

# **Consultation Regulation Impact Statement for the Draft Model Code of Practice: Managing Risks in Stevedoring**

## **Safe Work Australia**

**29 October 2013**

This Consultation Regulation Impact Statement should be read with the draft model Code of Practice: *Managing Risks in Stevedoring*.

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## Glossary

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ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ACTU	Australian Council of Trade Unions
COAG	Council of Australian Governments
Cth	Commonwealth
NSW	New South Wales
NT	Northern Territory
OBPR	Office of Best Practice Regulation
OHS	Occupational Health and Safety
PCBU	Person conducting a business or undertaking
Qld	Queensland
RIS	Regulation Impact Statement
SA	South Australia
Tas	Tasmania
Vic	Victoria
WA	Western Australia
WHS	Work Health and Safety

## Foreword

This Consultation Regulation Impact Statement (Consultation RIS) seeks the views of stevedoring operators, government regulators, workers and the public on the costs and benefits of the three options being considered to improve management of work health and safety risks in the stevedoring industry.

In particular we are seeking feedback on:

- The nature and extent of the problem
- The preferred option to address the perceived problem and to better manage risks in stevedoring
- The assumptions and methodology used to calculate costs of implementation of the draft model Code of Practice: *Managing risks in stevedoring* (the draft model Code)
- Whether implementation of the draft model Code is likely to achieve the necessary reductions in fatality and injury incidence rates to offset estimated costs of its implementation, and
- The degree to which businesses have already implemented existing jurisdictional law and guidance and how effective it is.

Within the Consultation RIS the following questions have been raised.

### ***Questions for Public Comment***

#### *Section 3 – Statement of the problem*

Are there any other issues with the quality of existing guidance which are an impediment to its application in the stevedoring industry?

Are there any other issues which may affect jurisdictional adoption of existing guidance material?

How does jurisdictional adoption of guidance affect compliance with safety requirements in the stevedoring industry?

#### *Section 6 – Analysis of expected changes from the reform*

For each of the key components of the draft model Code (listed in Appendix B), what are the costs and benefits of implementation for you and/or your business?

#### *Section 7 – Anticipated costs and benefits*

What costs and benefits do you anticipate from implementation of the draft model Code of Practice?

## Executive Summary

Sixteen stevedoring workers have died in the past 12 years from work related injuries. Workers' compensation data shows high rates of serious injury in stevedoring compared to other industries. For the 2011–12 financial year provisional data indicates a serious injury incidence rate more than two times that of the transport and storage sector as a whole, four times that of the construction sector and five times that of all sectors.

Model Work Health and Safety (WHS) laws developed by Safe Work Australia have now been adopted in seven of the nine jurisdictions. This provides the opportunity to implement a new, national approach to tackle the significant health and safety issues in the stevedoring industry.

Nationally developed guidance for the stevedoring industry has been available since 2009. This guidance is based on pre-harmonisation of jurisdictional WHS laws. Only three states use or reference the guidance material. Additional guidance is provided to support duty holders to manage work health and safety risks including those for hazardous manual tasks, noise, falls, plant and first aid.

The activities in the stevedoring industry are also subject to the *Navigation Act 2012* and associated Marine Orders as well as the *ILO Code of Practice: Health and Safety in Ports*.

### *Options*

This Consultation RIS considers four options; the status quo (Option 1), updated model guidance (Option 2), a model Code of Practice (Option 3) and model regulations for the industry (Option 4).

Maintaining the status quo, (Option 1) without further measures to address high rates of serious injury and fatality in stevedoring is not viewed as an acceptable option.

Updating existing guidance (Option 2) using the harmonised WHS framework may assist duty holders to better understand their obligation and voluntarily introduce changes which may improve safety performance.

If implemented, a draft model Code of Practice (Option 3) could also provide consistent practical guidance to organisations and workers on identifying hazards and managing risk associated with stevedoring. It is anticipated that the evidentiary status of model Codes of Practice may be an additional inducement for duty holders to comply with WHS laws, and is therefore the preferred option. A draft model Code of Practice: *Managing risks in stevedoring* (the draft model Code) has been developed and is also available for comment.

The draft model Code covers loading and unloading vessel cargo, stacking and storing on the wharf as well as receipt and delivery of cargo within a terminal or facility. The draft model Code provides guidance on how to manage health and safety risks associated with shore-based operations, operations on board a ship and inside a ship's hold. The draft model Code is based on current guidance material, the model WHS Act, Regulations and Codes of Practice, the *ILO Code of Practice: Health and Safety in Ports* and the *Navigation Act 2012* and associated Marine Orders.

Industry specific regulation (Option 4) under WHS laws has also been considered but is anticipated to result in additional costs and provide less flexibility than a model Code of Practice. The industry is already highly regulated and additional regulations will provide little practical guidance.

### *Anticipated costs and benefits*

The anticipated costs for business to implement the draft model Code are minor as it is based on existing regulation applying to the industry. However costs will be incurred where businesses are currently non-compliant with their existing legal requirements under the WHS and maritime laws.

The draft model Code recommends use of training needs analysis and development of training plans to assist businesses comply with existing requirements to provide relevant training to workers. These recommendations may impose some additional costs to businesses. The estimated costs to the stevedoring industry as a whole are estimated to be an initial adjustment cost of \$35 717 and ongoing costs of \$17 858 per annum to implement and maintain training plans.

It is anticipated there would be no additional costs to regulators from implementation of the draft model Code. In order to effectively regulate the stevedoring industry under current legislative arrangements, regulators in each jurisdiction would be required to understand hazards, risks and relevant control measures for the industry, regardless of whether that jurisdiction had implemented the existing national guidance material.

Using these figures it is estimated a reduction in serious claims of 1 per cent in the first year and 0.5 per cent in the second year would be sufficient to ameliorate the cost of implementing the draft model Code across Australia.

Anticipated benefits from implementing the identified provisions in a draft model Code are:

- A decrease to serious injury rates, and subsequently, to associated direct and indirect costs.
- Greater adherence to minimum standards due to the higher legislative profile of model Codes of Practice.
- Greater awareness of the need to manage the risks of stevedoring as a work health and safety issue, because of the evidentiary status of model Codes of Practice.

There is not sufficient evidence available to categorically establish these benefits will be realised or to quantify the benefits that may result. This Consultation RIS seeks public comment and views from businesses, regulators and the wider community on the anticipated impacts (costs and benefits) of implementing the draft model Code and whether the required benefits will be achieved to cover the estimated costs of implementation.

It is anticipated implementing the draft model Code has the potential to have the greatest net benefit to business and workers. The anticipated implementation costs are minimal and a model Code of Practice allows flexibility for businesses to tailor requirements to suit their needs. On this basis Option 3, implementing a model Code of Practice, is recommended.

# 1 Introduction

## 1.1 Regulation Impact Statement (RIS) Process

As part of developing solutions to regulatory shortfalls, it is a requirement of the Council of Australian Governments (COAG) to conduct a regulatory impact analysis for agreements or decisions of a regulatory nature. The development of a RIS is a two-stage process involving the preparation of a Consultation RIS and a Decision RIS.

The purpose of the Consultation RIS is to seek public comment on the regulatory options being considered and to seek information about the likely impact of those options to enable a more detailed cost benefit analysis to be developed for the Decision RIS.

The Decision RIS uses the information gathered during the public comment phase to refine the options being considered and to develop a cost-benefit analysis that assesses the costs and impacts associated with the final proposed regulatory model.

The Decision RIS provides information to assist Ministers when making the decision as to whether to accept a proposal put before them.

## 1.2 Structure of the Consultation RIS

This Consultation RIS follows a standard COAG RIS structure and provides a level of information and analysis commensurate with the magnitude of the problem and the size of the likely impact of the regulatory proposal.

A brief overview of the stevedoring industry in Australia is provided in Chapter 2, including industry composition, safety regulation and safety performance.

Chapter 3 seeks to identify the problems causing the industry's poor safety performance. Government intervention may be required to provide greater certainty and guidance about managing the risks involved in stevedoring. A more consistent and harmonised national approach to managing risks in stevedoring has the potential to improve safety performance. These are the primary objectives of the proposed reforms and are discussed in detail in Chapter 4.

The options to meet the objectives are discussed in detail in Chapter 5. This chapter also discusses the policy development process that has influenced the choice of possible options going forward.

Chapter 6 discusses the anticipated jurisdictional impacts of implementation of the draft model Code, and variations and/or departures of existing jurisdictional materials from the proposed content of the draft model Code.

The costs and benefits are estimated in Chapter 7 in order to illustrate the net impact of the proposed options.

Chapter 8 summarises the consultation process undertaken for this RIS and draft model Code, and comment to date by key stakeholders.

A conclusion is provided in Chapter 9.

A number of appendices are provided containing background and additional explanatory information.



## 2 Industry Overview

Marine transport accounts for all bulk imports and exports, nearly three-quarters of the value of all imports and exports of cargo to Australia. It is a key component in interstate trade via the coastal marine transport sector.

Stevedoring is the process of loading and unloading ships. This includes all activities directly connected with:

- loading or unloading of vessel cargo
- stacking and storing on the wharf, and
- receiving and delivering cargo within the terminal or facility.

The main sectors within the stevedoring industry are:

- container terminal operations – the loading and discharge of container vessels at terminal ports, largely using advanced mechanical technology, and
- automotive and general stevedoring – receiving, storing, loading, discharging and/or delivering general and specialist cargo such as motor vehicles, specialised containers, steel, paper, forest products and bulk cargo.

The stevedoring industry is included in the Transport and Storage Industry Division where approximately 86% of workers are classed as employees and therefore covered by workers' compensation. The 2006 ABS Census showed 41 per cent of persons employed in Services to Water Transport were employed in the stevedoring industry. Approximately 6 102 people were employed in stevedoring in 2011–12<sup>1</sup>, representing 0.05 per cent of the Australian workforce.

Australia has over 60 significant ports, five of which are considered to be major freight distribution hubs. These are located in Brisbane, Melbourne, Sydney, Fremantle and Adelaide. These five terminals combined handled over 76 million tonnes of cargo in the period of July to December 2012. Australian ports handled 383.5 billion dollars or 92.1 million tonnes of international freight in the 2010–11 financial year.

At the end of the 2010-11 financial year the Australian Bureau of Statistics reported there were a total of 95 businesses in Australia classed as providing stevedoring services. This included 41 non-employing, 36 small (1-9 employees) and 18 medium (20—199 employees) businesses. No large businesses (over 200 employees) were reported.

IBIS World data provides insight into stevedoring business structures. Its 2013 report indicates two organisations made up of many smaller separately registered subsidiary businesses dominate the stevedoring industry. Between them, the two organisations generate 97.4 per cent of all industry revenue.<sup>2</sup> Set up costs and other barriers to industry entry mean that, while there are many small and medium businesses operating in the industry, most are subsidiaries of larger organisations.

The stevedoring industry has changed significantly in recent years. Competitive pressures have led to the use of new technology and equipment, including automated container terminals.

### 2.1 Current jurisdictional regulatory settings

The stevedoring industry is currently required to comply with general WHS laws, as well as industry specific legislation.

Stevedores work on shore and on board ships and are therefore subject to both the jurisdictional WHS laws and to Marine Orders under the Commonwealth *Navigation Act 2012*.

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<sup>1</sup> IBISWorld Pty Ltd, *Stevedoring Services in Australia*, May 2013

<sup>2</sup> Ibid

Although the draft model Code is focussed on compliance under WHS laws, it also includes references to relevant Marine Orders and recognises that in some circumstances the WHS laws and Marine Orders operate concurrently.

### 2.1.1 Work Health and Safety laws

The WHS laws apply generally to workplaces in Australia. Under the model WHS Act (which has been adopted in all jurisdictions except Victoria and Western Australia):

- A person conducting a business or undertaking (PCBU) has the primary duty to ensure, so far as is reasonably practicable, that workers and other persons are not exposed to health and safety risks arising from the conduct of a business or undertaking. This duty includes a requirement to ensure, so far as is reasonably practicable:
  - the provision and maintenance of a work environment that is without risk to health and safety
  - the provision and maintenance of safe systems of work
  - relevant information, instruction, training and supervision is provided, and
  - the health of workers and the conditions of the workplace are monitored for the purpose of preventing illness or injury.
- Officers like company directors must exercise due diligence to ensure the business or undertaking complies with the WHS Act and Regulations. This includes taking reasonable steps to ensure the business or undertaking has and uses appropriate resources and processes to eliminate hazards or minimise risks.
- Workers must take reasonable care for their own health and safety and must not adversely affect the health and safety of other persons. Workers must also comply, so far as the worker is reasonably able, with any reasonable instruction and cooperate with any reasonable policy or procedure relating to health and safety at the workplace. A similar duty is placed on other persons at the workplace, for example visitors.

The model WHS Act recognises the seriousness of work-related injury, illness and deaths. The model WHS Act provides a range of offences including one targeted at conduct of the most serious kind involving recklessness and provides for five years imprisonment. Maximum fines for this offence are \$3 million for a body corporate and \$600 000 for a PCBU as an individual or officer and \$300 000 for a worker.

Employers and employees owe equivalent duties of care under the work health and safety legislation in place in Victoria and WA.

Although there are industry specific regulations for construction work and mining under the model WHS Regulations, there are no provisions specifically for stevedoring which is also a high risk industry. However, there are a number of regulations relevant to stevedoring, including:

- Hazardous Manual Tasks
- Noise
- Falls
- Licensing of high risk work (e.g. operating a crane)
- Plant, and
- First aid.

## Codes of Practice

There are currently no approved codes of practice specific to stevedoring under Australian WHS laws. However, a number of existing model WHS Codes of Practice apply to hazards found in the industry, for example:

- Hazardous manual tasks
- Managing the risk of falls at workplaces
- Managing noise and preventing hearing loss at work
- Managing the work environment and facilities
- First aid in the workplace
- Managing risks of plant in the workplace
- Managing electrical risks at the workplace, and
- Cranes.

## Guidance material

In 2009 Safe Work Australia released the following guidance material on managing health and safety risks in stevedoring intended for adoption nationally:

- Working safely on the waterfront
- Working safely with general cargo – Steel products, and
- Working safely with containers.

These guidance documents were primarily based on the Victorian Waterfront Project Guidance. This material was developed prior to harmonisation of WHS laws, and has been adopted or referenced by only three of the nine jurisdictions.

### 2.1.2 Other marine safety laws

The *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* regulates domestic commercial vessel safety and establishes the Australian Maritime Safety Authority (AMSA) as the National Regulator for domestic commercial vessels in Australian waters.

Commercial vessels which operate internationally, foreign vessels and vessels which maintain certification under the International Convention for Safety of Life at Sea are regulated by AMSA under the *Navigation Act 2012*.

Marine Orders are a form of delegated legislation made under the following Commonwealth legislation:

- *Navigation Act 2012*
- *Protection of the Sea (Prevention of Pollution from Ships) Act 1983*
- *Protection of the Sea (Harmful Anti-fouling Systems) Act 2006*, and
- *Marine Safety (Domestic Commercial Vessel) National Law Act 2012*.

Marine Orders implement a number of international conventions of which Australia is a signatory, including the International Convention for the Safety of Life at Sea (SOLAS).

The Marine Orders most relevant to stevedoring activities are:

- Marine Order 32 (*Cargo handling equipment*) regulates the use of material handling equipment, whether ship or shore equipment, when it is used for loading or unloading ships
- Marine Order 42 (*Cargo stowage and securing*), and
- Marine Order 44 (*Safe containers*).

Most of the Marine Orders currently in force under the *Navigation Act 2012* were made under the previous *Navigation Act 1912* and continue to have effect subject to modifications made to them by *Marine Order 4 (Transitional Provisions) 2013*.

The *Occupational Health and Safety (Maritime Industry) Act 1993* (the OHS (MI) Act) provides a similar duties based regime to the WHS laws which aims to minimise risks to the health and safety of persons employed on vessels while they are at work. The OHS (MI) Act imposes a general duty on the operator of a prescribed ship or unit to ensure that the workplace(s) under their control are safe and without risk to health. This general duty encompasses the safe handling, storage and transport of plant and systems of work. Specific to dock work, the OHS (MI) Act requires the operator of a prescribed ship or unit to take all reasonable steps to ensure the ship is not loaded or unloaded in such a manner as to make it unsafe for employees, contractors or other persons, or constitute a risk to their health.

The International Labour Organisation (ILO) Code of Practice *Safety and Health in Ports* reflects the Safety and Health (Dock Work) Convention (No. 152) and Recommendation No. 160. It covers all aspects of work in ports where goods or passengers are loaded onto or unloaded from ships, including work incidental to such loading or unloading activities in the port area. Australia is currently actively considering ratification of Convention No. 152.

### 2.1.3 Relationship between WHS laws and Marine Orders Part 32

The state and territory WHS regulators and AMSA have agreed cooperative arrangements to deal with safety incidents involving ship-based cargo handling on the basis that AMSA's Marine Order 32 *Cargo Handling Equipment* (MO 32) under the *Navigation Act 2012* operates concurrently with jurisdictional WHS legislation.

Memoranda of Understanding clarify how the WHS regulators and AMSA will respond to WHS issues which arise in relation to stevedoring activities in circumstances where both state/territory and Commonwealth legislation may apply concurrently. More information regarding these Memoranda of Understanding is available online at: [www.amsa.gov.au/Shipping\\_Safety/OHS/OHSMOUs.asp](http://www.amsa.gov.au/Shipping_Safety/OHS/OHSMOUs.asp).

The background to the previous *Navigation Act 1912* and MO 32 indicates there is no intention to exclude the operation of the jurisdictional WHS laws.

The provision for regulations under the *Navigation Act* referred to as MO 32 to protect the health and security from injury of persons engaged in the loading and unloading of ships was included in the original *Navigation Act*, which was enacted some sixty years before the 'Robens-style' duties-based WHS legislation was first introduced into Australia in the 1970s.

Similarly, the antecedents to MO 32 were regulations originally made in 1928 under the *Navigation Act, Navigation (Loading and Unloading – Safety Measures) Regulations 1928*. These regulations were repealed in 1986 to be superseded by the first issue of MO 32, which was reissued in 1997, well after the duties-based WHS legislation was enacted in Australia.

The provenance of MO 32 demonstrates that, while the *Navigation Act's* regulation of cargo handling operations predated 'Robens-style' WHS legislation, the original issue and reissue of MO 32 occurred after the modern WHS legislation had become established without exhibiting any intention to override these WHS regimes.

The codification of general duties by the 'Robens-style' WHS legislation is accepted as overlapping other regulatory duties at a number of levels. This pattern of overlap is reflected in the relationship between MO 32 and the WHS regime applying to Australian ships under the

OHS (MI) Act. The OHS (MI) Act specifically states in section 7 that it is not to affect the operation of the Navigation Act.

In section 25, the OHS (MI) Act provides for the general duties of a person engaged in loading and unloading a ship, to which the OHS (MI) Act applies. These duties overlap with the duties of the person in charge of loading and unloading a ship at a port in Australia, as required by MO 32. MO 32 is intended to operate concurrently with the OHS (MI) Act. The two regimes are capable of operating together and have done so for the past 20 years. The same can be argued to apply to the duties required under the jurisdictional WHS laws where they overlap MO 32 requirements and are capable of concurrent operation with MO 32.

Hence, the jurisdictional WHS laws operate concurrently with the requirements of MO 32 to the extent possible. However, in the case of any operational inconsistency where the Commonwealth and State powers are sought to be exercised simultaneously, the Commonwealth power would prevail.

## 2.2 Safety performance in the stevedoring industry

The stevedoring industry has a high rate of serious injuries and fatalities compared to other industries. Provisional data from 2011-12 indicates the incidence rate for serious injuries in the stevedoring sector is approximately two times higher than in the transport and storage sector, four times higher than in the construction sector and five times higher than the rate taken across all sectors (see Appendix A).

The majority of serious injuries and fatalities in stevedoring arise from the constantly changing and largely unpredictable working environment. The major risks to people working in stevedoring include:

- being struck by equipment (e.g. forklifts, vehicles and other powered mobile plant) or cargo (e.g. containers or steel)
- musculoskeletal injuries resulting from handling of cargo and cargo securing equipment
- falls from height
- slips and trips
- noise
- environmental hazards (sun, heat, cold)
- fatigue, and
- exposure to chemicals.

### 2.2.1 Fatalities

Over the 12 years from 2000–01 to 2011–12 (preliminary), 16 stevedoring workers have died from work related injuries. *Long-term contact with chemicals or substances* accounted for 44 per cent of fatalities (7 deaths). One fatality each occurred from the following causes:

- hit by falling objects
- hit by moving objects
- trapped between stationary and moving objects
- trapped between moving machinery
- exposed to environmental heat
- exposed to non-ionising radiation
- falling from a height
- suicide or attempted suicide, and
- an unspecified mechanism of injury.

### 2.2.2 Serious Injuries and illnesses

Preliminary workers' compensation data for 2011–12 show there were 350 claims for serious incidents which includes fatalities, injuries and illnesses. , The incidence rate is 76.2 claims per 1 000 employees. The number of claims for serious incidents is relatively constant from year to year, ranging from 340 to 390 (average 369) since 2003-04.

The incidence rate of serious claims in stevedoring remains consistently and significantly higher than the rate of 12.2 for all industries and for the Transport and Storage Division (25.2 claims per 1 000 employees).

Over the past six years *body stressing* accounted for 40 per cent of claims with many of these claims due to muscular stress while handling objects other than lifting, carrying or putting down. *Falls, trips and slips* of a person accounted for 24 per cent of claims with over half of these from *falls on the same level*. *Being hit by moving objects* accounted for 11 per cent of claims which includes *being hit by falling objects* (69 claims) and *being trapped between stationary and moving objects* (56 claims).

Over the period from 2006–07 to 2011–12 (preliminary), *non-powered hand tools, appliances and equipment* accounted for almost one-quarter (23 per cent) of serious claims. Serious claims arising from *environmental agencies* accounted for 22 per cent, including 6 per cent due to effects of the sun.

### 2.2.3 Breakdown of injury and illness data by jurisdiction and business size

Although data on serious injuries, illness and fatalities are available for each jurisdiction, details of employment numbers in each jurisdiction are not. As a consequence, it is not possible to provide a comparison of injury, illness and fatality rates per worker across the jurisdictions and therefore establish whether the existing guidance material has been effective at improving safety in those jurisdictions.

It is also not possible to compare incidence rates for sole traders, small, medium or large businesses to provide an indication of the relative level of compliance with existing requirements in those businesses.

### 3 Statement of the Problem

Safe Work Australia is seeking to address poor safety performance in the stevedoring industry demonstrated by the high rate of fatalities and serious injuries. Some causes are known. There is, however, insufficient information or data to definitively determine or reliably estimate whether the high incidence rates are due to a lack of compliance with WHS requirements.

In the absence of further information, this section explores the problems which may influence poor safety performance in the stevedoring industry.

It also seeks additional information to better define the problem. This will assist to select an appropriate option in the decision RIS.

A lack of good quality guidance for the stevedoring industry, particularly given the overlapping regulatory environment, is a known problem. In addition to requiring updating to reflect the harmonised WHS laws, a review in 2012 found the existing guidance to be deficient in a number of areas.

Additional problems which may contribute to poor safety performance addressed in this Chapter include:

- low uptake of the existing guidance by the jurisdictions
- poor compliance with existing guidance in those jurisdictions that have taken up the guidance, and
- debate within the industry on reasonably practicable solutions to eliminate or minimise stevedoring hazards and risks.

These three factors may be interrelated.

#### 3.1 Confusion between the application of WHS laws and Marine Orders

Discussions with industry stakeholders during the review of the existing guidance material identified confusion between requirements under WHS laws and Marine Orders due to the overlapping regulatory regimes relating to health and safety in stevedoring activities (see section 2.1).

#### 3.2 Quality of existing guidance material

Guidance material for stevedoring safety was developed to assist duty holders meet safety requirements set out in the overlapping regulatory regimes applicable to the industry. This guidance requires updating to reflect changes to WHS laws introduced in most jurisdictions from 1 January 2012. A stevedoring Temporary Advisory Group (TAG) was established by Safe Work Australia to review the guidance material during 2012. The review found the guidance:

- has not been effective as a practical resource in the workplace
- is disconnected from the users and lacks credibility as the technical content is of a poor standard, and
- fails to achieve the outcomes of providing a safe workplace as it does not address the key issues in a useful way.

The stevedoring TAG identified the following information gaps:<sup>3</sup>

- use of ladders in holds, portable ladders any other ladder issues not covered by MO 32
- exclusion zones
- emergency procedures for cranes
- work at height risks

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<sup>3</sup> Stevedoring Working Group – Workshop 17-18 May 2011

- key factors to be considered when developing a traffic management plan
- assessment of dogman/hatchman/lookout/safety observer
- crane boxes
- lashing and unlashings
- key factors for wind and storms, straddles and ships cranes, work under cranes and working near suspended loads in the ships hold and on the wharf during pinning including loss of loads
- ship design issues—hatch lids raised from walkways by more than one metre
- lighting levels working on the deck and in the hold
- noise, and
- risks associated with mooring.

The review also found inconsistencies in the level of detail provided in guidance. For example, extensive information on managing fatigue is included, while little or no practical guidance is provided for industry specific issues such as lashing.

The formatting and layout of the guidance was also thought to make it less usable. For example, the document contains checklists intended to guide the reader through a range of issues to be considered in managing risks in stevedoring without providing guidance on several items in the checklists.

#### ***Question for Public Comment***

Are there any other issues with the quality of existing guidance which are an impediment to its application in the stevedoring industry?

### **3.3 Uptake by jurisdiction**

Nationally developed guidance material for stevedoring has been available since 2009, however, only Victoria, Queensland and South Australia provide guidance for stevedoring which is consistent with or directly references the material.

Jurisdictions agreed to harmonise WHS laws while the stevedoring guidance was being developed. Knowing the laws underpinning the guidance were likely to change may have impacted regulators' decision to adopt the guidance material.

The WHS laws have now changed in most jurisdictions meaning elements of the guidance material are out of date. This makes it unlikely any further jurisdictions will adopt the material.

#### ***Questions for Public Comment***

Are there any other issues which may affect jurisdictional adoption of existing guidance material?

How does jurisdictional adoption of guidance affect compliance with safety requirements in the stevedoring industry?

### **3.4 Duty holder compliance**

The extent of business compliance with existing guidance and regulations is unknown. Overlapping regulation, such as applies to the stevedoring industry, can be an impediment to compliance. Practical guidance material can assist business to comply with regulations. Businesses are, however, unlikely to follow guidance material unless it is up to date and has been adopted and promoted by their regulator.



### 3.4.1 Stakeholder acceptance

Compliance with existing guidance material is voluntary, thus acceptance by stakeholders including business and unions in addition to the regulator, is key to increasing compliance.

Stevedoring employer and employee representative organisations generally agree safety outcomes in the industry need to be improved. As demonstrated during the 2012 review, both believe the current guidance to be unhelpful.

## 4 Objectives of the proposed reform

The objectives of the proposed reform are to reduce the incidence of serious injuries and fatalities in the stevedoring industry, increase compliance with existing requirements and reduce the overall costs to Australian business and the community by:

- providing authoritative guidance on how to manage health and safety risks in the stevedoring industry, including guidance on the interaction between WHS laws and Marine Orders under the *Navigation Act 2012*, and
- improving the uptake of known effective controls in the stevedoring industry.

## 5 Options to achieve the reform

### 5.1 Options considered

The following options for addressing the problem have been identified in this Consultation RIS:

**Option 1** – Retain the status quo—maintain existing national guidance material on stevedoring

**Option 2** – Update existing guidance material on stevedoring

**Option 3** – Develop a model Code of Practice for managing risks in stevedoring

**Option 4** – Include industry specific provisions in the model WHS Regulations

The options are discussed in greater detail below.

### 5.2 Discussion of options

#### 5.2.1 Option 1: Retain the status quo – not recommended

This option would maintain the guidance material: *Working safely on the waterfront* released by Safe Work Australia in 2009.

If this option is preferred, Safe Work Australia could work with jurisdictions to encourage uptake of the existing guidance material. This would not address the other factors inhibiting business's uptake of the guidance material outlined in section 3.2.

The 2012 review of guidance material for stevedoring found it has not been effective as a practical resource in the workplace.

#### 5.2.2 Option 2: Updating guidance material on stevedoring – not recommended

Updating guidance with similar content to the draft model Code proposed in Option 3 would improve the currency and quality of the material. This may improve the level of uptake by jurisdictions and business, but is not expected to be as effective as a document that has the evidentiary status of a Code of Practice as proposed under Option 3.

However, the difference in costs between this option and Option 3 for compliant businesses is minimal because a draft model Code would also be based on the national guidance material.

#### 5.2.3 Option 3: Develop a model Code of Practice – recommended

Under this option jurisdictions would agree to a model Code of Practice as part of the model WHS laws package. Under the *Inter-Governmental Agreement for Regulatory and Operational Reform in Occupational Health and Safety* (IGA) each jurisdiction has committed to adopt model Codes of Practice.

A model Code of Practice has been drafted to address shortcomings identified in the 2012 review. The content of the draft model Code is based on harmonised laws and industry safety practices. It has been informed by the 2012 review of the guidance material for stevedoring to ensure it addressed the shortcomings identified by the review.

Under the model WHS Act, codes of practice have evidentiary status in prosecution action for a breach of the Act. Where there is an approved code of practice in place the expectation is businesses will follow the code of practice to the extent necessary or demonstrate compliance with the legislation by having provisions in place that provide for an equivalent or higher standard of work health and safety.

This provides businesses with the flexibility to tailor the way they manage risks in stevedoring as appropriate for the size and circumstances of their business without introducing additional regulation to an already highly regulated industry.

A code of practice is more likely to promote adherence to minimum standards within workplaces due to its higher legislative status and the ability for a code of practice to be used in compliance and enforcement activities.

As with the draft model Code currently available for public comment, a model Code of Practice could consolidate existing guidance; this would not extend the scope of the model WHS Act or create any new duties under the model WHS Regulations or Marine Orders. If, as with the current draft, a model Code of Practice is based on the existing material available for regulators, it is anticipated it will have minimal regulatory impact on compliant business and the not-for-profit sectors. It is not possible to calculate costs for non-compliant business as the extent of compliance is not known.

#### 5.2.4 Option 4: Include industry specific provisions in the model WHS Regulations – not recommended

Under this option, all jurisdictions would need to agree to a common set of regulations for the stevedoring sector. The regulations would build on the general duty of care and would mandate specific control measures to manage the risks to health and safety arising from stevedoring activities.

As noted in section 2.1 the stevedoring industry is already highly regulated at a national level. Issues of regulatory overlap between WHS and maritime regulation already exist. Introducing further regulation is likely to reduce flexibility and therefore increase costs and regulatory burden.

Unlike a model Code of Practice, where a business can demonstrate they have met their duties by provision of an equivalent standard of health and safety, model WHS Regulations must be followed. This reduces flexibility for businesses to tailor the management of risks to suit the circumstances of their business.

A recent report titled *Review of the Seacare Scheme* did not recommend maritime safety laws be included under the model WHS laws. Instead they recommended the *Occupational Health and Safety (Maritime Industry) Act 1993* be updated so its structure and provisions are the same as the model WHS Act, except where another approach is justified in the particular circumstances of the maritime industry. The report also noted the jurisdictional issues associated with the maritime industry, and in particular, international obligations that must be met. These are not always consistent with the approach or style of the model WHS laws.

This option would likely result in greater implementation costs for businesses to comply with specific control measures than the other options. It could be particularly burdensome for businesses which under a code of practice would have greater flexibility to adapt their risk management approach to the size and nature of their business.

## 6 Analysis of expected changes from the reform

### 6.1 Overview

None of the jurisdictions have an existing code of practice or regulations specifically covering stevedoring under their WHS laws. The proposed Code of Practice is unlikely to have any significant effect on compliance costs for stevedoring operators. This is because there are no new requirements imposed by the draft model Code that are not already requirements under the model WHS legislation and under a set of prescriptive Marine Orders regulated by AMSA.

The draft model Code provides practical guidance for persons conducting a business or undertaking (PCBUs) who are involved in stevedoring activities. It covers the loading and unloading of vessel cargo, stacking and storing on the wharf, as well as receipt and delivery of cargo within a terminal or facility. The draft model Code does not apply to seafarers, but may apply to activities that involve interaction between seafarers and stevedores. The draft model Code provides guidance for stevedores on how to comply with the duties under the WHS Act and Regulations, and Marine Orders.

The draft model Code also provides guidance on how to manage health and safety risks associated with shore-based operations, as well as on board a ship and inside a ship's hold. It also provides industry-specific information on risk management; consultation, cooperation and coordination; and the provision of information, training, instruction and supervision. It identifies control measures in handling loads, storage techniques and use of plant and equipment directly relevant to stevedoring.

The draft model Code is expected to have a minimal impact in each jurisdiction if adopted, apart from the ACT where there would be no impact.

#### 6.1.1 Principal Source Documents

The draft model Code is largely based on the current guidance material for stevedoring which consists of three guides: *Working safely on the waterfront*, *Working safely with general cargo – Steel products*, and *Working safely with containers*. These booklets were based on Victorian guidance material adapted for national use by Safe Work Australia and published in October 2009:

[www.safeworkaustralia.gov.au/sites/swa/whs-information/stevedoring/pages/stevedoring](http://www.safeworkaustralia.gov.au/sites/swa/whs-information/stevedoring/pages/stevedoring)

A review of this guidance material was conducted in 2012 and public comment received during this review has informed the development of the draft model Code. Additional information from governments, industry and union stakeholders, including industry safe work instructions and procedural information, has also been considered.

Other source documents used include the model WHS Act, Regulations and Codes of Practice, the ILO *Code of Practice: Health and Safety in Ports*, the *Navigation Act 2012* and associated Marine Orders. In particular, the following Marine Orders have been used:

- Marine Order 32 - Cargo handling equipment
- Marine Order 42 - Cargo stowage and securing, and
- Marine Order 44 - Safe containers.

Relevant port specific regulation (e.g. harbour masters directions) may also apply and have been referenced.

## 6.2 Comparison of the draft model Code with existing requirements

This section compares the guidance in the draft model Code against existing legal requirements and industry practices.

The content of the draft model Code reflects the requirements in the WHS Act, Regulations and other Codes of Practice that have been implemented in seven of nine jurisdictions, as well as Marine Safety laws. The draft model Code clarifies these requirements as they apply to stevedoring but does not impose additional duties to those provided under the model WHS legislation. Analysis is provided in Table 6.1 below which shows there are not any new requirements in the draft model Code. Rather, the draft model Code provides information and practical guidance on how to comply with the duty of care under WHS laws.

The table at *Appendix B* provides a comparison of the draft model Code and existing obligations. It demonstrates how the draft model Code has drawn on current legal requirements and existing obligations to inform the content of each section of the Code.

As noted in Chapter 3, existing guidance is considered to be deficient in a number of areas. This could contribute to its poor uptake in the jurisdictions and by duty holders. The draft model Code addresses the information gaps, for example it provides more detailed guidance in relation to traffic management and handling loads. Cross reference to relevant and more targeted guidance and model Codes of Practice have been included, for example, in relation to consultation, emergency plans, and first aid.

The draft model Code provides advice on how duty holders can meet their duties under the model WHS Act by applying a risk management approach. These changes bring the guidance on stevedoring up to date with current harmonised work health and safety laws.

### **Question for Public Comment**

For each of the key components of the draft model Code (listed in Appendix B), what are the costs and benefits of implementation for you and/or your business?

### 6.2.1 Training needs analysis and training delivery plans

Section 3.4 in the draft model Code is based on the guidance material *Working safely on the waterfront*, as recommended by the Stevedoring Working Group reviewing the guidance material on 28-29 May 2012.

Stevedoring businesses are concerned this section is unnecessarily detailed, particularly in relation to information about training needs analysis and training delivery plans.

In agreeing to release the draft model Code for public comment, Safe Work Australia members agreed to retain the information as drafted and seek public comment on its usefulness and practicality.

The provision of relevant information, instruction and training is already a requirement under the WHS Act, and the WHS Regulations further require the training and instruction to be suitable and adequate having regard to the nature of the work, the nature of the risks and control measures implemented.

The draft model Code recommends a training needs analysis as a means of identifying the necessary training to be provided to stevedores, and use of a training delivery plan to ensure stevedores receive the appropriate training. Despite the requirements for training and instruction under the Act and Regulations, the draft model Code may impose some additional costs to business for undertaking a needs analysis and developing a training plan.

Training is a form of administrative control which equips the worker with the knowledge and skill to identify hazardous situations and take steps to ensure they and others are not put at risk.

Training workers ensures they understand the safety limitations of equipment they are working with and the safest way to carry out given tasks.

A training needs analysis is a systematic approach to identifying what training is required to safely undertake the work of the business or undertaking. Using a systematic rather than ad hoc approach, allows duty holders to identify the most effective, including cost effective, way of providing appropriate training for all workers over time.

### 6.2.2 Use of hatchmen/cargo space lookouts

The use of hatchmen or cargo space lookouts in stevedoring operations was raised as an issue by stevedoring businesses during development of the draft model Code, with concerns the draft model Code introduces the requirement for additional hatchmen to be used during unloading and loading of a ship, which would significantly increase costs.

To address these concerns the guidance relating to the use of hatchmen at Section 6.3 of the draft model Code has been amended to refer to and be consistent with the requirements for monitoring cargo operations in Schedule 6 of MO 32.

## 7 Anticipated costs and benefits

### 7.1 Estimated prevalence and cost

It is anticipated implementation of the draft model Code will result in greater awareness of stevedoring risks with the flow-on effect that uptake of known risk control measures will increase. Available data indicates accidents in stevedoring are significantly higher than in any other sector. Any improvement in the uptake of risk control measures described in the draft model Code will likely result in a reduction in the number of accidents in stevedoring.

### 7.2 Anticipated costs and benefits for businesses

As noted in Chapter 3 the review of current guidance material highlighted several deficiencies preventing it from being a practical resource in the workplace. By addressing these issues a model Code would provide businesses clear information on how to comply with their current duties under WHS laws.

Chapter 6 of this Consultation RIS provides an analysis of the requirements of the draft model Code with existing requirements under the WHS legislation. The analysis suggests the draft model Code will not introduce any significant requirements for stevedoring businesses beyond already existing requirements under the WHS legislation and current industry practice.

One area which may result in some additional costs for business is the requirement to undertake a training needs analysis, and develop a training delivery plan. It is estimated there would be a one-off cost to undertake a training needs analysis and develop a training delivery plan for each employing stevedoring business, with ongoing costs each year to revise and if necessary, modify those plans.

Table 7.1 – Estimated annual costs per business to implement and maintain training plans

Cost to business	Year 1	Years 2 and on
Sole traders (non-employing)	NA	NA
Small and medium business (\$ per business)	\$661	\$331
Large business	NA	NA
Total cost to industry	\$35,717	\$17,858

These calculations were based on the average wage in the stevedoring industry of \$41.34 per hour.<sup>4</sup>

The wage of the person likely to undertake training needs analysis, development of training plans and reviews may be higher than calculated in the above table. Using an estimated wage of \$82.00 per hour, approximately twice the average in the stevedoring industry, the costs to the stevedoring industry as a whole for implementing the proposal are estimated to be around \$71,000 in the first year and \$35,000 per year from year two.

As described in chapter 2, the Australian Bureau of Statistics reported the stevedoring industry is comprised of only small (1-9 employees) and medium (20—199 employees) businesses. Accordingly, costs to implement the draft model Code are only indicated for small to medium businesses.

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<sup>4</sup> IBISWorld Pty Ltd, *Stevedoring Services in Australia*, May 2013

Although some additional costs may be incurred by stevedoring businesses as a result of implementation of the draft model Code, the overall costs from its implementation are assessed as being minimal.

Using these figures, it is estimated a reduction in accepted serious claims by 1 per cent in year one and 0.5 per cent in year two and beyond would be sufficient to ameliorate the cost of implementation of the draft model Code. It is anticipated this reduction could be achieved by ensuring business use a systematic rather than ad hoc approach to training in order to eliminate the risk of workers by not receiving adequate training.

### **7.3 Anticipated costs and benefits for workers**

Workers who are injured during stevedoring accidents bear the costs that can include health costs and a reduction in quality of life. Any reduction in accident and injury rates achieved by implementing the draft model Code and raising awareness of the risks of stevedoring activities will be of benefit to workers.

### **7.4 Anticipated costs and benefits for regulators**

Work health and safety regulators provide the most significant interface between government regulation and businesses. They play an important role in regulatory regimes by encouraging compliance through education and advice, as well as enforcing laws and regulations.

At the time of drafting this Consultation RIS and from initial discussions with regulators, none foresaw any costs increasing as a result of implementing the draft model Code. Nevertheless, it is anticipated training for inspectors and revision of publications and websites may incur some additional costs to regulators.

There may also be an increased demand on inspectorate resources in the first two years of operation and then a levelling of demand for investigations, inspections and information. This has been the experience of some regulators after the introduction of new or amended guidance material in their jurisdictions. It is anticipated these costs will be relatively low given the size of the stevedoring industry and the limited number of operators.

In order to effectively regulate the stevedoring industry under current legislative arrangements, regulators in each jurisdiction are required to understand hazards, risks and relevant control measures for the industry, regardless of whether that jurisdiction has implemented the existing guidance material.

Jurisdictions are continually improving their training materials and compliance and reporting requirements and benefits to government are likely to occur in the medium to long term.

### **7.5 Anticipated costs and benefits for government**

It is anticipated improved preventive systems will reduce injury severity and prevalence rates and thus reduce the pressures on the public health system.

Other costs to the economy include public sector costs such as the Medicare rebates for medical expenses incurred by injured workers, the cost of providing social welfare programs for injured and incapacitated workers, costs of administering compensation schemes and investigating accidents, and a potential loss of output and revenue.

It is anticipated there will be greater capacity to draw upon common and shared jurisdictional approaches to managing risks in stevedoring. It is anticipated these factors combined should be reflected in a reduction in the overall cost to Government through reduced injury severity and prevalence rates in the stevedoring industry.



## 7.6 Summary of anticipated costs and benefits

Overall, the costs of implementation of the draft model Code are estimated to be low. While benefits of implementation have not been quantified in this Consultation RIS, only a small reduction in rate of compensable accidents and injuries would be needed to offset any implementation costs.

### ***Question for Public Comment***

What costs and benefits do you anticipate from implementation of the draft model Code of Practice?

## 8 Consultation

A Temporary Advisory Group (TAG) was formed by Safe Work Australia to provide advice on developing a draft model Code. The Stevedoring TAG membership included representatives from:

- Commonwealth Department of Education, Employment and Workplace Relations – Chair
- WHS regulators from NSW, Victoria and Queensland
- Australian Maritime Safety Authority
- Maritime Union of Australia
- Australian Council of Trade Unions
- Patrick
- Toll Shipping
- DP World
- Qube
- Shipping Australia
- Safe Work Australia

On 3-4 November 2011, the Strategic Issues Group for Work Health and Safety (SIG-WHS), a sub-committee of Safe Work Australia, agreed to review guidance material: *Working safely on the waterfront*, and develop a model Code of Practice for the industry. This was based on the recommendation of the stevedoring TAG.

In 2012, Safe Work Australia sought feedback on the guidance material through release of an [\*Issues Paper: Review of the National Guidance Material for Working Safely on the Waterfront\*](#). Over 600 submissions were made in response to the Issues Paper.

The Stevedoring TAG agreed on the structure of the draft model Code and its content was based on the TAG's list of agreed safety gaps for stevedoring, the guidance material and the comments received through the consultative processes.

Safe Work Australia has hosted a number of tripartite meetings which have informed development of the draft model Code. These including:

- the Stevedoring TAG—a total of 6 meetings convened between 14 September 2010 to 16 November 2012
- the Stevedoring Working Group
- SIG-WHS—meetings 3-4 November 2011, 26-27 September 2012, and 18-19 February 2013, and
- Safe Work Australia Members—meetings 21 November 2012, 14 March and 31 May 2013.

Additional meetings were held in 2013 between Safe Work Australia and union and employer representatives in an effort to negotiate a way forward on key areas of contention.

Employer representatives and unions have expressed differing views over the content of the draft model Code. Issues of contention have included:

- Safety observers –particularly the use of safety observers based on a risk assessment, and of hatchmen who may also have the function of safety observers.
- Training and competencies –balancing flexibility to conduct training based on the specific needs of a workplace and referencing specific training packages developed by the Transport and Logistics Skills Council.
- Interaction with Marine Orders—clarification of jurisdictional overlap across regulatory regimes and between regulators (ie AMSA and WHS regulators).

- Scope –differing views have been expressed over inclusion of information on:
  - fumigation and fumigants (not currently included)
  - storage (currently included in part 6.5)
  - mooring (currently chapter 8), and
  - fatigue (currently part 5.8).

On 31 May 2013 Safe Work Australia Members reconfirmed their decision of 14 March 2013 to release the draft model Code for public comment.

The draft model Code was released for public comment on 7 June 2013. Submitters are specifically asked to comment on a number of key areas outlined in the draft model Code.

## 8.1 Stakeholder comment

Key issues raised by stakeholders during the development of the draft model Code are outlined below.

### 8.1.1 Stakeholder position on options to improve poor safety performance

The 2012 review of current guidance for stevedoring considered the regulatory levers available to address poor safety performance in the industry. A number of stakeholders have commented publically on their preference.

The Maritime Union of Australia (MUA) supports a model Code for stevedoring. They are of the view regulation is required but accept the consensus for a model Code reached by the stevedoring TAG. In supporting a model Code the MUA notes codes of practice exist in similar industries such as construction, manufacturing and seafaring all of which have lower fatality rates than stevedoring. The MUA believes current guidance material is not sufficient or fit to address the “current severe safety crisis” in this industry. The MUA notes that while Codes of Practice hold evidentiary status under the model WHS Act, guidance does not have any formal standing under model WHS laws.

[www.mua.org.au/news-story/3581/](http://www.mua.org.au/news-story/3581/)

The Australian Logistics Council (ALC) said in a press release “Australia’s major stevedores are committed to a Code of Practice that is performance and risk based and is in line with the Work Health and Safety legislative framework”. The ALC stated “ALC members recognise the benefits of establishing a Code of Practice that is workable, practical and one that enhances safety outcomes.”

[austlogistics.com.au/wp-content/pdf/2012/Stevedoring-Code-of-Practice-Needs-to-Reflect-Best-Practice-ALC-Press-Release-30-October-2012.pdf](http://austlogistics.com.au/wp-content/pdf/2012/Stevedoring-Code-of-Practice-Needs-to-Reflect-Best-Practice-ALC-Press-Release-30-October-2012.pdf)

The Australian Chamber of Commerce and Industry stated their support for a model Code on the basis this was agreed through extensive tripartite consultation. They do not support separate regulation being developed.

[www.safeworkaustralia.gov.au/sites/SWA/model-whs-laws/public-comment/Documents/National\\_Guidance\\_Material-Waterfront/Public-Submissions-A/NGMW006-ACCI.PDF](http://www.safeworkaustralia.gov.au/sites/SWA/model-whs-laws/public-comment/Documents/National_Guidance_Material-Waterfront/Public-Submissions-A/NGMW006-ACCI.PDF)

Conversely, Shipping Australia Limited (SAL) “is not confident that the Code in its current form sets out agreed or recommended methods for achieving compliance with the law, or reflects current safety standards in relation to managing risks in stevedoring. This is in part because of the rapidly evolving nature of ships and shipping and procedures for loading, discharging and stowage of cargoes, internationally. For this reason SAL recommends its adoption as a Guide for a 24-month transitional period after which time the Guide can be reviewed, if necessary updated and/or adopted as a Code. This would also allow a period of time in which practices in other international jurisdictions might be considered.”

In their view “the Code in its current form does not provide sufficient guidance to enable better compliance with the duties contained in the WHS Act or Regulations and there is no evidence of a significant risk or widespread work health and safety problems if the current practices were to continue, with the workers following established safe work procedures adopted by the PCBU. Information on hazards, risks and control measures is well-established in current work practices. The continuous drive by all parties of the industry to improve safety may not be best secured by the adoption of a Code. The Code will have to be continually updated because of the rapidly evolving nature of ships and shipping and procedures for loading, discharging and stowage of cargoes.

SAL is of the opinion that the measures proposed to manage risks in stevedoring be addressed in guidance material.”

<http://www.safeworkaustralia.gov.au/sites/SWA/model-whs-laws/public-comment/Documents/Stevedoring%20Public%20Comment/Stevedoring%20submissions/009-Shipping-Australia-Limited.PDF>

SeaRoad Holdings Pty Ltd has expressed concerns a model Code of Practice will increase the level of regulation “SeaRoad does not believe that an additional set of regulations are required as Australian laws are already broad and extensive. Indeed, were the recommendations contained within the document [the draft model code] be adopted, it places in doubt the applicability of laws already in place. Which piece of legislation takes precedence?”

[www.safeworkaustralia.gov.au/sites/SWA/model-whs-laws/public-comment/Documents/Stevedoring%20Public%20Comment/Stevedoring%20submissions/003-SeaRoad-Holdings-Pty-Ltd.PDF](http://www.safeworkaustralia.gov.au/sites/SWA/model-whs-laws/public-comment/Documents/Stevedoring%20Public%20Comment/Stevedoring%20submissions/003-SeaRoad-Holdings-Pty-Ltd.PDF)

## 9 Discussion and conclusion

Data shows the stevedoring industry in Australia has retained a proportionately high incidence of fatalities and serious injury. As WHS laws have now been introduced in seven of the nine jurisdictions the opportunity exists to implement a nationally consistent approach for safety in stevedoring.

The Consultation RIS considers three viable options. Option 1, continuing with the status quo, is not viable. At a minimum the current guidance requires updating to make it consistent with the WHS laws (Option 2). Option 3 involves development of a model Code of Practice. Option 4 involves development of stevedoring-specific regulations but this may involve additional costs for the industry.

It is estimated Option 3 may potentially provide improved benefits for relatively small costs compared with the costs of injury and fatalities to the community.

It is expected a model Code of Practice would encourage greater compliance than guidance (Options 1 or 2). This is anticipated due to its higher evidentiary status in regulatory and compliance activities. Model Codes of Practice generally impose a smaller regulatory burden on businesses than regulations (Option 4) due to greater flexibility to choose appropriate control measures and thus are less expensive to implement.

This Consultation RIS seeks views, supported by evidence where possible, on the costs and benefits of all four options to enable an informed decision on the preferred method to improve safety in the stevedoring industry.

## Appendix A - Work Health and Safety Statistics Report – Stevedoring

Stevedoring injuries and fatalities 2000-01 to 2011-12 (preliminary) <sup>5</sup>

Year of Lodgement	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12p
Number of compensated fatalities	1	2	2	1			2	1	
Fatality incidence rate (per 100,000 employees)	19.9	36.9	33.9	17.5	..	..	31.1	13.5	..
Number of serious claims	375	345	340	390	360	355	370	350	350
Serious claims incidence rate (per 1000 employees)	74.8	65.9	63.4	71.3	64.3	62.5	64.7	60.4	57.4
Median payment	\$7,600	\$8,300	\$9,600	\$8,200	\$10,900	\$10,100	\$8,600	\$9,200	\$10,200
Median time lost (working weeks)	2.6	2.4	2.4	3.0	2.8	3.9	3.2	3.8	3.2
Number of Employees	5013	5233	5364	5471	5597	5683	5722	5791	6102

Number of Employees from 2003-04 onwards has been sourced from the IBISWorld publication, *Stevedoring Services in Australia* (May 2013). Data on fatalities and serious injury are available prior to 2003-04, however, they cannot be converted into an incidence rate without reliable data on the number of employees in the industry.

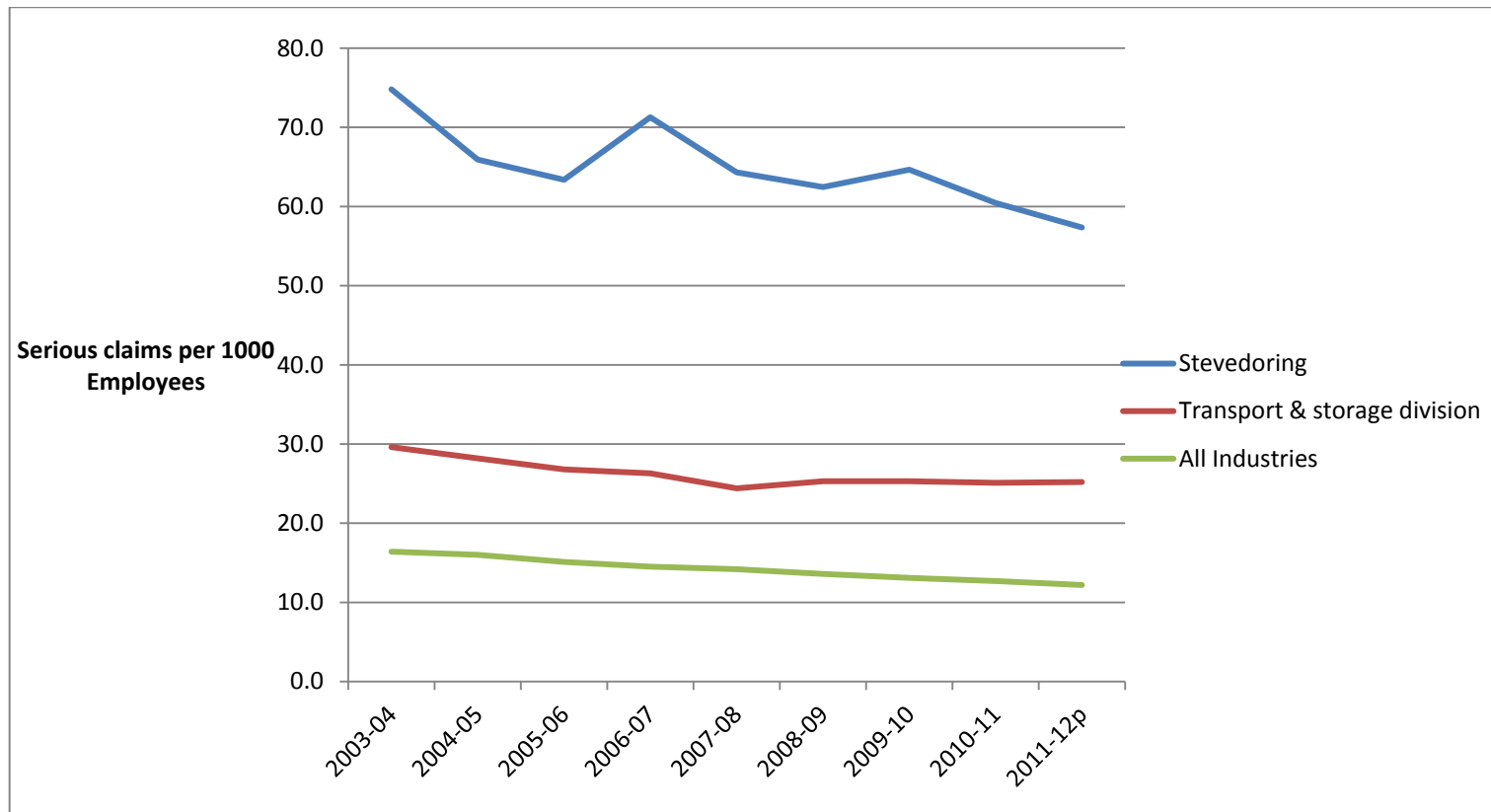
Stevedoring is a small industry and as a consequence employee estimates are likely to be volatile.

Data on number of fatalities and serious injuries have been sourced from Safe Work Australia's National Data Set for Compensation-based Statistics (NDS). They represent serious workers' compensation claims but don't include accidents and incidents which didn't result in injuries or fatalities. Serious claims include all workers' compensation claims (excluding journey claims) resulting from a permanent or temporary incapacity with an absence from work of one working week or more or from a fatality.

<sup>5</sup> Lodgement Year is all workers' compensation claims lodged between 1 July and 30 June

### Comparison of serious incidence rates 2000-01 to 2011-12 (preliminary)

Year of Lodgement	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12p
Stevedoring	74.8	65.9	63.4	71.3	64.3	62.5	64.7	60.4	57.4
Transport & storage division	29.6	28.2	26.8	26.3	24.9	25.0	24.0	22.4	20.7
Construction	27.5	26.3	23.0	22.0	22.4	22.2	18.1	17.1	16.5
All Industries	16.4	16	15.1	14.5	14.2	13.6	13.1	12.7	12.2



## Appendix B - Comparison of the draft model Code with existing requirements

Key provisions in the draft model Code	Existing legal requirements & safety practices
<b>1. Introduction</b>	
<p>1.1 What is stevedoring? 1.2 Who has health and safety duties in relation to stevedoring?</p> <ul style="list-style-type: none"> <li>• Persons conducting a business or undertaking, including designers, manufacturers, importers, suppliers and installers</li> <li>• Officers</li> <li>• Workers</li> <li>• Other persons at a workplace</li> </ul>	<p><u>WHS Act sections 13-29</u> impose requirements to eliminate or minimise risks to health and safety as far as reasonably practicable, and place duties of care on persons conducting a business or undertaking, officers, workers and other persons at the workplace.</p>
<p>1.3 What is required to manage risks associated with stevedoring activities?</p> <ul style="list-style-type: none"> <li>• Risk management steps</li> <li>• Consulting your workers</li> <li>• Consulting, co-operating and co-ordinating activities with other duty holders</li> </ul> <p>References model Codes of Practice:</p> <ul style="list-style-type: none"> <li>• How to Manage Work Health and Safety Risks</li> <li>• Work Health and Safety Consultation, Co-operation and Co-ordination.</li> </ul>	<p><u>WHS Regulations 34-38</u> require a duty holder to identify reasonably foreseeable hazards that could give rise to risks and eliminate identified risks so far as is reasonably practicable. If it is not reasonably practicable to eliminate the risk, the duty holder must minimise the risk so far as is reasonably practicable by implementing control measures in accordance with the hierarchy of control.</p> <p><u>WHS Act sections 46-48</u> impose duties to consult with workers and to consult, co-operate and co-ordinate activities with other duty holders.</p> <p><u>Working Safely on the Waterfront</u> includes similar information on consultation and representation.</p>
<b>2. Risk Management</b>	
<p>2.1 Identifying the hazards 2.2 Assessing the risks 2.3 Controlling the risks 2.4 Maintaining and reviewing control measures.</p>	<p><u>WHS Regulations Part 3.1</u> requires a person with a duty to manage risk to identify hazards, apply the hierarchy of control and maintain and review control measures.</p> <p><u>Regulation 38</u> – a PCBU must review and revise control measures when the control measure is not effective, when a workplace change may give rise to a new risk, if a new hazard or risk is identified, if consultation indicates that a review is necessary, or if a health and safety representative requests a review.</p> <p><u>Working Safely on the Waterfront</u> includes similar guidance on applying the risk management process and hierarchy of control to stevedoring hazards.</p>



Key provisions in the draft model Code	Existing legal requirements & safety practices
<b>3. Planning</b>	
<p>3.1 Pre-arrival planning</p>	<p><u>WHS Regulations 3.1</u> – requires a duty holder to identify all reasonably foreseeable hazards and apply the hierarchy of controls to manage the associated risks.</p> <p><u>Working Safely on the Waterfront</u> includes guidance on planning for type of vessel, cargo, weather conditions, etc. as a control measure.</p>
<p>3.2 Emergency planning and first aid</p> <p>References model Codes of Practice:</p> <ul style="list-style-type: none"> <li>• Managing the Work Environment and Facilities</li> <li>• First Aid in the Workplace</li> </ul>	<p><u>WHS Regulation 42</u> – requires provision of appropriate first aid services, access to first aid facilities and an adequate number of trained workers to administer first aid.</p> <p><u>WHS Regulation 43</u> – requires preparation and maintenance of an emergency plan that provides for emergency procedures and information, training and instruction for workers in relation to implementing the emergency procedures for the workplace.</p> <p><u>Working Safely on the Waterfront</u> includes guidance on emergency procedures.</p>
<p>3.3 Traffic management</p> <ul style="list-style-type: none"> <li>• Separation of vehicles and pedestrians on the wharf, when moving cargo on and off ships and on deck</li> <li>• Traffic management plans</li> </ul> <p>References model Code of Practice:</p> <ul style="list-style-type: none"> <li>• Traffic Management in Workplaces</li> </ul>	<p><u>WHS Regulation 215</u> – persons with management or control of powered mobile plant must ensure that the risk of colliding with pedestrians or other plant is controlled, so far as is reasonably practicable.</p> <p><u>Working Safely on the Waterfront</u> includes similar guidance on traffic management plans and separation of vehicles and pedestrians.</p>
<p>3.4 Information, training, instruction and supervision</p> <ul style="list-style-type: none"> <li>• Training needs analysis</li> <li>• Training delivery plan</li> <li>• Training topics, keeping records, reviewing training</li> <li>• Supervision</li> </ul>	<p><u>WHS Regulation 39</u> requires the provision of suitable and adequate information, training and instruction to workers with regard to the nature of the work, the associated risks and the control measures implemented.</p> <p><u>Marine Order 32 section 15.2(c)</u> requires the person in charge to take all reasonable steps to ensure, as far as is practicable, that persons are not engaged in loading or unloading a ship unless they have been given adequate instruction and training concerning the risks involved and precautions to be taken.</p> <p><u>Working Safely on the Waterfront</u> includes similar but more detailed guidance on training needs analysis, training delivery plan, training records, review of training, training for health and safety representatives and supervision.</p>

Key provisions in the draft model Code	Existing legal requirements & safety practices
<b>4. Inspections</b>	
<p>4.1 Vessel inspections</p> <ul style="list-style-type: none"> <li>• Cargo presentation</li> </ul> <p>References <i>Marine Orders</i>.</p>	<p><u><i>Marine Order 32 section 29 and Schedule 4</i></u> include detailed requirements for inspection and testing of material handling equipment used in loading or unloading a ship.</p> <p><u><i>Working Safely on the Waterfront</i></u> includes guidance on carrying out regular inspections of vessels and the work environment.</p> <p><u><i>Working Safely with General Cargo – Steel Products</i></u> and <u><i>Working Safely with Containers</i></u> includes guidance on cargo presentation.</p>
<p>4.2 Plant inspections</p> <p>References model Code of Practice:</p> <ul style="list-style-type: none"> <li>• Managing Risks of Plant in the Workplace</li> </ul>	<p><u><i>WHS Regulation 213</i></u> A person with management or control of plant must ensure that maintenance, inspection and testing of plant is carried out by a competent person in accordance with manufacturer’s recommendations, or if those aren’t available, in accordance with recommendations of a competent person.</p>
<b>5. The working environment</b>	
<p>5.1 Access and egress</p> <p>References <i>Marine Orders</i> for requirements relating to ships and the model Code of Practice <i>Managing the Work Environment and Facilities</i> for landside operations.</p>	<p><u><i>WHS Regulation 40</i></u> – a person conducting a business or undertaking must ensure so far as is reasonably practicable that the workplace allows safe access and egress in normal conditions and in an emergency.</p> <p><u><i>Marine Order 32 section 23 and Schedule 2</i></u> set out detailed requirements for access, including design of ladders, passageways, landing platforms and crane operators’ cabins.</p> <p><u><i>Working Safely with General Cargo – Steel Products</i></u> and <u><i>Working Safely with Containers</i></u> includes guidance on safe access and egress.</p>
<p>5.2 Housekeeping</p> <p>References the model Code of Practice <i>Managing the Work Environment and Facilities</i>.</p>	<p><u><i>WHS Regulation 40</i></u> – a person conducting a business or undertaking must ensure so far as is reasonably practicable that:</p> <ul style="list-style-type: none"> <li>• work areas have space for work to be carried out safely</li> <li>• floors and other surfaces are designed, installed and maintained to allow work to be carried out safely.</li> </ul> <p><u><i>Working Safely with General Cargo – Steel Products</i></u> and <u><i>Working Safely with Containers</i></u> includes guidance on housekeeping.</p>

Key provisions in the draft model Code	Existing legal requirements & safety practices
<p>5.3 Lighting</p>	<p><u>WHS Regulation 40</u> – a person conducting a business or undertaking must ensure so far as is reasonably practicable that lighting enables safe working, safe movement and safe emergency evacuation</p> <p><u>Marine Order 32 Schedule 1</u> includes requirements for lighting levels, including minimising glare and dazzle.</p> <p><u>Working Safely with General Cargo – Steel Products</u> and <u>Working Safely with Containers</u> includes guidance on lighting levels.</p>
<p>5.4 Air quality</p>	<p><u>WHS Regulation 40</u> – a person conducting a business or undertaking must ensure so far as is reasonably practicable that ventilation enables workers to carry out work without risk to health and safety.</p> <p><u>Marine Order 32 Schedule 1</u> includes requirements for a safe atmosphere.</p> <p><u>Working Safely with General Cargo – Steel Products</u> and <u>Working Safely with Containers</u> includes guidance on minimising risks associated with contaminated or oxygen-deficient atmospheres.</p>
<p>5.5 Weather conditions</p> <p>References the model Code of Practice <i>Managing the Work Environment and Facilities</i> for managing risks associated with extremes of heat and cold.</p>	<p><u>WHS Regulation 40</u> – a person conducting a business or undertaking must ensure so far as is reasonably practicable that workers exposed to extremes of heat or cold are able to work without risk to their health and safety.</p> <p><u>Working Safely with General Cargo – Steel Products</u> and <u>Working Safely with Containers</u> includes guidance on weather conditions.</p>
<p>5.6 Managing the risk of falls and falling objects</p> <p>References the model Code of Practice <i>Managing the Risk of Falls at Workplaces</i>.</p>	<p><u>WHS Regulation 78</u> – a person conducting a business or undertaking must manage the risk of falls from one level to another that are reasonably likely to cause injury.</p> <p><u>WHS Regulation 54</u> – a person conducting a business or undertaking must manage risks to health and safety associated with falling objects that are reasonably likely to injure people.</p> <p><u>WHS Regulation 55</u> – if it is not reasonably practicable to eliminate the risk associated with falling objects, the risk must be minimised by providing adequate protection by preventing objects from falling freely, or if it is not reasonably practicable to prevent an object from falling freely, providing, so far as is reasonably practicable, a</p>

Key provisions in the draft model Code	Existing legal requirements & safety practices
	<p>fall-arrest system for the objects.</p> <p><u>Marine Order 32</u> includes requirements to prevent falls and falling objects, including requirements for protective fencing.</p> <p><u>Working Safely with General Cargo – Steel Products</u> and <u>Working Safely with Containers</u> includes guidance on work at height.</p>
<p>5.7 Noise</p> <p>References the model Code of Practice <i>Managing Noise and Preventing Hearing Loss at Work</i></p>	<p><u>WHS Regulation 57</u> – a person conducting a business or undertaking must manage noise-related hearing loss health and safety risks and ensure that workplace noise to which a worker is exposed does not exceed the exposure standard for noise.</p> <p><u>Working Safely with General Cargo – Steel Products</u> and <u>Working Safely with Containers</u> includes guidance on noise.</p>
<p>5.8 Managing fatigue</p>	<p><u>WHS Act sections 13-29</u> impose requirements to eliminate or minimise risks to health and safety as far as reasonable practicable, and place duties on persons conducting a business or undertaking, officers, workers and other persons at the workplace.</p> <p><u>Working Safely on the Waterfront</u> includes much more detailed guidance on fatigue, including developing a fatigue management plan.</p>
<p><b>6. Handling loads and cargo</b></p>	
<p>6.1 Suspended loads</p>	<p><u>WHS Regulation 219</u> – requires, so far as is reasonably practicable, that plant used to lift or suspend persons or things is specifically designed for the task. Suitable lifting attachments must be used and the safe working limits of the plant must not be exceeded. The person conducting a business or undertaking must ensure, so far as is reasonably practicable, that loads are neither suspended over a person nor travel over a person unless the plant is specifically designed for that purpose. Loads must remain under control when being lifted or suspended and loads must not be lifted simultaneously by more than 1 item of plant unless the lifting method ensures that the load placed on each item of plant does not exceed the design capacity of the plant.</p> <p><u>Regulation 54</u> – a PCBU must manage risks to health and safety associated with falling objects that are reasonably likely to injure people.</p> <p><u>Marine Order 32 clause 4.1, Schedule 5</u> states that a hook must not be used in loading and</p>

Key provisions in the draft model Code	Existing legal requirements & safety practices
	<p>unloading unless the load is attached in a manner which precludes dislodgment during hoisting and lowering and:</p> <ul style="list-style-type: none"> <li>• the hook is of a construction and shape which prevents displacement of the load from the hook; or</li> <li>• the hook is fitted with a device which prevents a load from becoming detached.</li> </ul> <p><u>Marine Order 32 Schedule 6</u> sets out requirements for the safe lifting of loads including requiring slings on pre-slung cargo to be safe to use prior to loading and unloading. Each person involved in the discharge of pre-slung cargo must check the condition of these slings during the unloading operation to detect damage that may have occurred during carriage (clause 14.3).</p> <p>Other requirements relate to not exceeding maximum safe working loads (section 28).</p> <p><u>Working Safely with General Cargo – Steel Products</u> and <u>Working Safely with Containers</u> includes guidance on preventing suspended loads falling.</p>
6.2 Lashing and unlashings containers	<p><u>Marine Order 32 clause 8, Schedule 2</u> specifies a range of safety precautions in relation to workers lashing or unlashings containers to/from a ship. For example, the space provided for workers to carry out lashing operations should provide a firm and level working surface, a working area not less than 750mm wide, and sufficient space to permit the lashing gear and other equipment to be stowed without causing a trip hazard.</p> <p><u>Working Safely with Containers</u> includes guidance on preventing unauthorised entry of people into areas where lashing/unlashings is taking place.</p>
6.3 Working in ships' holds: <ul style="list-style-type: none"> <li>• Hatches and openings</li> <li>• Ladders</li> <li>• Monitoring cargo operations</li> </ul>	<p><u>WHS Regulation 78</u> – a person conducting a business or undertaking must manage the risk of falls from one level to another that are reasonably likely to cause injury.</p> <p><u>Marine Order 32 Schedule 6</u> include detailed requirements for safe access to ship's holds. Clause 5 sets out requirements for monitoring cargo operations, relating to the use of hatchmen. These provisions are duplicated in the draft model Code.</p>

Key provisions in the draft model Code	Existing legal requirements & safety practices
<p>6.4 Types of cargo:</p> <ul style="list-style-type: none"> <li>• General</li> <li>• Dry bulk</li> <li>• Liquid bulk</li> <li>• Containers</li> <li>• Roll-on/roll-off activities</li> <li>• Livestock</li> </ul>	<p>References to requirements in various Marine Orders:</p> <ul style="list-style-type: none"> <li>• Marine Orders 32 – <i>Cargo handling equipment</i></li> <li>• Marine Order 33 – <i>Grain cargo</i></li> <li>• Marine Order 34 – <i>Solid bulk cargoes</i></li> <li>• Marine Order 35 – <i>Additional safety measures for bulk carriers</i></li> <li>• Marine Orders 41 – <i>Carriage of dangerous goods</i></li> <li>• Marine Orders 17 – <i>Liquefied gas carriers and chemical tankers</i></li> <li>• Marine Order 43 – <i>Livestock cargoes.</i></li> </ul>
<p>6.5 Storage and stowage for goods not in containers</p>	<p><u>WHS Regulation 54</u> – a person conducting a business or undertaking must manage risks to health and safety associated with falling objects that are reasonably likely to injure people.</p> <p><u>WHS Regulation 55</u> – if it is not reasonably practicable to eliminate the risk associated with falling objects, the risk must be minimised by providing adequate protection by preventing objects from falling freely, or if it is not reasonably practicable to prevent an object from falling freely, providing, so far as is reasonably practicable, a fall-arrest system for the objects.</p> <p><u>Marine Order 32 section 15.2(d)</u> requires the person in charge to take all reasonable steps to ensure, as far as is practicable, that all persons are reasonably protected against injury arising from the loading or unloading of the ship and from movement of unsecured cargo or other objects on the ship.</p>
<p><b>7. Plant and equipment</b></p>	
<p>7.1 Powered mobile plant</p>	<p><u>WHS Regulation 214</u> requires a person with management or control of powered mobile plant to manage risks to health and safety associated with the following:</p> <ul style="list-style-type: none"> <li>• <i>the plant overturning</i></li> <li>• <i>things falling on the operator of the plant</i></li> <li>• <i>the operator being ejected from the plant</i></li> <li>• <i>the plant colliding with any person or thing</i></li> <li>• <i>mechanical failure of pressurised elements of plant that may release fluids that pose a risk to health and safety.</i></li> </ul>

Key provisions in the draft model Code	Existing legal requirements & safety practices
<p>7.2 Cranes and work boxes</p> <ul style="list-style-type: none"> <li>• Ship-based cranes</li> <li>• Shore-based cranes</li> <li>• Adverse weather conditions</li> <li>• Emergency procedures</li> <li>• Crane work boxes</li> </ul> <p>References <i>Marine Orders</i> for requirements relating to cranes on ships and the model Code of Practice <i>Cranes</i> for shore-based cranes.</p>	<p><u>WHS Regulation 219</u> sets out duties in relation to plant that lifts or suspends loads.</p> <p><u>Regulation 220</u> – if plant not specifically designed to lift or suspend a person is used for that purpose, the person must be lifted or suspended in a securely attached work box and remain substantially within the work box while being lifted or suspended; and a safety harness must be provided and worn by the person if there is a risk of the person falling from a height. A safe means of exit must also be provided for the person.</p> <p><u>Marine Order 32</u> includes detailed requirements for the design and use of material handling equipment used on ships.</p>
<p>7.3 Other lifting equipment</p> <ul style="list-style-type: none"> <li>• Loose gear</li> </ul>	<p><u>Marine Order 32</u> includes detailed requirements for the design and use of material handling equipment used on ships.</p>
<p>7.4 Personal protective equipment (PPE)</p>	<p><u>Regulations 44 - 46</u> set out duties relating to the use of PPE at the workplace.</p>
<p><b>8. Mooring and unmooring</b></p>	
<p>8.1 Prior to mooring 8.2 Mooring 8.3 Unmooring</p>	<p><u>WHS Act sections 13-29</u> impose requirements to eliminate or minimise risks to health and safety as far as reasonable practicable, and place duties of care on persons conducting a business or undertaking, officers, workers and other persons at the workplace.</p>

## Appendix C - Methodology to estimate costs to employing businesses to implement the draft model Code

Employing businesses are those businesses with one or more employees and does not include sole traders. Estimates were made of the costs of implementing the elements of the draft model Code for elements identified as being additional to existing requirements. Costs estimates were based on the average yearly earnings in the stevedoring industry \$80,612 per annum, equivalent to \$41.34 per hour.<sup>6</sup>

**Table C1 – Estimated cost to business of undertaking training needs analysis and development of training delivery plan**

Training plans	No. workers	Time hrs/worker	Cost \$/hr	cost \$/business	Total cost to industry	
undertake needs analysis (year 1 only)	2	6	\$41.34	\$496.07	\$26,788	
development of training plan (year 1 only)	1	4	\$41.34	\$165.36	\$8,929	\$35,717 (total year 1)
review of needs analysis and training plan (years 2 and on)	2	4	\$41.34	\$330.71	\$17,858	\$17,858 (total years 2 and on)

The wage of the person likely to undertake training needs analysis, development of training plans and reviews may be higher than calculated in the above table. Using an estimated wage of \$82 per hour, approximately twice the average in the stevedoring industry, the costs to the stevedoring industry as a whole for implementing the proposal are estimated to be around \$71,000 in the first year and \$35,000 per year from years 2.

<sup>6</sup> IBISWorld publication, *Stevedoring Serviced in Australia* (May 2013).