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STANDARD OPERATING PROCEDURE FOR WORKING ON-BOARD THE SHIP

Purpose

This procedure outlines the requirements of the management for handling of cargo on-board the vessel to avoid accident and minimize adverse effects on health of workers working thereat. The procedure applies to all workers of the Mumbai Port Authority as well as of Por User/contractors working in all areas of the holds/hatches of the ship, where import/export/transshipment cargo handle in docks and at midstream.

The procedure provides general guidance for safe handling of each cargo. Safety is integral part of duties assigned to each person working in the Port. As the working condition in docks operation is dynamic in nature, therefore, any action needed, which is not covered in SOP, but required to maintain safe working environment shall be taken.

Personal Protective Equipment (PPE) When working on board the ship head, foot, and hand protection are needed for all persons. Therefore, safety helmet. Safety shoes and nitrile coated hand gloves are required to be wear in proper way. Further, when harmful agents/dusty cargo is handled, then suitable mouth protection and clothing should be provided in addition to above PPEs. Protection for noise level also to be provided to the workers, where noise level is beyond 80 decibels due to operation of appliances like forklift, ship and other cranes.

<u>Guidelines</u> - For detailed guidance, the requisite regulatory provisions under the Dock Workers' (safety, Health & Welfare) Regulations, 1990 shall be referred.

<u>Safety Responsibility</u> - The Safety Responsibilities of each category of the employees involved in cargo handling operations are already prepared by the Committee constituted during 117th meeting of the Safety Committee for the Port of Mumbai held on 17.02.2011 and it was sent to the Traffic Manager for implementation vide letter No. HRD/SHW/DSC/506 date 05.03.2011. (Attached as <u>Annexure I</u>)

On the same analogy, whenever a work is carried out by the Private workers deployed by the Shipping Agent, then corresponding Safety Responsibility to that category of hierarchy or nature of work shall apply.

Risk Management -

i)

Risk Assessments - The potential risk assessment is given in Hazard

Identification and Risk Assessment (HIRA) matrix (Attached as<u>Annexure II</u>) for handling of cargo on-board vessel shall be referred and accordingly the Supervisor of the workplace shall ensure that those precautions are taken.

ii) Identification of Potential Risk - Due to nature of size, shape and weight of cargo and its stacking position differs from ship to ship; therefore, besides HIRA sheet, the supervisor requires identifying any foreseeable hazard in the operation and shall take necessary precautions to prevent accident.

iii) Risk Control - Risk control measures given in the HIRA sheet shall be implemented by the Supervisor of the workplace and it shall be ensured by the Sectional Asst. Traffic Manager of the area.

Stage of work	Activity	Responsibility
<u>Planning</u>	Advance planning of Lifting Appliances, equipment, Loose Gears for appropriate capacity and other ancillary tools required for safe handling of cargo.	Supervisor
On Arrival of Vessel	 Inspection of certificates of test and annual through examinations of lifting appliances, loose gears, wire ropes, etc. submitted by the Agents for their adequacy of capacity for handling maximum load of cargo as given in the IGM / Shipping Bill i. e. no cargo is to be handled beyond Safe Working Load (SWL) of the ship crane. If any cargo is beyond SWL of on-board lifting appliances, then ensure that suitable arrangement is made for its handling. Further, it is to be ensure that all lifting appliances and wire ropes, loose gears attached to them are tested every five years and annual thorough examinations is carried out by the Competent Person every year. (Refer Regulation 47 and 51 of the Dock Workers' (Safety, Health and Welfare Regulations, 1990) Receiving of an undertaking from the Master A 	Supervisor Foreman Chargeman
	 Chief Officer of the Vessel stating that wire ropes and loose gears attached to the lifting appliances are tested and examined as per the Dock Workers' (Safety, Health & Welfare) Regulations, 1990 and are in good working condition. Receipt of undertaking of loose gear certificates and sound working condition from the vessel agent. Inspect that no cargo is to be handled beyond SWI 	Supervisor Foreman Chargeman
	of the loose gear. 4. For visual inspection of wire ropes & loose gears attached to the lifting appliances, the pulley	Supervisor Foreman Chargeman

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block of the lifting appliance shall be taken down on ground and then visually check the conditions of the wire ropes attached to it, for any defects, corrosion, broken wires, etc. as practicably as possible. If any doubt about strength and condition of wire rope exists, then the Chief officer / Master of the ship shall be consulted and remedial measures shall be taken for working. If required, such undertaking for soundness of working of lifting appliances shall be taken.

5. In case of any fumigated cargo, suitable Gas Free Undertaking shall be taken from the Chief Officer / Master of ship shall be obtained. Even after receipt of certificate, it is to ensure that hold are well ventilated and it is suitable for entry of persons.

6. Conduct trial Operation of lifting appliances without any load for its smoothness or detection of any defects in working or control system, etc. If any deviation, then it shall be reported to the Foreman / Chargeman, who in turn will report to Chief Officer or Master of the Ship for remedial measures.

7. The safety checklist for handling of cargo by on-board the vessel is filled up & it is signed. If any point of the checklist is not complied, then necessary action is taken for maintaining safe work place. If required, matter may be brought to the notice of Sectional Asst. Traffic Manager for rectification.

8. Ensure safe access for the workers on deck, in hold, ship crane and see that the signalman is at safe position at work.

 Ensure that trained and skilled dock workers with sound health are deployed for operations. No intoxicated person is deployed.

10. In consultation with Chief Officer, Vessel Agent the loading /unloading plan is finalized for maintaining stability of ship and accordingly the operation will take place.

11. Carry out inspection of stacking of cargo in hold and based on which decide safe and proper method of handling.

Supervisor Foreman Chargeman

Supervisor Foreman Chargeman

Ship Crane Operator

Supervisor Foreman Chargeman

Supervisor Foreman Chargeman Asst. TM, OBL Booking

Supervisor / Chief Officer of ship

> Supervisor Foreman Chargeman

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At the Time of Commencement of	1. Impart Tool-Box Talk to explain Safe Precautions need to be taken and to make the	m E-
<u>Operation</u>	aware about potential dangers involved whi handling of cargo.	le Chargeman
	2. Provision of appropriate PPEs to the do workers and instruct them for their use	
	3. Keep ready stretcher or any other mean required for emergency required of	s Shed Superintenden
	The second working the scale of person working	a clini i A
	on/in the ship, in case of any accident / incident an emergency contact numbers.	d Supplier
	1. Ensure that all safety standard and procedure an	e Supervisor
	followed and provisions of safety regulations ar	D Dans
	complied and strictly adhered to while cargo handling activities are carried out on board th vessel.	e
	2. All persons involved in cargo handing operation are using PPEs.	
	3. Ensure that no dock worker is standing o	r _ Tindel / Hatch
	working in a danger zone of falling of cargo or any suspended load.	Foreman / Chargeman / Foreman
	4. Carry out periodical inspection (i. e. at leas	t Supervisor
	every hour) for stability of stacking of cargo in hold or receiving of cargo from shore. Based on	Foreman
	situation/condition prevailing in the hold and decide afe and proper method of handling.	
	Ensure that during operation no unsafe stack of	Tindel / Foreman /
	ving stack is created during operation.	Chargeman
	. Ensure that approach way to any working point	Tindel / Foreman /
	naintained for emergency evacuation of dock	CL
M	VOIKEIS.	Tindal / T
a n u 8 v 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	. Ensure that always enough space is maintained	C1.
	round stack of cargo or working area for smooth novement of dock workers and lifting appliances sed for cargo handling operation.	
	. No person is taking rest or sleeping in the	Tindal / France /
	icinity of cargo handling operation.	Tindel / Foreman / Chargeman
	Ensure that cargo is handled in safe manner	Every Dock Worker
	0. Prohibition of use of Mobile Phone, while orking.	
	Maintain Good House Kaaring and L	Every Dock Worker
	. Maintain Good House Keeping and hygiene i. e innage, steel strips, packing material are kept at	and the second second
	ie place.	Tindel / Foreman /
	2. Ensure of proper securing and lashing of cargo stack for accidental rolling/collapse.	Chargeman
	conapse.	Tindel / Foreman /
13	. Adequate illumination and ventilation is	Chargeman
m	aintained at the working area.	Summeric
14 /a:		Supervisor Foreman
	rangement/function of lifting appliances are in	Chargeman
pro	oper working conditions.	Ship Crane Operator

	15. No Hot Work or Smoking near cargo handling operation.	Supervisor
	16. Ensure that pals or skid nets are rigged on wharf, to avoid fall of cargo in dock basin.	Foreman Chargeman Supervisor Foreman
	17. To rectify deficiencies pointed out during safety inspection by the official of the Safety Management Cell.	Chargeman Supervisor Foreman
	18. In case of handling of any dangerous goods or any harmful commodity, the Material Safety Data Sheet (MSDS) of the said is referred and to ensure	
	that requisite safety precautions are taken or conditions stipulated in the permission given by the Competent Authority are complied. In case of any	Foreman Chargeman
Training and	doubt, the advice of the officials of the Safety	
Awareness	safety training at Port Management Training Centre. Besides this on-the-job training is given for awareness for safe handling of that cargo.	Cell

<u>Note - Whenever a work is carried out by the Private workers deployed by the Shipping</u> <u>Agent, then corresponding responsibility given in the SOP shall be applied to that category</u> of employee of port user or nature of work carried by him.

Asst. Traffic Manager (Safety)

Dy. Traffic Manager (OBL)

Dy. Manage

Sr. Dy. Traffic Manager (OD)

26/04/2022 5:22 PM

GAUTAM SUDEO DEY (TRAFFIC MANAGER TM)

> ADESH TITARMARE (DY.CHAIRMAN)

Note No. #4 SOP for approval.

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Note No. #5 SoP is approved

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RAJIV JALOTA (CHAIRMAN MBPT) 8

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