safe work australia

# Working Safely with Containers


October 2009

ISBN 978 0 642 32850 2 (print)

ISBN 978 0 642 32851 9 (online)

# CONTENTS

# Introduction

The waterfront provides a critical link in the distribution of traded goods internationally and within Australia. Stevedoring is a major link in the waterfront chain.

It is recognised that considerable efforts and advances have been made by companies, workers* and workers' representatives to improve safety in recent years, including the development and implementation of relevant safety management systems.

Despite all the achievements, and although large volumes of information on occupational health and safety (OHS) are available to the industry, both domestically and internationally, the way it is applied in the working environment of stevedores varies. Therefore, the continued importance of robust and effective health and safety risk management in this environment cannot be understated.

This publication was originally developed by WorkSafe Victoria in collaboration with the Maritime Union of Australia (MUA), the Australian Maritime Safety Authority (AMSA), shipping agents and stevedoring companies. Safe Work Australia and a technical working group, made up of representatives from the state and territory authorities, the MUA, AMSA and the stevedoring industry, have worked together to adapt the WorkSafe Victoria material for use nationally.

This guide should be read in conjunction with Marine Orders Part 32 and the International Labour Organization (ILO) *Code of Practice on Safety and Health in Ports*.

The stakeholders involved in the development of *Working Safely with Containers* agreed that container terminal operations pose significant risks to the health and safety of workers.

Given the number of fatalities and serious injuries while handling steel products, it was agreed that this would be the first area addressed.

This guide focuses specifically on the handling of containers at terminal operations and provides a range of options to address identified risks. It sets out what compliance could look like for a range of issues identified by stakeholders.

# Comparative charts

The comparative charts in this guide provide summaries of identified hazards and assessments of the risks associated with particular stevedoring work practices.

The green, amber and red format helps identify high-risk practices so person/s conducting a business or undertaking, or anyone in control of a workplace or work practice can implement safer work practices. The rationale for this is that to reduce injury rates and compensation claims, high-risk situations must be addressed.

***worker**, is a person who carries out work in any capacity for a person conducting a business or undertaking; including work as an employee, as a contractor or sub-contractor, as an employee of a contractor or sub-contractor, as an employee of a labour hire company who has been assigned work in the person's business or undertaking, as an outworker, as an apprentice or trainee, as a student gaining work experience, or as a volunteer. The person conducting the business or undertaking is also a worker if the person is an individual who carries out work in that business or undertaking.

Companies whose work practices fall into the red high-risk column are likely to be in breach of legislation. More significantly, they are placing the health and safety of their workers in jeopardy.

If high-risk practices are used, person/s conducting a business or undertaking, or anyone in control of a workplace or work practice should determine whether it is possible to implement the practices in the green low-risk column immediately. If that is not reasonably practicable (see page 9 of *Working Safely on the Waterfront*, 2009), the comparable practices in the amber medium-risk column should then be put into place. Generally, medium-risk practices only provide an interim solution. The green low-risk solutions reflect good practice.

However, the risk controls listed in the green low-risk column are not exhaustive. If person/s conducting a business or undertaking, or anyone in control of a workplace or work practice can demonstrate that an appropriate risk assessment process has been undertaken, and can verify that the 'reasonably practicable' test has been applied to the controls to be implemented, then control measures falling within the amber medium-risk range may well be justified as the only reasonably practicable solutions given the circumstances.

Often, a range of controls may be required to achieve the best solution. For instance, in stevedoring the environment is constantly changing and it may be impossible to implement one control to address all circumstances that may arise during the course of the work. While the practices in the green low-risk column may be the optimum solutions, in effect, a range of controls supported by an appropriate OHS management system (e.g. planning procedures, training and supervision) may be necessary to arrive at the best and safest way to undertake the work.

**A COMBINATION OF CONTROLS OFTEN GIVES THE BEST SOLUTION**

| RED (HIGH-RISK) | AMBER (MEDIUM-RISK) | GREEN (LOW-RISK) |
|---|---|---|
| The practices in the red column should not be used in workplaces; person/s conducting a business or undertaking who allow these practices to be used are likely to be in breach of OHS legislation | The practices in the amber column are less effective in reducing risk, as compared to the green column, and would generally be treated as interim solutions | The practices in the green column are the most effective in reducing risk and should be regarded as the target for all workplaces |

## Vessel/work environment inspections

Inspections should not be a 'one-off' activity (e.g. at the commencement of a shift or process) as the working conditions are constantly changing and frequently unpredictable. It is important to regularly inspect the working environment for new hazards and assess the ongoing suitability of work processes. Inspections should be conducted when a ship arrives at port, prior to work commencing and intermittently throughout the discharge process as working conditions change.

Inspections promote:

- learning opportunities
- shared experiences and opportunities to collectively identify solutions
- collaboration
- better communication tools
- increased knowledge across levels
- an understanding of issues by all affected parties, and
- an organisational focus on achieving good safety outcomes.

It is important that the right people, such as supervisors or foremen and Health and Safety Representatives (HSRs), are given the opportunity to be involved in inspections as appropriate. Depending on the circumstances, other personnel including the Ship's Master, a member of the crew, or a person with particular skills, may be invited to participate in the inspection process.

A pre-work inspection regime will assist in identifying issues associated with the type of vessel and cargo, cargo presentation, the condition of a ship's equipment and gear, supervisory requirements, the characteristics of the work team, weather conditions, the time of day, or length of shift. These issues may impact on the ability to undertake the task safely in the first instance. However, pre-work inspections will not identify issues that may arise over the entire process of discharge or loading.

## Checklist to support the inspection process

The *Vessel/Work Environment Checklist – Containers* (Checklist Three) identifies a range of hazards that occur in all areas of stevedoring relating to working safely with containers.

## Using Checklist Three

Checklist Three, specific to container discharge and loading activities, is included in this guide. It is suggested that this checklist is used to supplement the general *Vessel/Work Environment Checklist – General OHS Issues* (Checklist One). The comparative charts contained in this guide provide detailed information on what compliance could look like. These will also assist in the use of both checklists.

Checklist Three may be used without modification. However, where necessary, this checklist should be adapted to suit the particular circumstances of a

workplace. Checklists that are already in place may continue to be used if they address all potential hazards in that particular workplace.

## ‘Close the loop’ to achieve sustainable change

It is extremely important to have a process in place that ensures issues identified during the inspection process are resolved within appropriate timeframes.

It is also important that a process is in place that ensures unresolved issues and interim or temporary fixes are escalated to the appropriate level of management for a decision on the appropriate course of action. This includes referrals to third parties such as other jurisdictions or forward ports.



# COMPARATIVE CHART – ENVIRONMENT

## Vessel type, condition and equipment

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| No planning by shipping agent for type of vessel and/or cargo, resulting in incorrect vessel for type of cargo | Plan to assess load/unload conditions prior to arrival at dock (provided by shipping agent) | Vessel selection allows appropriate stowage and optimises cargo presentation |
| No, or inadequate confirmation of vessel compliance to required standards (Marine Orders and the International Labour Organization (ILO) *Code of Practice on Safety and Health in Ports*) | | Eliminate risk of poor cargo presentation by selecting the most appropriate vessel for known cargo types |
| No inspection of vessel and cargo presentation prior to work commencing | | Inspection of vessel (on arrival) prior to work commencing to identify discharge/load requirements |
| No escalation of issues identified as requiring attention/correction in regard to ship's equipment or vessel condition | Equipment/vessel issues escalated but not followed up and corrected | Issues escalated to third parties in supply chain (e.g. agents, lines, other authorities) so they can be corrected, and records kept |
| | | Refusal to discharge vessels that have recurring issues |
| Container movement due to conditions during transit | | |

# Cargo presentation

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| No consideration of presentation prior to commencing discharge | Cargo plan communicated and considered in pre-work inspection regime | Ship's cargo/stowage plan available and used during discharge/load planning |
| No communication to other ports on the condition of cargo | Communication between ports on stowage issues and re-stows | Unresolved issues escalated to third parties so they can be corrected, and records kept |
| Inspection of work environment not completed prior to commencing work | System of verbal communication of issues identified (no documented record) | Vessel/work environment inspection prior to work commencing identifies requirements for discharge |
| No escalation of issues identified as requiring attention/correction in regard to ship's equipment or vessel condition | Issues relating to equipment/vessel escalated but not followed and corrected | Job Safety Analysis (JSA), Safe Work Instruction (SWI) and risk assessment of requirements for new load with relevant and trained operators |
| Discharge plans altered at preceding port, impacting on accuracy of plan provided to subsequent ports<br><br>Alterations to discharge plan not considered prior to undertaking discharge | Load/unloading requirements specified and advised to forward port<br><br>Documented forward communication of cargo/vessel condition | Intermittent inspections undertaken and relevant actions implemented |



# Weather conditions *e.g. temperature*

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| No pre-work vessel/work environment inspection | | Assessment considers requirements of conditions and individual workers* and appropriate Personal Protective Equipment (PPE) provided |
| No consideration of changes in weather conditions and their impact on the ability to undertake tasks | | Assessment considers requirements for breaks, shelter and PPE |
| | | Bureau of Meteorology (BOM) contacts identified, and maps provided and utilised for work planning |
| No PPE provided or records kept of maintenance | Ad-hoc provision and maintenance of PPE and gear | Records kept of issue and maintenance of PPE |
| Inadequate PPE | No supervision in the use of PPE | Supervision of workers* using issued PPE |

*See page 23.

## Lighting

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| No inspection to identify lighting requirements including environmental factors | Consideration of environmental conditions in determining lighting levels required for the task | Pre-work and task specific vessel/work environment inspections identify lighting requirements, and lighting levels adjusted accordingly, particularly in order to achieve the minimisation of shadows |
| Lighting levels do not meet minimum requirements of International Labour Organization (ILO) *Code of Practice on Safety and Health in Ports* | | Lighting levels are suitable for the task being performed and achieve at least the minimum standard as per ILO *Code of Practice on Safety and Health in Ports*:<br>• working areas = 50 lux<br>• access routes = 10 lux |

## Noise

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| No assessment of noise exposure | Noise assessments undertaken and results documented | Controls in place that eliminate exposure to noise as far as reasonably practicable |
| | Hearing tests provided in accordance with Australian Standards | |
| No provision of appropriate Personal Protective Equipment (PPE) | PPE (as per AS 1270:2002) issued based on results of noise assessments | Hearing protection inspection and replacement regime documented |
| | | The correct use of hearing protection is monitored on an ongoing basis |



# Traffic management/common user facilities

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| No control/management of interaction between powered mobile plant and people | Assessment of requirements for work undertaken in close proximity to powered mobile plant considers all options for separation of people and plant. Interim controls implemented | Risk assessment conducted and permanent controls/practices for necessary interaction of workers* and powered mobile plant implemented and strictly enforced through procedures and supervision |
| | Sequence planning of delivery and loading/discharge activities | Use of traffic management technology (e.g. proximity sensors, speed limiters) |
| | | Robust traffic management plans that consider the reduction of collision risks are in place |
| No separation of people from moving or fixed plant and equipment | Exclusion zones without physical barriers | Physical separation of people from moving or fixed plant and equipment |
| | Training and supervision to achieve separation of people and equipment | |
| No consideration of travel surface conditions | | Well maintained travel surfaces |
| No contractor management system and contractors unsupervised while on site | Escort of contractor vehicles and supervision of contractors while on site | Documented system of induction, training, assessment and endorsement of contractors to permit controlled contractor movement on site |
| No established protocols between Common Users (e.g. stevedoring/marshalling companies that are working on the same wharf apron and/or vessel) | Documented process indicating communication/protocols have been established between Common Users working the same wharf apron and/or vessel | Robust traffic management plans are established between all Common Users, (e.g. stevedoring/marshalling companies that are working on the same wharf apron or vessel)<br><br>Plans that consider the reduction of collision risks are in place |

*See page 23.

# Housekeeping

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| No monitoring or management of housekeeping | Housekeeping system in place but no ongoing monitoring to ensure it is maintained at all times | Sustainable system of housekeeping in place |
| | | Walkways free of protrusions |
| Cables, dunnage, lashings and other loose items on floors and walkways in work area | | Designated storage areas for loose items |
| Slip hazards caused by residue build-up or wet/greasy decks and walking surfaces (vessel and port side), etc. | | No residue build-up (leading to slips) on walkways, gangways, hand rails, etc.<br>Areas kept clean and free of waste |
| | | Appropriate non-slip solutions are in place for wet deck risks |
| Inadequate or no checks to ensure clear, unobstructed work areas and floors | | Inspections address walkways and access ways to ensure they are kept clear and free of obstructions |
| Debris left from previous discharge/load operations | | Bins for waste readily available |
| Reefer cables on containers not secured prior to unloading | | Reefer cables secured prior to unloading ensuring no snagging of loose hanging cables |

# Access and egress

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| No assessment of requirements for safe access and egress | Assessment of requirements undertaken but inadequate follow-up | Pre-work inspection identifies access/egress requirements and appropriate provisions for access/egress made |
| Temporary access used even where fixed gear is available and identified as preferred method | | Two means of access/egress to each cargo compartment for ships built on/after 1 August 1998 (except ships used exclusively as bulk carriers or as cellular container ships) |
| Dedicated access provisions not used | | |
| Access platforms not appropriate for task | | |
| Gangways not properly rigged in accordance with Marine Orders parts 21 and 32 | | Procedures to ensure gangways remain properly rigged at all times |
| Damaged hand rails, ladders, etc. | Temporary repairs to damaged handrails to enable safe working. Report to the Australian Maritime Safety Authority (AMSA) if permanent repairs not undertaken prior to departure | Gangways, walkways and hand rails in good repair and free from obstructions |
| No clear access to gangways and walkways | | |
| Hinged hatch covers not mechanically locked when open | | Hinged and pontoon hatch covers mechanically fixed in open position as per Marine Orders Part 32 (or removed if not adequately secured) |
| | | Distance between containers allows sufficient space to accommodate work processes, gear and safe access/egress |

## Suspended loads *falling*

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| Working directly under loads being lifted or lowered, or under path of travel, or in vicinity of path of travel | Use of exclusion zones to separate personnel from areas where loads are being lifted or lowered, or away from path of travel | Inspection prior to work commencing identifies issues, and plans to address requirements are developed and implemented |
| | | Personnel physically isolated from areas where loads are being lifted or lowered, or away from path of travel |

## Items falling from height *lashing/unlashing*

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| Uncontrolled entry of people into areas where lashing/unlashing taking place | Lookout available during lashing/unlashing to prevent unauthorised movement of people within or into work area | No-go zones or barricades (e.g. nets, ropes) to physically isolate personnel from areas where loads are being lifted or lowered, or from path of travel |

## Work at height

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| No assessment of risk for working at height (e.g. where gaps are created during discharge/load or lashing on top of containers) | | Discharge/load planning/inspection process eliminates fall risks where reasonably practicable |
| | | Use of appropriate temporary access platforms (e.g. stages) |
| | | All openings where there is risk of a fall from height are enclosed or protected with high visibility rigid vertical and horizontal physical guarding |
| No implementation of appropriate controls (e.g. fall arrest/restraint gear, platforms, cages, edge barriers) | | Fall arrest/restraint systems implemented for any work at height (e.g. within hold of vessel or when securing tops of containers) |

## Contaminated or oxygen-deficient atmosphere

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| Use of combustion-powered plant or equipment in absence of regular maintenance regime | Use of combustion-powered plant or equipment with documented inspection and regular maintenance undertaken | Combustion-powered plant or equipment not used in restricted areas (e.g. electric forklifts used) |
| Vehicles or appliances powered by internal combustion engine used in a cargo space during loading or unloading that do not comply with provision 9.1.7 of the International Labour Organization (ILO) *Code of Practice on Safety and Health in Ports* | Use of vehicles or appliances powered by internal combustion engine that comply with provision 9.1.7 of the ILO *Code of Practice on Safety and Health in Ports* | Natural or mechanical ventilation prevents accumulation of harmful concentrations of gases, fumes and vapours |

| | | |
|---|---|---|
| | | Inspection regime identifies areas where interaction of powered plant or equipment could lead to build-up of contaminants |
| | | Inspection regime identifies requirements for Personal Protective Equipment (PPE) |
| No provision of appropriate respiratory equipment and other PPE | | Documented system of issue and maintenance of respiratory equipment and other appropriate PPE |
| No assessment of possible contamination and testing of atmosphere prior to work commencing | | Oxygen-deficient atmosphere detection system to check the quality and safety of the atmosphere and to identify possible loss of containment of hazardous substances or dangerous goods from containers |
| No risk assessment for release of contaminants from containers | | Programmed and/or periodic testing of atmosphere by suitably qualified person |

## Stowage techniques and procedures

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| No consideration of lashing requirements for design of vessel | Lashing plans not compatible with design of vessel, necessitating use of lashing gear that requires modification to suit application (assessed and approved for use even if not ideal for purpose) | Lashing plans compatible with design of vessel and correct gear available |



# COMPARATIVE CHART – COMMUNICATION

## Emergency procedures

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| No assessment of requirements for the type of vessel (personnel, gear, procedures, emergency contacts, etc.) | Assessment of requirements to ensure availability of correct gear for working environment (e.g. temporary access ladders) | Inspection of work environment prior to work commencing to determine emergency requirements |
| No supervision and no enforcement of requirements | Workers* unaware of procedures, and reliance on supervision | Documented system for induction and training (including updates/changes) is task and environment specific (e.g. confined spaces, areas with limited/restricted access, special equipment, gear) |
| No refresher training | | Emergency plan identifies workers* and addresses communication with designated authorities (including access/egress for emergency services in event of obstructed access) |
| | | Emergency procedures consider impact and information requirements for other workplaces, public, etc. in addition to site requirements |
| No assessment for addressing language requirements (e.g. with ship's crew) | | Language requirements factored into pre-work inspection regime |
| No backup communication in case of failure of primary system | | Backup communication system exists and all affected workers* trained in its use |

| | | |
|---|---|---|
| No protocols established for communication between ship and shore | Primary communication system available and implemented<br><br>Roles and responsibilities assigned and communicated | Ship-shore communication protocols established and implemented<br><br>Workers* informed of roles and responsibilities |
| | | Preventative maintenance program in place for all emergency plant/equipment |

*See page 23.

# COMPARATIVE CHART – EQUIPMENT

## Lifting appliances

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| Poor condition of ship-board cranes | Ship's gear or shore-based equipment modified to suit work task where issues are identified ('work around') | System to inspect ship's gear based on frequency of visit and availability of verified history of equipment |
| | Equipment modifications/work arounds to enable safe use for load have been risk assessed, approved and process documented | Appropriately tested and serviced equipment available |
| No system of inspection to ascertain fitness for use prior to work commencing | Minimum compliance with requirements of Marine Orders Part 32 | History of ship-board cranes provided and any issues corrected prior to use |
| No system for regular planned maintenance of shore-based equipment | One-off inspection with no follow-up or correction of identified issues | Log books for individual items of equipment maintained and available for pre-work inspection purposes |



# Loose gear for lifting of product *jigs, hooks, slings, chains, specialised handling systems, etc.*

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| Load bearing equipment or load lifting equipment is of unknown capacity or in poor condition (e.g. sensors not operating) | Informal inspection of wear and tear in equipment | System of inspection by qualified person (e.g. consultant) maintained and documented |
| | | Inspections done prior to use of all gear, and damaged gear removed from service |
| | | Pre-operational inspections and checks as part of general inspection regime |
| Use of lifting gear without complete service history or verification of Safe Working Load (SWL)/Working Load Limit (WLL) | | Auditable system of certification, rated SWL/ WLL and service history available for pre-slung loads |
| | | Gear register for land-based equipment maintained by stevedoring company |
| | | Gear register for vessel equipment maintained by Ship's Master |
| | | Log books detailing history of issues available for all plant and equipment (e.g. forklifts, straddle cranes, portainer cranes, reach stackers) and reviewed as part of pre-work inspection |
| | | Log books recording history of foreign ships and ship's equipment maintained by local stevedores and reviewed as part of inspection process |

| | | |
|---|---|---|
| | | Log books for local vessels and ship's gear maintained and kept on board ship for review by local stevedores as part of pre-work inspections |
| Load bearing equipment or load lifting equipment is of unknown capacity or in poor condition (e.g. chains stretched, hooks defective, sensors not operating) | | Gear only used with reference to marked SWL/WLL (not to be based on colour coding) |

## Loose gear for storage, stowage, or securing of product

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| No system to identify wear and tear in gear (e.g. rusted twist locks) or to ensure replacement | Informal inspection of wear and tear in gear | Documented system of inspection and maintenance of gear |
| | | System to repair or dispose of non-conforming items |
| Use of single-wire toggled twist locks with inappropriate lashing rods | | Uniform twist locks |
| | | Lashings and other portable cargo securing devices certified and assigned with Maximum Safe Load (MSL) |
| | | All lashing gear is uniform and compatible (e.g. semi-automatic twist-locks only used with suitable lashing bars) |

# COMPARATIVE CHART – PERSONNEL

## Fatigue

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| On-call shift notification does not provide for adequate:<br>• time between shifts<br>• fitness for duty<br>• notice of shifts | | Fatigue management plan developed and implemented, taking account of:<br>• work demands<br>• scheduling and planning<br>• working time<br>• environmental conditions<br>• individual factors |
| No assessment of requirements for workers* (e.g. numbers, work history) for shifts and specific tasks | | |

*See page 23.

## Induction and training

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| No assessment of worker* competency requirements and requirements for maintenance of skills | | Workers'* capabilities assessed, and training plan developed and implemented |
| | | Certification of competency to operate plant and equipment, and reassessment (as per legislated requirements) |
| | | Assessment of skills and knowledge |
| No formal induction provided prior to commencing work | Sole reliance on supervision | All workers* inducted using specific induction program |

*See page 23.

## Supervision

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| No supervision or supervisors required to manage workers*. Workers* are without adequate training, support and resources | | Supervisors trained and supported by management to ensure safety takes priority over production |
| No system to ensure supervisors have necessary skills and knowledge before taking on supervisory responsibilities | | Competent operators mentoring new workers* |
| | | Management provides visible presence and support to supervisors |

*See below.

## Contractors

| HIGH-RISK | MEDIUM-RISK | LOW-RISK |
|---|---|---|
| No consideration of contractor-specific requirements in induction and supervision system | | Documented contract management procedures in place, enforced and audited |
| | | Contractors inducted using specific induction program |
| | | Key Performance Indicators (KPI) for safety included in contracts |
| | | Certification of competency to operate plant and equipment, and reassessment (as per legislated requirements) |

***worker**, is a person who carries out work in any capacity for a person conducting a business or undertaking; including work as an employee, as a contractor or sub-contractor, as an employee of a contractor or sub-contractor, as an employee of a labour hire company who has been assigned work in the person's business or undertaking, as an outworker, as an apprentice or trainee, as a student gaining work experience, or as a volunteer. The person conducting the business or undertaking is also a worker if the person is an individual who carries out work in that business or undertaking.



# Checklist Three – Vessel/Work Environment Checklist – Containers

This checklist is a minimum requirement and may be used in conjunction with this guide to supplement the *Vessel/Work Environment Checklist – General OHS Issues* (Checklist One).

Checklist Three may be used without modification. However, where necessary, the checklist should be adapted to suit the particular circumstances of a workplace. Checklists that are already in place may continue to be used if they address all potential hazards in that particular workplace.

Facility name _____

Vessel name _____

Names of person/s in charge:

1. Ship's Duty Officer _____
2. Of shift _____

**Hatches to be worked** *(please circle)*: 1 2 3 4 5

Please indicate date and time of inspection activities:

| Date | Time | Activity | Names of personnel involved |
|---|---|---|---|
| | : | On arrival of ship at port/prior to work commencing | (Supervisor/Foreman) |
| | | | (Health and Safety Representative) |
| | | | (Ship's representative) |
| | | | (Other) |
| | : | Regular inspection/s‡ | (Supervisor/Foreman) |
| | | | (Health and Safety Representative) |
| | | | (Ship's representative) |
| | | | (Other) |

‡Regular inspections may need to be undertaken more frequently than indicated here – use additional checklists as required.

**Transfer any items marked 'No' to 'Actions for follow-up' at the end of the checklist.**



# VESSEL

## General

| Item | | Circle | |
|---|---|---|---|
| 1 | Is the lashing plan compatible with the design of the vessel? | Yes | No |
| 2 | Is all gear to be used compatible with the lashing plan? | Yes | No |
| 3 | Have all reefer cables been secured prior to loading or unloading? | Yes | No |
| 4 | Are all lashings and other portable cargo securing devices certified and identified with Maximum Safe Load (MSL)? | Yes | No |
| 5 | Is all lashing gear uniform and compatible? (e.g. all twist locks of same type, semi-automatic twist locks used with suitable lashing bars) | Yes | No |
| 6 | Has excess lashing gear been correctly stowed? | Yes | No |
| 7 | Are unlocking poles, bars, spanners, etc. placed at/near top of gangway? | Yes | No |
| 8 | Is an oxygen-deficient atmosphere detection system in place to identify possible loss of containment of hazardous substances or dangerous goods from containers? | Yes | No |
| 9 | Is there sufficient distance between containers to enable safe access/egress? (while allowing sufficient space for work processes, gear, etc.) | Yes | No |
| 10 | Are areas where people could be struck by falling objects during lashing/unlashing identified? | Yes | No |
| 11 | Have appropriate barricades/no-go zones been put in place? | Yes | No |
| 12 | Have containers moved/shifted since loading? | Yes | No |

## Appliances, gear, etc.

| Item | | Circle | |
|---|---|---|---|
| 13 | Is there any evidence of wear and tear in lifting gear? (e.g. stretched chains, defective hooks) | Yes | No |
| 14 | Has the gear register been sighted for all equipment? | Yes | No |
| 15 | Is all gear used in accordance with its marked Safe Working Load (SWL)/Working Load Limit (WLL)? | Yes | No |
| 16 | Have all lifting appliances been appropriately tested and serviced? | Yes | No |
| 17 | Is all load shifting/bearing equipment suitable for the task? | Yes | No |
| 18 | Are there any damaged or non-conforming items? | Yes | No |



# Actions for follow-up

| Item no. | Risk | Notes | Action | | Person responsible (sign) |
|---|---|---|---|---|---|
| | High/Medium/ Low | | Short term | Long term | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

## Sign-off (supervisor/person in charge)

| Item | Circle | |
|---|---|---|
| Have records of vessel condition and on-forwarding actions been kept? | Yes | No |
| Has a record of this inspection (including who was involved and when it was completed) been forwarded for record keeping? | Yes | No |

Signature _____ Name _____

# References and further information


Australian Centre for Sleep Research (report commissioned by the Minerals Council of Australia)
*Work Design, Fatigue and Sleep: A resource document for the minerals industry (2004)*

Australian Council of Trade Unions (ACTU)
*Health and Safety Guidelines for Shift Work and Extended Working Hours (2000)*

Australian Maritime Safety Authority (AMSA)
*Marine Orders* parts 21, 32, 42, 44 and 58, and Marine Notices relevant to stevedoring activities

Australian Safety and Compensation Council (ASCC)
*Work-Related Fatigue: Summary of recent indicative research (2006)*

BHP Flat Products Division
*BHP Steel – Recommended Practices for Steel Coil and Sheet Storage and Stacking (1996)*

Government of Western Australia (Commission for Occupational Safety and Health/Mining Industry Advisory Committee)
*Code of Practice for Working Hours (2006)*

International Labour Organization (ILO)
*Code of Practice on Safety and Health in Ports (2005)*

National Transport Commission (NTC)
*Guidelines for managing heavy vehicle driver fatigue (2007)*

Standards Australia
Various Standards as cited in Appendix 20, *Marine Orders Part 32*

WorkSafe Australia
*Draft National Code of Practice for Occupational Health and Safety in the Stevedoring and Container Depot Industry: A Public Discussion Paper (1991)*

WorkSafe Victoria Stevedoring Guidance Material (2008)
*Working Safely on the Waterfront*

*Working Safely with General Cargo – Steel Products*, and

*Working Safely with Containers*


# Acknowledgements


Safe Work Australia appreciates the support and input of the many representatives of the stevedoring industry who provided experience, advice and resources that informed the development of this guide.

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