



# Vessel Health Safety Security and Environment Pack

**APM TERMINALS LIBERIA Ltd.**

## **Revision history**

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## 1. Introduction

To inform you of the APM Terminals Liberia site access procedures and its commitment to Health, Safety, Security and Environment outcomes, we are providing you with this Vessel HSSE (Health, Safety, Security and Environmental) pack, which gives you an overview of:

- **Onsite Health, Safety, Security and Environmental requirements**
- **Restricted areas and access procedures**
- **Key contact list**

In order to identify potential hazards and risks that can impact on the Health, Safety and Security of the workforce and other personnel, APM Terminals Liberia will ensure that a formal Vessel Inspection is conducted with APM Terminals Liberia representatives and your nominated vessel representative once alongside and before operations start. APM Terminals Liberia will require the responsible vessel representative to be present during inspection so that any issues which may arise are addressed in a timely manner. The vessels assistance in this matter is appreciated. Where a vessel representative is not available this will be noted on the inspection.

The inspection shall cover all places of work and will be aligned with minimum ILO requirements. A copy of the Vessel Safety Inspection Checklist can be seen in APPENDIX A of this document and can also be obtained from the APM Terminals Liberia vessel representative who will make themselves known to the crew once the vessel has been moored. A non-exhaustive list of ILO regulations (Safety and Health in Ports ILO Code of Practice 2005) is included in this document. This listing does not limit the scope of areas to be inspected for safety to those identified in this document and are samples only.

In case of any difficulties experienced during your stay at the terminal, please note the contact numbers are included in APPENDIX B. In the event of any accident, damage to cargo, vessel, port equipment, quayside etc. please report immediately to APM Terminals representative and Pilot Station. Assistance regarding investigations of incidents resulting from vessel activities will be required. Vessels may be required to delay their departure as a result of incidents and will be advised accordingly in case this is a requirement.

These guidelines have been put in place to protect vessels and crew, APM Terminals staff and the facility and will be amended from time to time in line with the APM Terminals Health, Safety, Security and Environmental standards and will be communicated accordingly.

Emergency VHF Channels and contact numbers is detailed in APPENDIX C – Emergencies

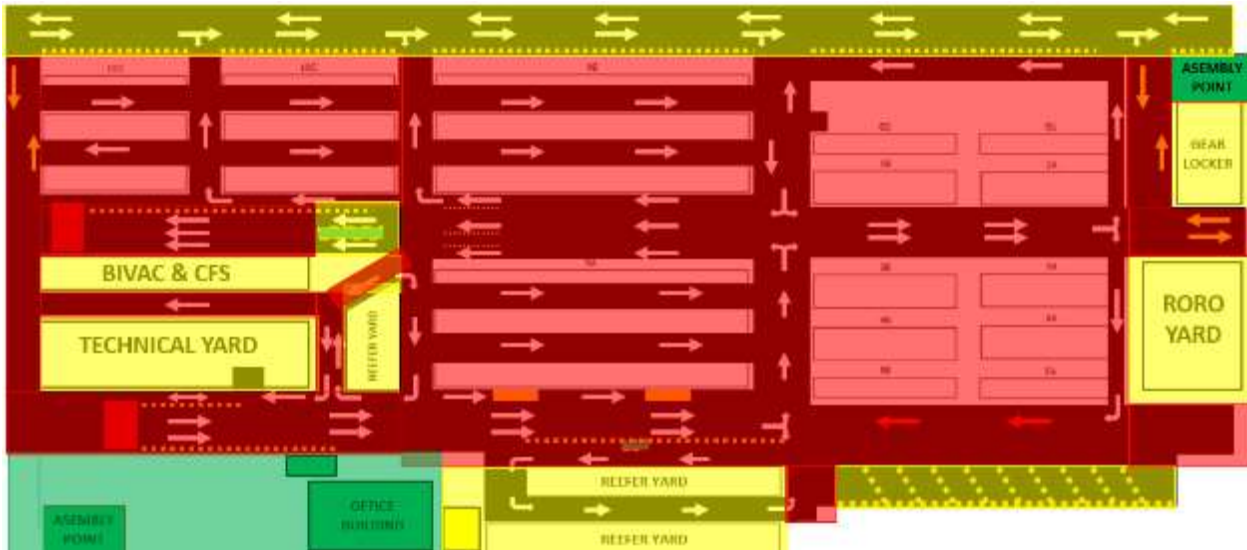
Should you require any clarification regarding the information and guidance provided in this document, please engage the APM Terminals Vessel Supervisor or the duty Shift Leader.

## 2. Onsite Requirements

APM Terminals Liberia considers the Health, safety, Security and Environment of all people to be important and therefore enforces the following requirements to be met by all staff, contractors, vessels, crew and visitors:

### 2.1. Pedestrians

APM Terminals Liberia has a mix of pedestrian only zones (green zones), zones where equipment and pedestrians are both allowed (Yellow zones) and non-pedestrian zones (Red zones). As examples, the quayside areas are zones where pedestrians sometimes mix with operational equipment whilst the stacking areas in the container terminals are strictly non-pedestrian zones when not isolated. In any case, it is absolutely forbidden to walk in operational areas and as such APMT provides internal bus transportation and pick-up at the gangway.



### 2.2. Personal Protective Equipment (PPE)

Individuals entering any operational areas both on board and ashore are required to wear the following PPE (Personal Protective Equipment) as a minimum:

- High visibility vest (Safety Vest) or high visibility overall
- Safety helmet (Hard Hat)
- Safety shoes (Protective footwear)

Other works being carried out may require additional PPE and other safety equipment but this shall be identified in specific task Risk Assessments conducted by responsible representatives of the visiting vessel.

Please note that all areas in the Terminal and your vessel cargo decks are deemed as

operational areas for ease of reference.

### 2.3. Terminal Access & Shuttle Bus Service

To prevent APM Terminals staff, visitors, contractors and vessel crew from endangering themselves and others on the terminal, transport is available to move people along the berth, between the vessel and the office area and between the vessel and the front gate of the terminal. All Ships Crew, Passengers and Visitors must utilize their Personal Protective Equipment and use designated pedestrian walkways when on operational areas. Vessel Master and Chief Officers are responsible for ensuring that their crew fully complies with these requirements. Please speak to your APM Terminals Vessel Representative about arrangements at the Terminal when required.

All Ships' Crew, Passengers and Visitors must sign in and identify themselves at security gatehouses of the terminal before leaving the terminal or going to their respective vessels. Please refer to the Security Guidelines Section for further Security requirements.

### 2.4. Service Staff and Vehicles

Vehicles and associated staff servicing vessels must ensure that they are conducting themselves in a safe and environmentally responsible manner and applying the requirements of this document as a minimum. Staff shall;

- Be appropriately trained and competent to carry out the desired tasks;
- Ensure that any work is conducted as per legal requirements on behalf of the agent or vessel crew;
- Must always remain in their vehicle unless it is absolutely required to get down to ensure service delivery;
- Not leave vehicles running when not within the vehicle;
- Park in designated areas or as directed by APM Terminals staff;
- Ensure traffic regulations and signs are strictly followed;
- Ensure that where parking is not available always park adjacent to the quay edge protection and not perpendicular to the quay; and
- Must take direction from APM Terminals staff as required.

### 2.5. Ship's Gangway

Ships gangways must be

- Well-lit with a minimum lighting level of 10 lux across the entire surface;
- Be of sound construction and free from damages and defects;
- Free from oils and other debris;
- Be fitted with a safety net;
- to be at least 550mm in width and be supplied with upper and intermediate guard rails;
- Gangways shall be grounded correctly and always kept fully lowered.
- Crew members positioning gangways should be equipped with fall arrest equipment (full body harness and lanyard)
- Height and positioning shall not be adjusted whilst persons are on the gangway;
- Gangways must be kept clear of quay traffic and not impede the traveling of operations

trucks or obstruct roadways.

- APM Terminals does not accept liability for gangways being hit by vehicles or other equipment.

Please be advised that the crew setting up the Gangway is **STRICTLY** required to wear a life vest and body harness while undertaking this task.

## 2.6. Mooring the Vessel

When mooring vessels

- Vessel master must notify Pilot Station or the boarding pilot of any known defect in the vessels mooring systems so that precautions can be undertaken;
- Ensure that all mooring equipment is in good condition before use;
- Ensure that a strict watch is always kept on the mooring system to prevent slack or over tight lines developing;
- Mooring lines only to be adjusted under the guidance of a competent crew member;
- As soon as the vessel is secure manual mooring winch brakes are to be applied where fitted;
- Winches are not to be left on automatic tensioning mode;
- Ensure “monkey fists” are only made of rope;
- Mooring Operations are only to be carried out in response to clear instructions or signals;
- Mooring bollards should be always kept clear of obstructions;
- Mooring staff should only enter snap back zone to carry out necessary tasks;
- Never step over a mooring line under tension;
- Never put your feet in bights or eyes of mooring lines;
- Ensure roadways or work areas are not obstructed, and
- Rodent guards are fitted on all mooring lines for the duration of your stay.

## 2.7. Use of Ship’s Cranes, Boom Lifts

- APMT Liberia does not have any quay crane and as such the entire vessel operations will have to be conducted with ship crane while APMT provides the necessary lifting gears such as spreaders, cargo nets and other lifting accessories.
- For safety reasons and to ensure that the Terminal crane operator is always able to maintain a clear sight of all containers discharged or loaded, it is required that vessel stowage planning, for the freeport of Monrovia voyages, considers a maximum of two (02) tiers stowage on deck for bays located between the actual position of the crane and the point of work (the bay being loaded or discharged). Failure to follow this safety requirement will lead to all units above the 2nd tier (Tier 84) to be “**restowed for visibility**” (taken off the ship and landed on the quay side and loaded back on board) and all subsequent cost shall be for the shipping line account as per regular approved APM Terminals Tarif.
- Ship crane will be fully inspected including crane hook, cables and crane cabin. Please note the crane will not be used in case the inspection reveals substantial evidence that

the crane is not fit for safe operations.

- Crane certificate and maintenance records will also be reviewed as part of the inspection process and copies of these documents shall be made available accordingly.
- All loose lifting gear must be tested and certified prior to use. This applies to cargo nets and other devices used for cargo handling.
- Please be informed that vessel cranes cannot be used as a man lift without an approved man cage.
- When not in use vessel cranes must be stowed on the water side of the vessel.

## **2.8. Lashing Certificate**

Once lashing is completed, vessel Chief Officer shall check all lashing for safety and conformity. Once satisfied with the lashing, Chief Officer should sign and stamp the lashing certificate. Please check APPENDIX-C for a template of the lashing certificate.

## **2.9. APM Terminals Damage Policy**

APM Terminals will not accept responsibility for any damage whatsoever to the Vessel, Vessel Equipment, or to Cargo loaded unless that damage is immediately brought to our attention. We will not sign damage reports presented to us at the end of cargo operations unless one of our Shift Managers or Vessel Supervisor have been notified in a timely manner of all the damages described, such that we have had the opportunity to survey and fully document the damages we are alleged to have caused.

Any damage to Vessel or Cargo reported after sailing will not be acknowledged by APMT.

The damage policy document (APPENDIX-D) shall be presented to the Chief Officer before operations start for him to sign and stamp it. The damage policy document is a mandatory document which must be signed before operations start.

## **2.10. Maintenance Work**

Maintenance work such as but not limited to hull painting, scraping and hot work must only be undertaken after permission has been received from the Port Harbor Master. Additionally:

- Maintenance work as described above, must have a permit issued by the APM Terminals Head of Operations or his designated representative, and selected repair vendors if any, must be part of the Permit to Work process;
- Any work undertaken near the water's edge requires a life vest to be worn by all

maintenance staff;

- Maintenance work must not be undertaken at night without prior approval; and
- Welding and repair works to hatch covers on the quay are not permitted.

Maintenance work must not be:

- Undertaken under the path of loading or discharging cranes;
- Adjacent to loading or discharging zones on quayside or waterside.

Non-approved maintenance work may result in bans, fines or extra charges being incurred by vessels. This is at the discretion of APM Terminals, and shall be in accordance with our approved tariff list.

### **2.11. In Case of Emergency**

Fire, Oil Pollution or any Incident requiring emergency spill response, medical attention and/or an ambulance shall be reported to the APMT Supervisor onboard the vessel when the vessel is at berth or to Pilot Station when vessel is offshore. In the event where Pilot Station or vessel Supervisor cannot be contacted please raise the alert to those numbers provided in Appendix B as appropriate.

When in communication with the Pilot Station or other designated contacts at APM Terminals, kindly provide the following information:

- Type of emergency;
- Location of emergency;
- What happened;
- Are there any injuries;
- Medical assistance required;
- What is the extent of the emergency; and
- If involving hazardous material provide UN no.

### **2.12. Drugs and Alcohol**

APM Terminals Liberia has a zero-tolerance policy for drug and alcohol for all staff, visitors and



crew members whilst alongside. Visiting vessel visitors, which includes 3rd parties, and crew shall adhere to APM Terminals' drug and alcohol requirements whilst in port. Those found not to be complying may be handed over to authorities.

### **2.13. Restricted Areas On-board**

Vessel crew must not:

- Allow APM Terminals staff to access a vessel's restricted area without prior approval from the vessel master and APM Terminals Vessel supervisor or Person in Charge.
- Request APM Terminals staff to deliver packages ashore. APM Terminals staff has been advised to report the issue to APM Terminals Vessel Person in Charge for further action by authorities.

### **2.14. Disposal of General Waste and Hazardous waste**

Disposal of waste (general waste, hazardous waste, sewage and waste oil...) can only occur through government approved service providers (EPA: Environment Protection Agency). Please ask your vessel agent to arrange.

Illegal waste disposal by visiting vessels will be reported to the National Port Authority (NPA) and may result in bans, fines or extra charges being incurred by vessels according to existing approved tariffs.

In case of further assistance please contact the NPA or the EPA. APM Terminals' Waste management contractor can also be contacted for assistance.

## APPENDICES

- ✓ APPENDIX – A: Security Guidelines to Vessels Entering APM Terminals Liberia
- ✓ APPENDIX – B: APM Terminals Reporting Procedures
- ✓ APPENDIX –C: APM Terminals Lashing certificate template
- ✓ APPENDIX- D: APM Terminals Damage Policy document template
- ✓ APPENDIX-E: APM Terminals Vessel Safety Inspection template
- ✓ APPENDIX- F: Vessel Safety Inspection ILO and OSHA guidelines

## **APPENDIX – A: Security Guidelines to Vessels Entering APM Terminals Liberia**

### **Legal Requirements:**

#### 1. ISPS Requirements:

- ISSC (International Ship Security Certificate)
- Crew List
- Last ten (10) port of calls details
- Pre-arrival report

#### 2. General Guidelines:

- Do not conduct any illegal activities at the Port.
- No crew member shall leave the ship/vessel without a valid shore pass granted after Immigration clearance and shall undertake required security checks at the designated locations/gates.
- Photography or other means of graphic display are not allowed within the Terminal and Port facility.
- Crew members must not request APM Terminals staff to handle goods that are deemed illegal in Liberia.
- Packages cannot be accepted by APM Terminals staff on behalf of Crew Members and any such requests are to be reported to APM Terminals Shift Leader.

## **APPENDIX – B: Reporting Procedures**

Any incident/accident, damage to cargo, vessel, port equipment, quayside, environmental release etc. must be reported immediately. Vessel assistance may be required regarding incidents investigations and vessels may be required to delay departure whilst an investigation is undertaken.

In the event of any reportable incident occurring please use the following contact numbers:

<b>STATION</b>	<b>CONTACT</b>
APM Terminals Pilot Station	VHF Channels 9 and 16
Security Duty Officer	+231777749632
Port facility Security Officer	+231777032772
APMT Clinic	+231777328511
Planning Office	+231777756406
Operations Execution Manager	+231776880469

**APPENDIX –C: APM Terminals Lashing certificate template**



FROM: APM TERMINALS  
TO: MASTER / CHIEF MATE – *“Vessel Name”*  
RE: LASHING / SECURING COMPLIANCE

THIS LETTER SERVES AS A NOTICE THAT THE CONTAINERS HAVE BEEN LASHED IN ACCORDANCE WITH THE VESSEL’S CARGO SECURING MANUAL AND/OR VESSEL OFFICER REQUIREMENTS.

THE UNDERSIGNED DOES HEREBY CERTIFY THAT ALL CONTAINERS ARE PROPERLY LASHED OR SECURED, AND STOWED TO SATISFACTION PRIOR TO DEPARTURE.

*DATE:* \_\_\_\_\_

*PORT:* *APMT Liberia, Freeport of Monrovia*

*TITLE:* \_\_\_\_\_

*SIGNATURE:* \_\_\_\_\_

*TERMINAL:* \_\_\_\_\_

**APPENDIX –D: APM Terminals Damage Policy document template**



DATE: \_\_\_\_\_ PORT: \_\_\_\_\_

TO: MASTER VESSEL \_\_\_\_\_ VOY: \_\_\_\_\_

RE: APMT DAMAGE POLICY DOCUMENT

**APM Terminals will not accept responsibility for any damage whatsoever to the Vessel, Vessel Equipment, or to Cargo loaded unless that damage is immediately brought to our attention. We will not sign damage reports presented to us at the end of cargo operations unless one of our Shift Managers or Vessel Supervisor have been notified in a timely manner of all the damages described, such that we have had the opportunity to survey and fully document the damages we are alleged to have caused.**


**Any damage to Vessel or Cargo reported after sailing will not be acknowledged by APMT.**

**This letter serves as prior notification to you of this policy.**



\_\_\_\_\_  
MASTER / OFFICER SIGN

\_\_\_\_\_  
APM TERMINALS REPRESENTATIVE


## APPENDIX –E APM Terminals Vessel Safety Inspection template

<b>APM TERMINALS</b>  <b>VESSEL SAFETY INSPECTION SHEET _ APMT Liberia</b> Version 02 – 2018.01.04				
Vessel/Voyage #	IMO Number	Date/time of Inspection	Terminal	The safety inspection sheet is based on the ILO code Safety & Health in Ports.
Gangway access Pictures taken? _____	<b>Safety net:</b> <input type="checkbox"/> In place <input type="checkbox"/> Missing <input type="checkbox"/> Good condition <input type="checkbox"/> Poor condition	<b>Steps:</b> <input type="checkbox"/> Antiskid <input type="checkbox"/> Slippery / Greased <input type="checkbox"/> Good Condition <input type="checkbox"/> Poor Condition	<b>Gangway / Platform:</b> <input type="checkbox"/> Railings in place <input type="checkbox"/> Railings missing <input type="checkbox"/> Platform missing <input type="checkbox"/> Secured on / to quay	<b>Comments:</b>
Access to Catwalks, Hatch covers & Cranes Pictures taken? _____	<b>Stairs &amp; Ladders:</b> <input type="checkbox"/> Good <input type="checkbox"/> Dangerous <b>Protection:</b> <input type="checkbox"/> Railings in place <input type="checkbox"/> Railings missing	<b>Working Areas:</b> <input type="checkbox"/> Free of obstructions <input type="checkbox"/> Obstructions <b>Cargo Hatches:</b> <input type="checkbox"/> Free of obstructions <input type="checkbox"/> Obstructions	<b>Manholes:</b> <input type="checkbox"/> Closed <input type="checkbox"/> Fenced off <input type="checkbox"/> Open/dangerous	<b>Comments:</b>
Catwalks and 'tween deck areas' Pictures taken? _____	<b>Width:</b> <input type="checkbox"/> More than 750mm (approx 30 inches) <input type="checkbox"/> Less than 750mm (approx 30 inches)	<b>Protection:</b> <input type="checkbox"/> Railings in place <input type="checkbox"/> Railings missing <input type="checkbox"/> Moveable stanchions <input type="checkbox"/> Unprotected	<b>General Conditions:</b> <input type="checkbox"/> Good <input type="checkbox"/> Slippery <input type="checkbox"/> Damaged <input type="checkbox"/> Unsteady	<b>Comments:</b>
Lashing platforms & Area Pictures taken? _____	<b>Access:</b> <input type="checkbox"/> Sufficient <input type="checkbox"/> Insufficient <input type="checkbox"/> Free of obstructions <input type="checkbox"/> Obstructions	<b>Protection:</b> <input type="checkbox"/> Railings in place <input type="checkbox"/> Railings missing <input type="checkbox"/> Moveable (stanchions) <input type="checkbox"/> Unprotected	<b>General Conditions:</b> <input type="checkbox"/> Good <input type="checkbox"/> Slippery <input type="checkbox"/> Damaged <input type="checkbox"/> Unsteady	<b>Comments:</b>
Lashing equipment Pictures taken? _____	<b>Twist locks:</b> <input type="checkbox"/> Good condition <input type="checkbox"/> Poor condition	<b>Lashing Rods &amp; Turnbuckles:</b> <input type="checkbox"/> Good condition <input type="checkbox"/> Poor condition	<b>Twist lock bins:</b> <input type="checkbox"/> Good condition <input type="checkbox"/> Poor condition <input type="checkbox"/> Damaged twist lock bin available	<b>Comments:</b>
Cargo Holds Pictures taken? _____	<b>Cell guides:</b> <input type="checkbox"/> Good condition <input type="checkbox"/> Poor condition <input type="checkbox"/> No cell guides	<b>Access to holds:</b> <input type="checkbox"/> Protected ladders <input type="checkbox"/> Dangerous ladders <input type="checkbox"/> No access	<b>General Conditions:</b> <input type="checkbox"/> Good <input type="checkbox"/> Bad	<b>Comments:</b>
Lighting & Illumination Pictures taken? _____	<b>Catwalks:</b> <input type="checkbox"/> Sufficient <input type="checkbox"/> Insufficient	<b>Lashing area:</b> <input type="checkbox"/> Sufficient <input type="checkbox"/> Insufficient	<b>Holds:</b> <input type="checkbox"/> Sufficient <input type="checkbox"/> Insufficient	<b>Comments:</b>
General conditions Pictures taken? _____	<b>Corrosion:</b> <input type="checkbox"/> No rust <input type="checkbox"/> Average <input type="checkbox"/> Heavily rusted	<b>High viz painting on:</b> <input type="checkbox"/> Obstructions <input type="checkbox"/> Low overheads <input type="checkbox"/> Deck hazards <input type="checkbox"/> Missing	<b>Life Buoys:</b> <input type="checkbox"/> Available <input type="checkbox"/> Not Available <b>Mooring Lines:</b> <input type="checkbox"/> Taut <input type="checkbox"/> Not Taut	<b>Comments:</b>
Other Observation	<b>Comments:</b>			
Inspection completed by			Copy given to Ch. Officer / Vessel (name & signature)	

**APPENDIX –F Vessel Safety Inspection ILO and OSHA guidelines**

 <b>VESSEL SAFETY INSPECTION ILO and OSHA GUIDELINES</b>		
<b>International and national regulations references</b>	<b>ILO - Safety &amp; Health in Ports</b>	<b>OSHA &amp; Pacific Coast Marine Safety Code</b>
<p><b>Gangway access</b></p> 	<p><b>ILO 7.2.3</b> Gangways should:</p> <ul style="list-style-type: none"> <li>▪ Have closely boarded walkway at least 550mm (22 inches) in width</li> <li>▪ Be fitted with transverse treads at suitable stepping intervals</li> <li>▪ Be fitted with upper and intermediate guard rails</li> <li>▪ Be fitted with devices enabling it to be properly secured to the ship</li> <li>▪ Never be used at an angle of more than 45° to the horizontal</li> <li>▪ Land on a clear and unobstructed area of the quay</li> </ul> <p><b>ILO 7.2.1 (5)</b></p> <ul style="list-style-type: none"> <li>▪ A safety net should be rigged wherever a person may fall between the ship and the quay from a means of access to the ship.</li> </ul>	<p><b>OSHA 2232</b></p> <p><b>1918.22(a)</b> – Whenever practicable, a gangway of not less than 20 inches (0.51m) in width, of adequate strength, maintained in safe repair and safely secured shall be used.</p> <p><b>Pacific Coast Marine Safety Code</b></p> <p><b>235</b> - When a ship is lying at a pier or wharf, there shall be provided at all times a safe means of going to and from the ship consisting of a gangway or ramp. Such means of access shall be adequately lighted during hours of darkness. Personnel platforms on container crane lifting beams shall not be used as a substitute for a gangway.</p> <p><b>236</b> – Gangways provided shall be at least twenty inches (20”) wide and properly secured to the ship. Such gangways shall be provided with a two-rail railing on each side; the upper rails shall be at least thirty-three inches (33”) high. Rails shall</p>



		<p>consist of wood, taut ropes or chains or other equally safe devices</p>
<p><b>Access to Catwalks, Hatch Covers &amp; STS Cranes</b></p> 	<p><b>ILO 7.3.1</b> Access on board ships:</p> <ul style="list-style-type: none"> <li>▪ Safe means of access about the ship should be provided for port workers between the gangways or other main access and the holds, deck cargoes, winches and cranes that are to be worked.</li> <li>▪ All access routes should be kept tidy and clear of obstructions. If specially constructed, they may consist of wooden grating or steel plates at least 600mm (24 inches) wide. They should be raised some 100mm (4 inches) above deck.</li> <li>▪ If access is required during the hours of darkness, the routes should be lit with a minimum of 10 lux on access routes and 50 lux in working areas, taking into account any specific need that may require additional lighting is provided.</li> </ul>	<p><b>OSHA 2232</b></p> <p><b>1918.35</b> – Open weather deck hatches around which employees must work that are not protected to a height of 24 inches (0.61m) by coamings shall be guarded by taut lines or barricades at a height of 36 inches (0.91m) to 42 inches (1.07m) above the deck, except on the side on which cargo is being worked. Any portable stanchions or uprights used shall be supported or secured to prevent accidental dislodgement.</p> <p><b>1918.33</b> – If it is necessary to stand or walk at the outboard or inboard edge of the deck load having less than 24 inches (.61m) of bulwark, rail, coaming, or other protection, those employees shall be provided with protection against falling from the deck load.</p> <p>Also see <b>1918.31(a) &amp; 1918.91(a)</b></p> <p><b>Pacific Coast Marine Safety Code</b></p> <p><b>214</b> – Sufficient hatch boards of proper dimensions to ensure a safe working surface for each deck being worked shall be supplied during stevedoring operations</p> <p><b>216</b> – Broken, split, or ill-fitting hatch covers shall be replaced at once.</p>

## Ladders / Life rings



### ILO 3.5.3

- All ladders should be of steel construction
- Rungs or treads of ladders should
  - Be equally spaced at intervals of not less than 250mm (10 inches) or more than 350mm (14 inches)
  - Provide foothold not less than 150mm (6 inches) deep and 350mm (14 inches) wide
  - Extend at least 1m above the landing place; if this is not practical, an adequate handhold should be provided above the platform
  - Be opened out above the platform to give a clear width of 700 (28 inches) to 750mm (30 inches) to enable a person to pass through them
  - Have a clear space of not less than 750mm (30 inches) on each side for the users hand
  - Be fitted with devices enabling it to be properly secured to the ship
- Where a landing platform is provided, it should:
  - Have a minimum dimension of 750mm (30 inches) in either direction not less than 1m above the floor of the platform enabling the person to stand safely on the platform
  - Be protected on any open side by a rigid guard rail 1m above the platform, an intermediate rail 500mm (20 inches) above the platform and a toe board extending to a height of not less than 150mm (6 inches) above the floor of the platform
  - Have a floor with a non-slip surface
  - Have a minimum headroom of 2.1m (6.9 feet)

### OSHA 2232

**1918.24(a)** There shall be at least one safe and accessible ladder for each gang working in a single hatch. An effective means of gaining a handhold shall be provided at or near the head of each vertical fixed ladder. No more than two ladders are required in any hatch regardless of the number of gangs present.



**1918.97(e)** The employer shall ensure that there is in the vicinity of each vessel being worked at least one U.S. Coast Guard approved 30-inch (76.2cm) life ring with no less than 90 feet (27.43m) of line attached, and at least one portable or permanent ladder that will reach from the top of the apron to the surface of the water


When any fixed ladder is visibly unsafe (or known to be unsafe), the employer shall identify such ladder and prohibit its use by employees.



#### Pacific Coast Marine Safety Code

**237** – A ladder shall be provided in all holds where employees are engaged in operations. Where there are two units or gangs operating in a hatch, there shall be two ladders provided

**238** – All ladders providing access to holds shall be kept in good repair and in safe condition. When rungs are broken or missing or ship's ladders are

		<p>otherwise unsafe, they shall be blocked off pending repair. Pending repair, portable straight ladders, properly secured, shall be provided. Where it is not practicable to use straight ladders, or when no alternative safe means of access is available, properly secured Jacob's ladders may be used, provided they are of the double rung or flat tread type.</p>
<p><b>Lashing platforms / Area</b></p> 	<p><b>ILO 7.8.2</b> Deck working:</p> <p>Shore-side management should ensure that safe access is provided by the ship to any place on the ship where stevedores have to work, and that the place of work is safe</p> <ul style="list-style-type: none"> <li>▪ The placing and removal of lashing equipment on the ends of containers should be carried out in the athwart-ship gaps between container stows</li> <li>▪ The space provided between the container stows for port workers to carry out such work should provide: <ul style="list-style-type: none"> <li>–A firm and level working surface</li> <li>–A working area, excluding lashing in place, preferably of 1 m and not less than 750 mm (30 inches) wide to allow clear sight of twist lock handles and the manipulation of lashing gear</li> <li>–Sufficient space to permit the lashing gear and other equipment to be stowed with causing a tripping hazard</li> </ul> </li> </ul>	<p><b>OSH 2232</b></p> <p><b>1918.34(b)</b> – Grated decks shall be properly placed, supported, maintained and designed to support employees.</p>
<p><b>Lashing Equipment</b></p> 	<p>All lashing gear and reefer cords properly stowed upon arrival. Check if all gear is stowed in the designated places from the previous port operations.</p> <p>Cone racks and bins in good condition</p> <p>Twist locks are in good condition and not damaged.</p> <p>Adequate t/lock bins for damaged twist locks (red cone bins)</p>	<p>All lashing gear and reefer cords properly stowed upon arrival. Check if all gear is stowed in the designated places from the previous port operations.</p> <p>Cone racks and bins in good condition</p> <p>Twist locks are in good condition and not damaged.</p>

		Adequate t/lock bins for damaged twist locks (red cone bins)
<p><b>Guardrails/Fencing</b></p> 	<p><b>ILO 7.4.4</b> Hatches should:</p> <ul style="list-style-type: none"> <li>▪ Be protected by coamings of sufficient height to prevent accidental falls into the hold.</li> <li>▪ Port workers should not work on cargoes on deck or between decks that are over an opened hatch.</li> <li>▪ The fencing should be 1 m (3.3 feet) high and may be of suitable wire rope or chain, provided that : <ul style="list-style-type: none"> <li>-There are means to keep the ropes or chains taut as possible.</li> <li>-Wire ropes have sufficient wires per stand to be flexible, are free from broken wires, and any loose ends are fitted with ferrules or other means of protection to prevent injury;</li> <li>-Sufficient stanchions are provided.</li> </ul> </li> <li>▪ Deck sockets into which stanchions fit should be equipped with locking devices and should be sufficient deep and designed in such a way as to prevent the stanchions from moving unduly out of the vertical or being accidentally displaced.</li> <li>▪ The fencing should form a permanent part of the ship's equipment and be kept in place at all times, except: <ul style="list-style-type: none"> <li>- When hatches are being opened or closed</li> </ul> </li> </ul>	<p><b>OSHA 2232</b></p> <p><b>1917.112(b)(1)</b> Guardrails shall be provided at locations where employees are exposed to floor or wall openings or waterside edges, including bridges or gangway-like structures leading to pilings or vessel mooring or berthing installations, which present a hazard of falling more than 4 feet (1.22m) or into the water, except as specified in paragraph (b)(2) of this section.</p> <p><b>1918.32(b)</b> When the edge of a hatch section or of stowed cargo may constitute a fall hazard to an employee, the edge shall be guarded by a vertical safety net, or other means providing equal protection, to prevent an employee from falling.</p> <p><b>1918.2</b> Fall hazard means the following situations:</p> <p><b>1918.2(1)</b> Whenever employees are working within three feet (0.91m) of the unprotected edge of a work surface that is 8 feet (2.44m) or more above the adjoining surface and twelve inches (0.3m) or more, horizontally, from the adjacent surface or;</p> <p><b>1918.2(2)</b> Whenever weather conditions may impair the vision or sound footing of employees working on top of containers</p> <p>** guardrails or portable stanchions are required wherever there is a fall hazard</p> <p style="text-align: center;"><b>Pacific Coast Marine Safety Code</b></p> <p><b>1043</b> – When an edge of a permanent landing platform is exposed so that there is a danger of a</p>

		person falling, the edge shall be guarded by a line, save all or railing placed so as not to interfere with movement of cargo.
<p><b>Holds</b></p> 	<p><b>ILO 7.3.2</b> Access to holds should:</p> <p>Access to cargo holds should be effected by the ship's permanent access.</p> <ul style="list-style-type: none"> <li>Access hatches and other openings giving access to holds should be protected by coamings. There should be a clear space of at least 400 mm around the coamings to allow easy access. If openings are too small, coating the lower edges with foam rubber or other elastic material should ensure that head and shoulders are not injured if they strike against them</li> <li>The approaches to a hold and an access hatch should be kept unobstructed to reduce the risk of falls and to enable holds to be evacuated quickly in an emergency.</li> <li>Where such openings have lids, these should be secured to prevent them from accidentally closing during access</li> </ul>	<p><b>OSHA 2232</b></p> <p><b>1918.35</b> – Open weather deck hatches around which employees must work that are not protected to a height of 24 inches (.61m) by coamings shall be guarded by taut lines or barricades at a height of 36 inches (.91m) to 42 inches (1.07m) above the deck, except on the side on which cargo is being worked. Any portable stanchions or uprights used shall be supported or secured to prevent accidental dislodgement.</p> <p><b>Pacific Coast Marine Safety Code</b></p> <p><b>1047</b> – No worker shall work on a deck load of cargo or containers directly adjacent to an open hatch, except when adequate protection against falling into the hatch is provided.</p>
<p><b>Cell guides</b></p> 	<p>Staggered cell guides under deck will reduce cell guide damage, container damage, and improve production.</p> <p>Cell guides that extend down to tank top. Some smaller ships have cell guides that stop about 10' from the tank top to allow for general cargo stowage.</p> <p>Cell must not be damaged, so cargo operation is affected.</p>	<p>Staggered cell guides under deck will reduce cell guide damage, container damage, and improve production.</p> <p>Cell guides that extend down to tank top. Some smaller ships have cell guides that stop about 10' from the tank top to allow for general cargo stowage.</p> <p>Cell must not be damaged, so cargo operation is affected.</p>
<p><b>Lighting/Illumination</b></p>	<p><b>ILO 7.1.5</b></p>	<p><b>OSHA 2232</b></p>



- It is the responsibility of the ship to provide conditions on board in which port work can safely be carried out. However, before starting operations to load or unload a ship, the company responsible for the stevedoring work should itself take steps to ensure that:
  - There are safe means or access onto and about the ship
  - Suitable deck and under-deck lighting, with a minimum level of 10 lux on access routes and 50 lux in working areas, taking into account any specific need that may require additional lighting, is provided

**1918.92(a)** Walking, working, and climbing areas shall be illuminated. Unless conditions described in the regulations of the U.S. Coast Guard (33 CFR 154.570) exist for specific operations, illumination for cargo transfer operations shall be of a minimum light intensity of five foot- candles (54 lux). Where work tasks require more light to be performed safely, supplemental lighting shall be used

**1918.92(b)** The lighting intensity shall be measured at the task/working surface, in the plane in which the task/working surface is present

**Pacific Coast Marine Safety Code**

**1501** – Employers shall provide adequate illumination. Adequate illumination is defined as light levels in walking and working areas which enable employees to safely perform assigned tasks and to be seen by other employees operating equipment. Lights shall be placed so that they do not shine in the eyes of the employees

**Freeport of Monrovia  
Bushrod Island, Monrovia, Liberia**