.

#### (J) <u>GUIDELINES ON HOUSE KEEPING</u>

- (a) Every employee/worker is responsible to maintain good house keeping at his/her work place. A clean place is necessary for safe working.
- (b) Report all oil leaks, chemical leaks or water pipe line leaks promptly to the concerned departments.
- (c) Ensure to pick up tripping hazards such as nails, pieces of wires, scrap etc. and dispose them to a safer place.
- (d) A slip can cause a serious accident. Spillage of oil, water or chemical should be immediately cleaned.
- (e) Report wherever conduits/pipes/materials projected or running on the work area to the section heads or maintenance personnel. This will help them to embed and avoid tripping hazard.
- (f) Keep your lockers clean and tidy.
- (g) Report worn out / broken work areas and steps of the stairs. They should be repaired promptly.

#### (K) <u>GUIDELINES FOR USE OF LADDERS</u>

- (a) Get a ladder for any work that you cannot reach. But be sure that you are using required type of ladder and it is properly secured.
- (b) Do not ever climb on machinery or use make-shift ladder like boxes, drums or barrels.
- (c) Before using a ladder, inspect for missing cleats or cracked rungs or broken spreaders.
- (d) Before using a straight ladder, the distance from the base to the wall should always be maintained at a quarter of the length of the ladder itself.
- (e) While ascending or descending a ladder, the person should hold the body in position facing the ladder, and have a firm grip on the ladder with the hands and should ensure proper feet contact with the rungs.
- (f) Step ladder more than 10 feet high should be held by another person. Do not step on the last rung from the top.
- (g) When working on a ladder, the person should not work farther than permissible reach. Excessive leaning or sidewise movements should be avoided.
- (h) After work, do not leave the ladder at the work place.
- Do not use two short ladders together to make a long ladder.
  Extension ladder only may be used in such a case.
- (j) Ladder should not be painted.
- (k) Metallic ladders should not be used for repairing of electrical equipment.

#### (L) <u>GUIDELINES FOR HANDLING OF MATERIALS</u>

- (a) Inspect the object you are going to lift to determine its size, weight etc.
- (b) A good pair of hand gloves should be used in preventing hand injuries while handling materials.
- (c) Before lifting a material make a trial to ascertain whether you can lift it without strain. If you can't get a good grip, keep your

feet apart and bend your knees. Then keep your back relatively straight and lift by strengthening your legs in order that your strong leg muscles do the job rather your back muscles.

- (d) When the material is heavy, call for help/assistance.
- (e) Where crane is used for material handling, the persons working under it should keep away from the swing circle area of crane.
- (f) Never stand under a load carried by cranes.
- (g) Only authorised persons should handle / operate the cranes.
- (h) While handling materials, wear hand gloves, goggles and safety shoes.
- (i) If more than two persons are involved in material handling, there should be good co-operation and team spirit.

#### (M) GUIDELINES FOR HANDLING OF TIMBER LOGS

- (a) Wire ropes/slings in good condition, properly tested and certified by a competent person should only be used for cargo handling.
- (b) The wire rope slings should have tag / punch mark indicating its safe working load. (SWL)
- (c) Timber Logs shall be safely slung before being hoisted and while swinging it should be kept horizontal to ground.
- (d) Timber logs inside the hatch must be discharging in a levelled manner to avoid formation of ditch, which results in rolling over of logs. This should be ensured by Cargo Supervisor/Hatch Tindel.
- (e) Trailers used for transportation should be of good condition and must be driven by an authorised driver only.
- (f) Place the timber properly on the trailer and lash by means of rope to avoid falling / rolling on wharf and roads.
- (g) Use of stanchion of a minimum height of 90 cms. Of at least three at each side of trailer is compulsory.
- (h) Use of red flag / light indicating danger for the logs projecting beyond the trailer platform is compulsory.

- (i) Speed limit of trailers should bot exceed 20 Kmph inside the wharf and roads.
- (j) Use of personal protective equipment like safety helmet, safety shoes and hand gloves etc. is compulsory.
- (k) Better co-ordination between Winch Operator, Signalman, Supervisory staff and workers should be maintained.
- (I) Private vehicles or person not connected with cargo handling operations should remain away from the work place.

#### **RESPONSIBILITY AND PUNITIVE ACTIONS**

Responsibility towards compliance of safety requirements is as laid down under the Dock Workers (Safety, Health and Welfare) Regulations – 1990. Punitive actions shall be initiated against the employees or the port users who fails to comply with the safety guidelines. The forms of punitive actions are as follow

- Warning Memo
- Show Cause Notice
- Suspension of Dock Entry Permit
- Cancellation of Dock Entry Permit
- Black Listing of Firm
- Action as per Recommendation of Accident Investigation Report.
- Action decided by the Management.

## DISCLAIMER

GUIDELINES ON SAFE WORKING IN THE PORT ENLISTED IN THIS COMPILATION ARE DRAWN BASED ON THE FIELD EXPERIENCES AND EMANATE FROM VARIOUS NATIONAL AND INTERNATIONAL SAFETY RULES. THEY ARE MERELY ILLUSTRATIVE IN NATURE. FOR ENHANCED UNDERSTANDING OF SAFETY REQUIREMENTS THE READERS MAY REFER TO THE RELEVANT NATIONAL / INTERNATIONAL RULES.