



safe work australia

Working Safely on the Waterfront

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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 (see definition on next page) 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.

In recent years the stevedoring industry has faced considerable change. The profile of the workforce has improved, many new and less experienced workers have entered the industry and a constantly changing market has meant increasing competitive pressure in the sector.

The majority of serious injuries and fatalities in stevedoring arise from the fact that the work environment is constantly changing and largely unpredictable. The very nature of stevedoring – the process of loading and discharging cargo vessels – involves a vast array of environmental, physical, mechanical and psychosocial

risks. Management of these risks requires constant and effective communication, consultation, supervision and training, together with sound systems of work.


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*.

This guide articulates expectations for safe work practice and shows what compliance could look like when positive changes are made to health and safety arrangements in stevedoring operations.

Safe Work Australia recognises the importance of allowing for flexibility in the methods chosen. At the same time, emphasis is placed on demonstrating that the highest possible level of health and safety protection has been achieved. This involves due consideration of the content of this guide and the specific conditions arising in the work environment.

This guide provides a resource for person/s conducting a business or undertaking, or anyone in control of a workplace or work practice, Health and Safety Representatives (HSRs), workers and government regulators.



For the purposes of this guidance material, the following terms apply:

- **competent person**, in relation to a specified task, refers to a person who has, through a combination of training, education and experience, acquired knowledge and skills that enable the person to correctly perform that task.
- **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.

Key principles for stevedoring safety

- When working out ways to undertake stevedoring activities, ensure the hierarchy of risk control is considered. It is always better to eliminate the risk or engineer an alternative way of doing the task than to rely on administrative controls such as procedures and supervision.
- Try to influence other parties to affect how tasks are undertaken, so that

solutions are implemented at the source of the hazard to make the job safer.

- Involve the right people in assessing the task and developing solutions to do the task safely.
- When implementing solutions, consider the changing work environment and specific circumstances.


Take a supply chain approach

Stevedoring activities take place across a range of circumstances and may be affected by a number of factors. Consideration should be given to the items being handled, the physical condition and presentation of the ship to be loaded or discharged, and environmental conditions.

Changes to one aspect of the work can affect other aspects. The range of circumstances under which activities take place needs to be considered when identifying how to address hazards.

The level of risk to workers may also be affected by factors outside the immediate control of the person/s conducting a business or undertaking, or anyone in control of a workplace or work practice. These include the demands of shipping lines, agents, suppliers and customers, the weather and tidal conditions.

Safe Work Australia strongly encourages person/s conducting a business or undertaking, or anyone in control of a workplace or work practice to consider the impact that all parties in the supply



chain have on the ability of workers to do their jobs safely. The possible impacts on others, such as visitors to the site, should also be considered.

Loading vessels

Often, the risks associated with loading ships are easier to predict than those associated with discharging them. This is because there is a greater likelihood of having an ongoing relationship with parties supplying, producing or manufacturing product.

For example, in ports where product is loaded for export, the type of product is likely to be fairly consistent and come from a known source. The various parties in the supply chain will be known, and it will be possible to address risks with third parties.

Where product is supplied for export, person/s conducting a business or undertaking, or anyone in control of a workplace or work practice should try to influence producers or manufacturers to introduce engineering or other higher order solutions. This should be done to facilitate safe handling of product and to minimise the direct interaction of people with product and/or machinery. This includes palletisation and containerisation which enables mechanical handling of product and reduces the human interface (e.g. eliminating the need for manual attachment of crane hooks).

Discharging vessels


The risks involved in discharging loads, particularly general cargo, may be higher than those associated with loading vessels. This is because the nature (e.g. type or presentation) and condition of the stow may not be known until the vessel arrives at the dock and the hatch covers are opened.

Person/s conducting a business or undertaking, or anyone in control of a workplace or work practice should aim to establish relationships with relevant parties in the supply chain to influence them to raise standards in the selection and condition of vessels, as well as the equipment used and conditions in which work is undertaken.

This should include establishing processes to ensure that risks are escalated to the appropriate level of authority so that they are addressed and resolved within agreed timeframes. Efforts need to be made to work with relevant maritime authorities, suppliers, agents and overseas shipping lines to improve the physical condition of vessels. Improvements should also be sought in the way cargo is stowed and secured, so it is more likely to present in a condition that can be easily and efficiently discharged using the safest means possible.

How to use this guide

Stakeholders involved in developing the original Victorian guide with WorkSafe Victoria agreed on an approach addressing a range of OHS issues across



the stevedoring industry. This approach is supported by information and tools addressing specific areas of activity.

Stakeholders agreed that the first areas to be addressed were general cargo (steel) and container terminals.

This guide provides examples of tasks undertaken in stevedoring. However, it does not cover all tasks. Therefore, it is important that person/s conducting a business or undertaking, or anyone in control of a workplace or work practice review their own operations and apply the solutions or principles shown in this guide, as well as develop other ways to ensure that work is undertaken safely.

General OHS issues

This section of the guide provides information on the following aspects of stevedoring that apply regardless of the type of activity being undertaken or the commodity involved:

- consultation and representation
- induction and training
- supervision
- vessel/work environment inspections
- traffic management
- prevention of falls, and
- fatigue.

Checklists

A general *Vessel/Work Environment Checklist – General OHS Issues* (Checklist One) is contained in this guide. It provides examples of the issues that

should be considered and addressed during regular inspections.

Two other checklists address issues specific to particular stevedoring activities. The *Vessel/Work Environment Checklist – Steel Products* (Checklist Two) is provided in the *Working Safely with General Cargo – Steel Products* guide, and the *Vessel/Work Environment Checklist – Containers* (Checklist Three) is provided in the *Working Safely with Containers* guide. These checklists present OHS issues in summary form.

Comparative charts

Comparative charts are provided in the steel products and containers guides. They provide summaries of identified hazards and assessments of the risks associated with particular stevedoring work practices. This material aims to help workplace parties identify what compliance could look like and help them select and implement the highest standards of risk control.

The green, amber and red format helps to 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.

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 all workers at risk.

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 if it is possible to implement the practices in the green low-risk column immediately. If that is not reasonably practicable (see explanation on page 9), 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.

impossible to implement one control to address all the circumstances that 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

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



Reasonably practicable control measures

What does 'reasonably practicable' mean?

Person/s conducting a business or undertaking, or anyone in control of a workplace or work practice must consider all relevant matters when deciding if something is 'reasonably practicable'.

In general terms, the factors to be taken into consideration are:

- the likelihood of the hazard or risk eventuating
- the degree of harm that may result if the hazard or risk eventuated
- what person/s conducting a business or undertaking, or anyone in control of a workplace or work practice know, or should reasonably know about:
 - the hazard, potential harm or risk, and
 - ways of eliminating or minimising the hazard, harm or risk
- the availability and suitability of ways to eliminate or minimise the harm or risk, and
- the costs associated with the available ways of eliminating or minimising the hazard, harm or risk, including whether the cost is grossly disproportionate to the degree of harm or risk.

This guide is a reference to what you should reasonably know, and what you should reasonably do. It is expected that person/s conducting a business or undertaking or anyone in control of a workplace or work practice, workers and safety regulators will use this guide to

form an opinion about suitable health and safety risk controls, under the 'reasonably practicable' test.

The information contained in this guide is not legally binding. However, in the event of an accident or incident, it would be used to inform any investigation process or court proceeding that may arise.


GENERAL ISSUES APPLYING TO ALL AREAS OF STEVEDORING

Consultation and representation

Consultation with workers

Under the OHS legislation in your jurisdiction, person/s conducting a business or undertaking are required to consult their workers, as far as reasonably practicable, on matters that directly affect their health, safety or welfare. Independent contractors and any of their workers, including labour hire workers, should also be consulted.

The duty to consult recognises that the input and participation of workers improves decision-making on health and safety matters. Consultation between person/s conducting a business or



undertaking and workers is an essential part of effective OHS management. Workers will often be the best source of information and may have new ideas on how to do a job safely. They will also be able to identify whether proposed solutions may lead to other risks.

There are many ways to consult with workers to improve health and safety in the workplace. The methods used to consult with workers should be tailored to the particular workplace (e.g. by taking into account the types of work being conducted, the nature of physical work areas and shift arrangements). These methods must be developed in consultation with workers.

It is recommended that consultation includes the establishment of a health and safety committee (HSC) that meets at least once every three months, has regular meetings involving workers (e.g. tool box talks and team meetings), and conducts work environment inspections and informal face-to-face discussions.

Representation of Workers: Health and Safety Representatives (HSRs)

Of all the consultative mechanisms, the use of HSRs is recognised as the most effective method for workers to have their views and concerns on workplace health and safety heard by the person/s conducting a business or undertaking.

Safe Work Australia supports the establishment of work groups (WG), whose members are represented by elected HSRs. These HSRs must be consulted on workplace safety matters affecting workers they represent.

HSRs facilitate communication and consultation. HSRs have a role in raising

and resolving any OHS issues with the relevant person/s conducting a business or undertaking, and have powers to take issues further.

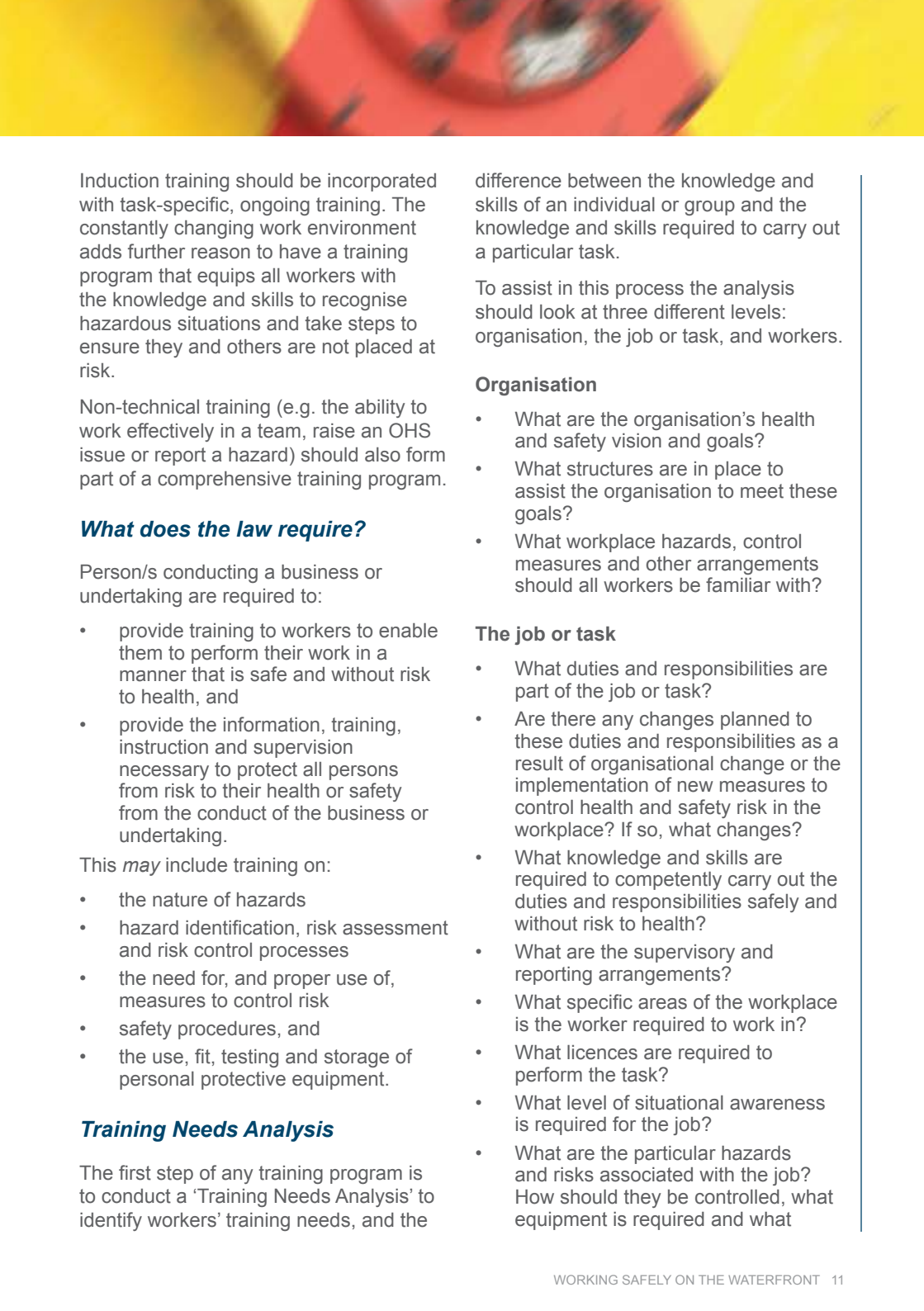
HSRs are legally entitled to carry out workplace inspections at any time after giving notice to the person/s conducting a business or undertaking, or immediately in the event of an incident or situation involving an immediate risk to health and safety. HSRs should be involved in the inspection of any area where their WG members work. However, if they are unavailable at the time of inspection, HSRs must be consulted as soon as possible when next rostered.

HSRs are also legally entitled to participate, as far as reasonably practicable, in any HSC that is established at the workplace.

Induction and Training

Training must not be regarded as a substitute for higher order risk controls. Induction and training do not address hazards specifically and are considered lower forms of risk control. Nonetheless, training is an excellent way for workers to learn new skills and knowledge, reinforce good work practices and build a strong team through shared learning.

Training is not a one-off activity. A comprehensive training program requires constant review to ensure that both preliminary and ongoing training needs are identified and implemented. This is particularly important in stevedoring, where the workforce may change frequently and may only be employed for short periods or intermittently.



Induction training should be incorporated with task-specific, ongoing training. The constantly changing work environment adds further reason to have a training program that equips all workers with the knowledge and skills to recognise hazardous situations and take steps to ensure they and others are not placed at risk.

Non-technical training (e.g. the ability to work effectively in a team, raise an OHS issue or report a hazard) should also form part of a comprehensive training program.

What does the law require?

Person/s conducting a business or undertaking are required to:

- provide training to workers to enable them to perform their work in a manner that is safe and without risk to health, and
- provide the information, training, instruction and supervision necessary to protect all persons from risk to their health or safety from the conduct of the business or undertaking.

This *may* include training on:

- the nature of hazards
- hazard identification, risk assessment and risk control processes
- the need for, and proper use of, measures to control risk
- safety procedures, and
- the use, fit, testing and storage of personal protective equipment.

Training Needs Analysis

The first step of any training program is to conduct a 'Training Needs Analysis' to identify workers' training needs, and the

difference between the knowledge and skills of an individual or group and the knowledge and skills required to carry out a particular task.


To assist in this process the analysis should look at three different levels: organisation, the job or task, and workers.

Organisation

- What are the organisation's health and safety vision and goals?
- What structures are in place to assist the organisation to meet these goals?
- What workplace hazards, control measures and other arrangements should all workers be familiar with?

The job or task

- What duties and responsibilities are part of the job or task?
- Are there any changes planned to these duties and responsibilities as a result of organisational change or the implementation of new measures to control health and safety risk in the workplace? If so, what changes?
- What knowledge and skills are required to competently carry out the duties and responsibilities safely and without risk to health?
- What are the supervisory and reporting arrangements?
- What specific areas of the workplace is the worker required to work in?
- What licences are required to perform the task?
- What level of situational awareness is required for the job?
- What are the particular hazards and risks associated with the job? How should they be controlled, what equipment is required and what



procedures should be followed to ensure they are controlled?

- What emergency procedures apply if hazards cannot be controlled and someone is injured?

Workers

- Are workers aware of their duties under OHS legislation to take reasonable care of their own and others' health and safety and cooperate with measures put in place by the person/s conducting a business or undertaking?
- What knowledge and skills do workers currently have – both technically and in relation to health and safety?
- What training have individual workers already undertaken?
- Are there specific requirements for particular people in the workforce, for example:
 - supervisors, foremen or those with particular responsibility for others
 - workers required to operate particular plant or equipment with legal requirements for licensing or certification
 - new starters requiring general awareness as well as task-specific training
 - young workers
 - casual or short-term workers
 - workers who work infrequently or who have had a long period of absence from the workplace, or
 - workers with limited reading and writing skills?
- Who should receive additional training on specific topics?

- Are there any general issues associated with reading and writing that need to be accommodated?
- How can you accommodate the needs of workers from culturally and linguistically diverse (CALD) backgrounds?
- Who can act as a trainer for specific topics? The knowledge and skills of experienced workers should be considered as possible resources when developing programs to train and develop new workers. Their expertise could be used in a mentoring or 'buddy' system or as part of more formal training.
- What is the best way to deliver training to meet the needs of individual workers?
- What are the benefits of classroom training versus on-the-job training?
- Should internal staff or external training providers be employed?
- Should in-house or external training facilities be used?
- Should training be conducted during or after work hours?

The Training Needs Analysis should be carried out in consultation with workers and HSRs where they exist.

Person/s conducting a business or undertaking, or anyone in control of a workplace or work practice, need to ensure that trainees undergoing on-the-job training or practising new skills are not exposed to health and safety risk and that:

- they receive appropriate directions, demonstrations and monitoring
- should an emergency involving a trainee arise, action is immediately taken to rectify any dangerous situation

- they are always under the direct supervision of a competent person, and
- their work requirements are paced appropriately to enable them to concentrate on developing their skills and techniques before trying to keep up with work demands.

Training delivery plan

Once workers' training needs have been identified, a plan for the delivery of training should be developed in consultation with workers and HSRs.

The training plan should contain the following information:

- training required
- training objectives
- who is to be trained
- how the training will be delivered
- who is going to deliver the training and when
- particular competencies that need to be attained by workers, and
- measures that will be used to ensure workers have developed the necessary skills or competencies.

Once the training plan has been endorsed, a senior person in the organisation should be given responsibility for ensuring its implementation. Workers and HSRs should be provided with regular progress reports on the implementation of the training plan.

If aspects of the training plan need to be changed during implementation due to unforeseen circumstances, relevant workers and HSRs must be consulted on those changes.

Training records

Some jurisdictional regulations require formal training records to be kept. Where this is not a requirement, it is strongly recommended that formal training records are kept.

Maintenance of appropriate records will assist you to:

- know what training has been provided and what additional training is needed, and
- demonstrate compliance with your obligations under the OHS legislation and regulations.

The following records should be kept:

- Training Needs Analysis documents
- training plans
- training materials
- lists of workers who have successfully completed various training programs and the dates of completion
- details of any competency-based training completed, and
- copies of licences, certificates, or other qualifications.

Review of training

A training program should not be a one-off activity. All training needs to be reviewed and workers must be provided with ongoing or refresher training to ensure they are kept up to date with:

- changes to the nature of hazards and associated risks in the workplace
- changes to work practices or risk control measures
- changes to roles, responsibilities or organisational arrangements, and

- new or additional information available from manufacturers, suppliers, government bodies or other relevant bodies that may have an impact on the health and safety of workers.

Training for health and safety representatives

As key parties in workplace consultation and a crucial link between workers and management in addressing health and safety matters, it is important that HSRs have the relevant knowledge and skills to effectively perform their role and exercise their obligations under OHS legislation.

As such, HSRs and any deputy HSRs have a legal entitlement to attend an initial training course after being elected, as well as refresher courses as per jurisdictional requirements.

Supervision

In addition to ensuring workers receive appropriate training, person/s conducting a business or undertaking, or anyone in control of a workplace or work practice must provide and maintain an effective level of supervision over workers and visitors at the workplace. The level of control depends on the workplace hazards, the level of exposure, the experience and competence of workers and the integrity of risk control measures in place.

Like training, supervision cannot be regarded as a substitute for higher order risk controls. Due to its nature, supervision relies on having the right people with the right skills, knowledge, competence and aptitude present to


ensure the job is done correctly and safely.

In stevedoring, supervisors may be known by a variety of titles, such as foreman, shift manager, line manager, team leader, or yard foreman. A supervisor, regardless of title, is required to ensure that his/her workers can perform their work in a way that is safe and without risk to health, as per the relevant state or territory OHS legislation. This is consistent with Marine Orders Part 32 which requires a person-in-charge to ensure, as far as reasonably practicable, that if a workplace becomes unsafe or there is a risk of injury to health, effective measures are taken to protect workers until the workplace has been made safe.

Remote supervision may not effectively meet this requirement and person/s conducting a business or undertaking, or anyone in control of a workplace or work practice must ensure that person/s charged with directing activities at the site have the necessary authority to stop unsafe activities.

A supervisor's role may involve directing the work of others, allocating work, planning and scheduling, instructing and monitoring actions, maintaining discipline, providing leadership and making decisions, facilitating communication and teamwork, ensuring worker involvement, taking responsibility, and ultimately being held accountable for the work being done. For supervisors to be effective, it is vital that they have the right technical and leadership skills and that they are supported in performing their role.

Supervisors must be supported to be *particularly* focussed on safety, not just on productivity or other business demands.



“Safety is a part of productivity – not apart from productivity”

Ensuring supervisors are best equipped for their role

Person/s conducting a business or undertaking, or anyone in control of a workplace or work practice should ensure that all supervisors have the information, instruction and training to competently direct and control their team's work and ensure that work is done safely at all times.

Elements that should be considered when establishing supervision arrangements in the workplace include competency requirements, individual and organisational factors, and requirements of people and tasks.

Competency requirements

These include:

- the ability to identify health and safety hazards and risks, and the specific controls available to ensure they are eliminated or minimised as far as reasonably practicable
- an understanding of the hierarchy of risk control and how this should be applied in the workplace
- an awareness of situational and skills requirements and how they may impact on undertaking the work safely
- demonstrated knowledge of, and ability to apply, organisational procedures relating to health and safety. This includes how to consult with workers, issues resolution,

job safety analysis, inspections, incident reporting and investigation, emergency management, contractor management, training, plant safety and traffic management

- the ability to recognise and manage abnormal conditions and deal with emergencies
- negotiation and communication skills to enable effective and constructive participation in discussions and resolve health and safety issues in line with procedures, and
- the ability to identify requirements for the formal training of supervisors (e.g. Certificate IV in Transport and Distribution).

Individual and organisational factors

These include:

- relationships between members of the work team, and between teams
- individual leadership qualities required by the supervisor
- management and reporting structures (e.g. flat vs. hierarchical)
- the training of supervisors in the technical and philosophical aspects of organisational policies, procedures and standards, so that all workers receive the same messages in relation to these factors
- the degree of flexibility or autonomy the supervisor has in undertaking their work
- the effectiveness of consultation and communication across management and supervisory levels. (Does management actively engage with all levels, including supervisors and the general workforce?), and
- the autonomy to allocate time and resources to effectively consult and communicate with workers.



Requirements of people and tasks

- New starters, young workers, or others with special needs may require a higher level of direct supervision and ongoing discussion about the task than more experienced workers. This coaching could be delivered by an experienced worker. However, to avoid over-familiarity and reduced attention being paid to the task at hand, some degree of formal supervision of both the coach and the inexperienced worker is necessary.
- High-risk or complex activities may have greater supervision requirements. For example, discharging steel from a ship's hold requires direct supervision to ensure that no worker or person is placed in the path of the load or underneath a suspended load.
- Contractors have particular supervisory requirements. Often it is the safety of contractors, rather than company personnel, that is at greater risk due to their unfamiliarity with the working environment, infrequent exposure to the workplace, frequent shifts to different work environments, unfamiliarity with organisational policies and work procedures (particularly relevant in stevedoring where personnel often work for different organisations), or lack of involvement in team dynamics. An effective induction and training program should address these issues to some degree.
- To determine the level of supervision required, shift and scheduling arrangements (e.g. the time of day, length of shift, or number and skills of available personnel) need to be considered.

Vessel/work environment inspections


Inspections should not be a 'one-off' activity (e.g. at the commencement of a shift or process) as working conditions are constantly changing and frequently unpredictable. It is important to inspect the working environment regularly 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 HSRs, are given the opportunity to be involved in inspections as appropriate. Depending on the circumstances, other personnel such as 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.

Many factors that may not be identified prior to, or when commencing work, may impact on safety during the course of the work. Therefore, it is important that regular inspections also form part of the work process. A system should be developed to recognise when inspections are required. To ensure implementation, this should be supported by a work program.

During discharge, for example, as cargo is removed from the ship's hold, working conditions and circumstances may change significantly. Altered physical conditions may be generated by the removal, loading, or shifting of items, or changes in weather or light (e.g. day vs. night-time operations). Consideration may also need to be given to the length of time required to undertake the work and the possible impact of worker numbers.

Similar factors may arise over the course of loading cargo. However, the type of cargo and vessel will generally be known prior to work commencing, making the working conditions more predictable. Nonetheless, ongoing monitoring is needed to ensure conditions that might impact on safety are identified throughout the loading process.

Checklists to support the inspection process

Checklist One – Vessel/Work Environment Checklist – General OHS

Issues identifies a range of hazards that occur in all areas of stevedoring. Checklist One is included in this guide.

Checklist Two, provided in *Working Safely with General Cargo – Steel Products*, and Checklist Three, provided in *Working Safely with Containers*, will assist in identifying hazards that may be present during the process of handling steel products and containers.

Using the checklists


Checklist One 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.

In certain circumstances it may be necessary to ‘work around’ identified issues, such as when an issue requires a longer-term fix that may be outside the immediate control of the person/s conducting a business or undertaking.

It is also important that a process is in place ensuring that 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.



Consider how to influence long-term change through the supply chain of agents, suppliers, customers or other parties to prevent problems at the source. Strive to build relationships with relevant workplace safety authorities and AMSA to promote communication and collaboration, and to begin to drive change across Australian and international ports.

Keep records and communicate outcomes

It is important to record all inspection details, including who was involved, when the inspection was completed, and any action plans to resolve issues (short and long-term). This provides evidence of what was done to ensure that workplace risks to health and safety were controlled as far as reasonably practicable, both before and during the work taking place.

Consider keeping a photographic record of issues identified, so that such information, together with action plans, is available for supervisor training and to inform management.

Person/s conducting a business or undertaking, or anyone in control of a workplace or work practice should also ensure that results are communicated to all affected personnel; especially the work team, supervisors and HSRs. This helps foster a cooperative and consultative approach and gives confidence to those doing the work that issues are being acted upon.

Implement a formal OHS management system and audit protocol

Inspections are just one element of a comprehensive OHS management system. Each system should suit the particular risk profile of the organisation. Person/s conducting a business or undertaking are encouraged to conduct regular audits to verify that the OHS management system still meets the needs of the organisation and identifies areas for improvement.


Detailed information can be found in *AS/NZS 4804:2001 Occupational health and safety management systems – General guidelines on principles, systems and supporting techniques*, and *AS/NZS 4801:2001 Occupational health and safety management systems – Specification with guidance for use*.

Traffic management

Forklifts can be unstable and may require considerable distance to come to a stop. To illustrate this point, a laden 3 tonne counterbalanced forklift travelling at 5 kilometres per hour, or walking pace:

- travels about 2 metres while the driver reacts
- travels a further 1 metre while braking, and
- needs at least 3 metres to come to a stop.

A fundamental requirement for any workplace where powered mobile plant is used is to develop and implement a traffic management plan to separate powered mobile plant from pedestrians, both on



board ship and dockside. The first step in developing a traffic management plan is to identify hazards and assess the risk of people coming into contact with those hazards. The plan should then determine the best ways to eliminate the risks, or minimise them as far as reasonably practicable.

A key consideration in any traffic management plan is to ensure pedestrians and powered mobile plant (particularly forklifts) are physically separated as far as reasonably practicable. A risk assessment needs to establish the actual practicability for each scenario at the workplace.

The types of forklifts used in stevedoring environments can vary. The figures used in the example relate to smaller forklifts (generally with less than a 10 tonne capacity), but illustrate the necessity for effective traffic management. Where larger or higher-capacity forklifts such as reach stackers are in operation, there will be a need for even greater vigilance in ensuring pedestrians are separated from heavy equipment travelling at speed.

Consultation is central to developing a traffic management plan that will be supported by all workplace parties, including facility owners, common user berths, HSRs, forklift operators, other workers, OHS professionals and person/s conducting a business or undertaking.

When identifying risk control measures, consider the source of the risk and develop practical, workable controls (perhaps through a brainstorming session).

Controls should consider the most efficient route of travel, traffic flows, ways to reduce the frequency of interaction

with powered mobile plant, substituting a forklift with other suitable load shifting equipment, and options for eliminating risk altogether, if reasonably practicable.


Once risk control measures are in place they must be regularly reviewed to gauge effectiveness. An effective traffic management plan can use a range of devices, including pedestrian and forklift exclusion zones, safety zones for truck drivers, safety barriers, containment fences, speed limiting devices and signs. The best control measures are those that physically separate people from equipment, and reduce the reliance on monitoring, procedures and supervision.

All those at the workplace, including contractors and visitors, must be informed of the site's traffic management plan. This should take place as part of the induction program for all people new to the workplace. Person/s conducting a business or undertaking, or anyone in control of a workplace or work practice should also consider traffic management issues as part of the inspection process to ensure that the controls put in place remain effective at all times.

Prevention of falls

Falls from height are recognised as one of the key preventable risks in stevedoring activities. Accessing the hold of a ship, loading and discharging cargo, or working on top of containers, all involve the risk of a fall. Weather conditions including cold, heat, rain and tidal conditions increase the risk of a fall.

It is important to understand that any fall can lead to serious injury or death.



A process to identify, assess and control any risk of a fall that may occur during stevedoring operations should be implemented.

Often fall hazards will be predictable and well known (e.g. on-shore, where fixed installations exist and do not vary from job to job), with appropriate procedures and equipment available to prevent falls occurring.

In other instances (e.g. where a vessel presents infrequently or where operations vary according to the discharge/load plan) the risks will be unfamiliar, and the controls required to eliminate or reduce the risks will need to be determined as part of the work process. In either case, it will be necessary to identify fall hazards as part of the pre-work and ongoing inspection process, and to determine and implement appropriate controls.

Types of falls that may cause death and injury in stevedoring operations include those resulting from:

- inappropriate ladders/ladder use
- working in the vicinity of holes or cavities on board ship (e.g. near hatchways or on top of cargo where voids are created during discharge/loading)
- working on top of containers
- accessing the ship's decks, hatchways and holds
- using stairs, ramps, landing stages or gangways
- walking across beams over open hatchways, and
- working on elevated equipment such as cranes.

Wherever reasonably practicable, the risk of a fall must be eliminated by working on

the ground or on a solid construction, in an area that has:

- a surface that is structurally capable of supporting people, material and any other loads intended to be applied to it
- barriers around its perimeter and any open penetrations to prevent a fall from the area
- an even and readily negotiable surface and gradient, and
- a safe means of access and egress.

Where it is not reasonably practicable to work on the ground or on a solid construction, the risk must be controlled using the following measures in order of priority:

- use a passive fall prevention device
- use a work positioning system that ensures workers work within a safe area
- install a fall arrest system that limits the risk of injuries should a fall occur
- use a fixed or portable ladder, and
- implement administrative controls. (Note that where these are to be the only control mechanism, records must be kept stating the tasks for which they are to be used.)

Where any of these methods are to be used, person/s conducting a business or undertaking must establish emergency procedures, including the provision of first aid, to cover the rescue of a worker in the event of a fall.

Person/s conducting a business or undertaking must ensure that any measures put in place to control fall risks are reviewed in accordance with the OHS regulations and revised as necessary to ensure that fall risks are adequately controlled at all times.



Fatigue

In recent years, Australian industries have faced increasing pressure to become more competitive, resulting in the introduction of new technologies and significant labour market change.

These changes have led to an increase in the need for continuous or more flexible business operations, which has in turn increased the number of workers engaged in shiftwork, and working irregular and/or longer hours.

There is growing recognition that these workplace developments may lead to increased rates of worker fatigue. It is widely acknowledged that fatigue can compromise health and safety. Worker fatigue has obvious implications for those safety-critical industries where fatigue may cause or contribute to potentially dangerous or costly errors.

Where fatigue may affect an individual's ability to work safely, it must be identified, assessed and controlled like any other risk in the workplace. Controlling fatigue requires cooperation between person/s conducting a business or undertaking and workers. Both person/s conducting a business or undertaking and workers have roles to play in making sure any risks associated with fatigue are minimised.

While person/s conducting a business or undertaking have a duty to ensure that fatigue risk is eliminated or reduced as far as reasonably practicable, workers also have a duty to follow procedures and cooperate with the person/s conducting a business or undertaking to minimise fatigue. Workers also have a duty to take care of their own health and safety and

the safety of others in the workplace. This means that workers need to ensure their behaviour outside of work does not contribute to workplace fatigue.

A fatigue management plan should be established that includes:

- hazard identification, risk assessment, risk control and review
- consultation with workers and HSRs to identify issues, establish priorities and work out ways to control fatigue risks
- policies and procedures
- appropriate training, instruction and supervision, including induction and ongoing training for workers (including supervisors, managers and contractors)
- record-keeping, and
- a system for monitoring shift lengths or start times, etc. to ensure that the shift system is not contributing to fatigue.

Recognising symptoms of fatigue

Jobs which require standing for lengthy periods, frequent manual handling, repetitive movements, or heavy work which is physically demanding can lead to increased fatigue on long shifts or shifts with overtime. Monotonous work or work where a high level of attention and alertness is required can also increase fatigue.

It may be difficult for person/s conducting a business or undertaking to recognise fatigue in workers. Symptoms of fatigue may include:

- frequent stopping to rest
- poor quality work
- simple mistakes

- irritability
- decreased alertness
- increased information processing and decision-making time
- slower reaction time, and
- decreased motivation.

Developing a fatigue management plan

A list of items that should be considered when developing a fatigue management plan for the stevedoring industry follows.

1. Identify fatigue hazards

Many factors contribute to fatigue, and workers are often not aware of how fatigued they have become. The first step in developing a fatigue management plan is to identify those factors in consultation with workers and HSRs.

Factors that could be considered include, but are not limited to:

Mental and physical work demands

- handling heavy items
- work requiring a high alertness level over prolonged periods
- mentally intense tasks
- boredom or monotony
- restricted movement or seating discomfort
- heavy physical work, and
- repetitive work.

Work scheduling and planning

- pressure to meet deadlines
- travel time to and from work
- requirements to work or travel between midnight and 6.00 am
- whether workers are able to have at least one day off per week

- the ability of workers to have at least two consecutive nights' sleep per week, and
- on-call or call back arrangements.

Working time

- the frequency of 12-hour shifts (or greater)
- breaks between shifts of less than 10 hours
- the number and timing of rest breaks, and
- work required to be undertaken between 2.00 am and 6.00 am.

Environmental conditions

- demands for using items of plant or machinery
- excessive glare or inadequate lighting levels
- prolonged exposure to heat, noise, humidity, vibration and poor air quality/air contaminants, and
- working in cramped or confined conditions.


Individual factors and factors outside work

- the amount and quality of sleep
- responsibilities such as childcare or voluntary work
- lifestyle factors such as having more than one job, fitness, social life or diet, and
- illness or other factors that have the potential to impact on health.

2. Assess fatigue risks

An assessment of fatigue risk should include a review of:

- working hours and schedules; to identify planned versus actual



working hours, and reasons for any discrepancies

- the frequency and extent to which workers feel fatigued
- the extent of variation in work tasks, and
- incident data to determine whether fatigue may be a contributing factor. This should include analysis of the time of day and impact of circadian rhythms on incidents, the timing of incidents in relation to shift duration, any incidents occurring during overtime, and the timing of incidents in relation to the accumulation of shifts.

Various tools are available to support the assessment process, such as fatigue risk calculators that establish the risk of actual and proposed work schedules, and risk assessment charts.

See the references on page 38 for further information.

3. Control fatigue risks

Wherever possible, the hazards that cause fatigue risks should be eliminated at the source. If that is not possible, then consider how fatigue risks will be managed. As with any risk control process, the main focus should be on controls that address the source of the risk (e.g. work scheduling and planning and using appropriate machinery and equipment) rather than those relying on procedures (e.g. job rotation) to manage fatigue.

Some of the ways in which identified fatigue hazards could be addressed (in order of preference from controls at the source to administrative controls such as procedures) include:

Mental and physical work demands

Where possible:

- use plant, machinery and equipment that eliminates or minimises the mental and physical demands of the job
- redesign the job to include a variety of mental and physical tasks
- introduce job rotation to minimise mental and physical fatigue
- optimise rest periods, and
- increase the amount of variation in work tasks to minimise repetition.

Work scheduling and planning

Where possible:

- reduce the time spent doing mentally and physically demanding work
- schedule safety-critical work outside low circadian rhythm periods where concentration and performance are diminished (i.e. between 2.00 am and 6.00 am, and between 2.00 pm and 4.00 pm)
- avoid working arrangements that provide incentives to work excessive hours
- provide adequate breaks between shifts to allow for sufficient recovery time (including travelling, eating, sleeping and socialising)
- ensure there are adequate numbers of people and resources to do the job without placing excessive demands on personnel
- gradually increase work demands towards the middle of a shift and decrease demands towards the end
- for night shift workers, allow 24 hours rest between each block of consecutive shifts
- minimise sequential night shifts

- provide an adequate period of non-work following a sequence of night shifts
- allow periods of normal nights' sleep to allow recovery from sleep debt
- arrange shifts to finish before 10.00 am so day sleep is not restricted, and
- give at least 24 hours notice before requiring workers to start night work.

Working time

Where possible:

- avoid quick shift changeovers such as finishing at 11.00 pm and starting again at 7.00 am
- control overtime, shift swapping and on-call duties
- use a forward rotating roster
- limit shifts to 12 hours including overtime, or eight hours if they are night shifts and/or the work is demanding, monotonous, dangerous and/or safety-critical
- establish shift rosters ahead of time and avoid sudden changes of shifts to allow workers to plan leisure time
- where split shifts are used, arrange their timing so sleep is not disrupted due to the times required to be at work
- ensure appropriate supervision during periods of low alertness
- set standards and allow time for communication at shift changeover, and
- offer alternatives to workers who may have difficulty adjusting to working hours.

Environmental conditions

Where possible:

- avoid working during periods of extreme temperature
- consider the heat and cold, requirements for protective equipment, and devices or facilities for heating, cooling, shelter, rest rooms, etc.
- install devices such as adjustable, vibration-free seats in machinery and vehicles, and
- consider lighting, safety and security requirements for the working environment.

Individual factors and factors outside work

Where possible:

- implement systems that prevent an incident occurring should a fatigue-affected individual have a lapse in concentration, and
- provide training and information on fatigue management.

4. Develop fatigue management policies and procedures

Areas to be considered include:

- the length and frequency of shifts
- overtime and on-call arrangements
- handover protocols
- emergency procedures
- communication
- work in remote areas or in isolation
- driving to or from work
- excess working hours, and
- rest breaks.



5. Supervision

- Supervisors should be trained in fatigue management, and be able to recognise fatigue in workers.
- Supervisors must be provided with resources and support to implement workplace policies and procedures. This will ensure that fatigued workers are removed from the working environment until they are adequately rested and capable of performing the work tasks.
- Supervisors are responsible for monitoring overall work patterns and rostering arrangements.
- To identify potential hazards and discuss measures for managing fatigue, handover and general communication with crews is essential.

6. Training

The fatigue management plan needs to include a program for providing information and training to workers on issues such as:

- health and safety responsibilities for everyone in the workplace
- the body clock and circadian rhythms
- risk factors for fatigue
- recognising symptoms of fatigue
- control measures that have been implemented to manage fatigue, (e.g. procedures or ergonomic designs), and why these have been implemented
- the effects of medication, drugs and alcohol
- nutrition, fitness and health issues and how they relate to fatigue, and
- balancing work/life demands.

7. Record keeping

- To ensure excessive hours and overtime can be identified and managed appropriately, records of shift arrangements and working hours need to be kept
- Incident records need to be maintained, (e.g. to provide information on the types of incidents and time of day they occur, and the number of shifts worked prior to these incidents). Records should be used as a resource to inform the risk assessment and review process.
- Records of processes for monitoring and reviewing the fatigue management plan should be kept. This will ensure that control measures remain effective and new hazards are identified and addressed.

Checklist One – Vessel/Work Environment Checklist – General OHS Issues

Checklist One 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.

On arrival of ship/prior to work commencing

PERSONNEL

Item		Circle	
1	Have Health and Safety Representatives (HSRs), supervisor/foreman been identified for this inspection and ongoing vessel inspections?	Yes	No
2	Have other relevant personnel been identified to participate in the inspection process? (Ship's Master/appropriate crew member/other)	Yes	No
3	Have all workers* been inducted?	Yes	No
4	Are all workers* supervised by a competent person†?	Yes	No
5	Are staff numbers adequate for this job?	Yes	No
6	Are skills/competencies of workers* adequate for this job?	Yes	No
7	Have workers* been advised of any changes to work procedures and specific requirements for the vessel and operation?	Yes	No
8	Has sufficient time been allowed to discharge the load?	Yes	No

*†See page 35.

EMERGENCY PROCEDURES

Item		Circle	
9	Have requirements for the vessel and operation been identified?	Yes	No
10	Does the emergency plan identify all responsible personnel?	Yes	No
11	Have language barriers been identified and considered in the emergency plan for this vessel? (e.g. with ship's crew)	Yes	No
12	Have ship-shore communication protocols been established and communicated?	Yes	No
13	Are all workers* inducted/trained in the emergency procedure?	Yes	No
14	Is there a backup communication system?	Yes	No
15	Are workers* trained in using the backup communication system?	Yes	No

*See page 35.

During operation – dockside

GENERAL

Item		Circle	
16	Are physical conditions monitored throughout the operation?	Yes	No
17	Are Bureau of Meteorology (BOM) contacts identified and maps available?	Yes	No
18	Have weather conditions been considered in planning operations?	Yes	No
19	Have personnel been issued with appropriate weather gear?	Yes	No
20	Is appropriate fire fighting, first aid and safety rescue gear available?	Yes	No
21	Are lighting levels on wharf suitable for the tasks and environment?	Yes	No
22	Have noise levels been assessed?	Yes	No
23	Has appropriate hearing protection been provided where required?	Yes	No
24	Are walkways and other surfaces clear of obstructions and residue build-up? (e.g. loose gear, residual cargo, debris, oil, power cables, overhead fittings)	Yes	No
25	Are all portable electrical leads tested and tagged?	Yes	No
26	Are leads for portable electric lighting or power devices rigged to ensure they do not interfere with access and egress?	Yes	No

TRAFFIC MANAGEMENT

Item		Circle	
27	Are controls in place to separate workers* from powered mobile plant?	Yes	No
28	Are all tasks involving potential interaction of people and powered mobile plant supervised?	Yes	No
29	Are warning signs and speed limits displayed? (e.g. prohibited entry, pedestrian walkways)	Yes	No
30	Are all travel surfaces well maintained and in good condition?	Yes	No

*See page 35.

APPLIANCES, GEAR, ETC.

Item		Circle	
31	Are log books available for all items of plant, equipment and gear?	Yes	No
32	Is a gear register available for all equipment?	Yes	No
33	Has all ship's gear that is to be used by stevedores for loading/unloading been inspected to ensure it is safe for use?	Yes	No
34	Is all gear used in accordance with its marked Safe Working Load (SWL)/Working Load Limit (WLL)?	Yes	No
35	Have all lifting appliances been appropriately tested and serviced?	Yes	No
36	Is the load shifting/bearing equipment suitable for the task?	Yes	No
37	Are there any damaged or non-conforming items?	Yes	No

During operation – vessel

GENERAL

Item		Circle	
38	Are physical conditions monitored throughout the operation?	Yes	No
39	Are there obvious non-conformances with required standards? (Marine Orders/ILO Code of Practice. If yes, refer matter to appropriate authority)	Yes	No
40	Is the vessel type appropriate for the cargo?	Yes	No
41	Is ship's cargo/stowage plan available to assist with discharge planning?	Yes	No
42	Has advice on vessel/cargo condition been received from previous port?	Yes	No
43	Has advice on vessel/cargo condition been provided to forward port?	Yes	No
44	Is appropriate fire fighting and safety rescue gear available?	Yes	No
45	Are all mooring lines taut and in good order so as to prevent sudden movement? (If not, refer matter to Ship's Master)	Yes	No

GANGWAY

Item		Circle	
46	Is there safe means of access between wharf and vessel? (platform, screens, nets, handrails, obstructions, signage)	Yes	No

DECK

Item		Circle	
47	Are there safe means of access to vessel operating areas? (check for damaged handrails, grab rails, side rails)	Yes	No
48	Are all walkways and other surfaces clear of obstructions and residue build-up? (e.g. loose gear, residual cargo, debris, oil, power cables, overhead fittings)	Yes	No
49	Are appropriate fixed ladders and work platforms available?	Yes	No
50	Have requirements for temporary installations been identified? (e.g. portable ladders, access platforms)	Yes	No
51	Are all temporary ladders secured at least one metre from the top?	Yes	No
52	Have all areas where falls are possible been identified?	Yes	No
53	Are appropriate fall protection/prevention mechanisms available?	Yes	No
54	Have all areas where falls from height are possible been identified?	Yes	No
55	Are physical barriers in place to prevent falls from height?	Yes	No
56	Are waste bins readily available?	Yes	No
57	Are storage areas for loose items sufficient and well-located?	Yes	No
58	Are all portable electrical leads tested and tagged? (refer AS/NZS 3760:2003)	Yes	No
59	Are leads for portable electric lighting or power devices rigged to ensure they do not interfere with access and egress?	Yes	No
60	Are work areas adequately ventilated with safe atmosphere? (e.g. enclosed, restricted or confined areas)	Yes	No
61	Has testing for oxygen-deficient atmospheres or other contaminants been done?	Yes	No
62	Has appropriate respiratory equipment been issued?	Yes	No
63	Is all respiratory equipment well maintained?	Yes	No

TRAFFIC MANAGEMENT

Item		Circle	
64	Is there a system in place to prevent people from accessing areas where loads are being lifted/lowered?	Yes	No
65	Is there a system to prevent people from entering the path of travel of a suspended load?	Yes	No
66	Have any risks from interaction of workers* and powered mobile plant been identified?	Yes	No
67	Are controls in place to separate workers* from powered mobile plant?	Yes	No
68	Are all tasks involving potential interaction of people and powered mobile plant supervised?	Yes	No
69	Are warning signs and speed limits appropriately displayed? (e.g. prohibited entry, pedestrian walkways)	Yes	No
70	Is there interaction of people with powered mobile plant or equipment in restricted areas?	Yes	No
71	Is any interaction of people and powered mobile plant in restricted areas adequately supervised?	Yes	No

*See page 35.

APPLIANCES, GEAR, ETC.

Item		Circle	
72	Is a history of ship-board equipment available?	Yes	No
73	Are log books (including preventative maintenance schedules) available for all items of plant, equipment and gear?	Yes	No
74	Has all ship's gear been inspected to ensure it is safe for use?	Yes	No
75	Is a gear register available for all equipment?	Yes	No
76	Is all gear used in accordance with its marked Safe Working Load (SWL)/Working Load Limit (WLL)?	Yes	No
77	Have all lifting appliances been appropriately tested and serviced?	Yes	No
78	Is all load shifting/bearing equipment suitable for the task?	Yes	No
79	Are there any damaged or non-conforming items?	Yes	No

***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.

†competent person, in relation to a specified task, refers to a person who has, through a combination of training, education and experience, acquired knowledge and skills that enable the person to correctly perform that task.

Actions for follow-up

[illegible]

Sign-off (supervisor/person in charge)

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

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

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