



The Port of Warrnambool Safety and Environment Management Plan



Document Title:

Port of Warrnambool – Safety and Environment Management Plan

Document Status and Reference:

Revision Code	Date Revised	Sections revised	Author
Version 1	16 May 2005		Don Allen
Version 2	10 August 2005	1.5, 1.7, 1.10, 3.1, 3.4, 6, 6.1, 7.2, 7.3, 8, 9	Don Allen
Version 3	6 July 2007	1.3, 1.6, 1.9, 1.10, 1.11, 3.2, 3.4, 4.1, 5, 6, 7.1, 9 & Appendices 1, 3, 4 & 5	Peter Robertson
Version 4	9 December 2009	4.1, 4.2, 5, 6, 6.1, Appendix 4	Leah Johnston
Version 5	7 December 2010	1.2, 1.6, 1.7, 1.9, 1.10, 1.11, 2, 2.1, 3.1, 3.2, 3.3, 4.1, 5, 6, 6.1, 7.2, 7.5, 9 & Appendices 4 & 5	Leah Johnston
Version 6	27 September 2012	1.2, 1.6, 1.9, 1.11, 2, 2.1, 2.3, 3.2, 4.4, 5, 6, 6.1, 7.4, 7.6, 8 & Appendix 2	Don Allen
Version 7	31 July 2014	1.2, 2, 2.3, 3.4, 5, 6, 7.6	Don Allen
Version 8	30 November 2015	1.9, 2.3, 3.1, 3.4, 4.3, 5, 6, 7.6	Don Allen
Version 9	16 September 2016	1.3, 1.9, 4.2, 4.3, 5, 6, 6.1, 7.6	Don Allen
Version 10	29 November 2018	1.2; 1.9; 1.10; 1.11; 2.3; 4.1;	Benjamin Storey

Review:

Approver	Signature	Date	Period review
Construction engineer	Don Allan	December 2018	12 months
Director – City Infrastructure	Scott Cavanagh	December 2018	12 months

The above signatory commits to the implementation of the plan.

The above signatory also commits to co-operation and participation in the triennial independent audit of the plan.

Contents

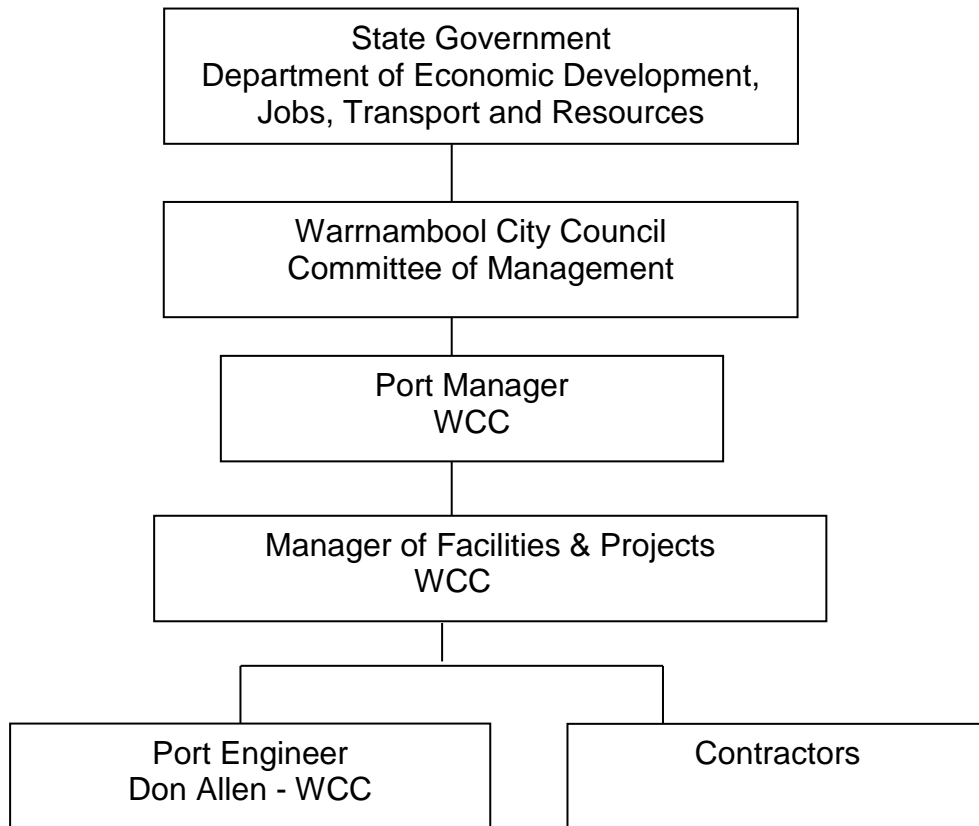
Part 1 - Executive Summary	4
1.1 Aim of the Safety and Environment Management Plan.....	4
1.2 Port Organisational Structure.....	4
1.3 Plan Endorsement by Port Management	Error! Bookmark not defined.
1.4 Safety and Environment Values Statement	4
1.5 Description of Port	4
1.6 Key Activities.....	5
1.7 Major Tenants, Licensees and Service Providers.....	5
1.8 Overview of the SEMP Process.....	5
1.9 Significant Hazards/Risks and Prevention and Reduction Measures.....	6
1.10 Consultation	6
1.11 Contact Person	7
Part 2 - Introduction	8
2.1 Port functions.....	9
2.2 Warrnambool Port Safety and Environment Policy	10
2.3 The Port of Warrnambool Key Performance Indicators and Annual Report.....	11
Part 3 – Description of Port Areas.....	12
3.1 Area Applicable to this Management Plan	12
3.2 Port Operations.....	13
3.3 Key Tenancies within the Port.....	13
3.4 Stakeholder Consultation.....	13
3.5 Dangerous goods or hazardous materials storage facilities.....	14
Upper & Lower Lady Bay Lighthouses.....	15
Part 4 – Identification of Hazards and Risks	16
4.1 Port Activity Map	16
4.2 Risk Assessment	18
4.3 Definitions	18
4.4 Risk Assessment Process	20
Part 5 – Impact of Hazards and Risks.....	23
Part 6 – Controls to Prevent and Reduce Hazards and Risks	26
6.1 Interaction with Emergency Management.....	29
Part 7 – Implementation.....	30
7.1 Responsible person(s).....	30
7.2 Implementation Procedures for Management Plan	30
7.3 Process for involvement of tenants, licensees and service providers in development and implementation	30
7.4 Documentation and implementation systems.....	31
7.5 Port Incident Register	31
7.6 Regulatory Compliance Register	32
Title	39
Part 8 – Review and Revision.....	40
Part 9 – Copies	41
Appendix 1 - Certification.....	42
Appendix 2 - Audit.....	45
Appendix 3 - Warrnambool City Council Incident Form	46
Appendix 4 - Warrnambool City Council SWMS	47
Appendix 5 – Port of Warrnambool Inspection Checklist	50

Part 1 - Executive Summary

1.1 Aim of the Safety and Environment Management Plan

Warrnambool City Council (WCC) intends to utilise this plan as a management tool to systematically examine the full scope of activities in its port and to ensure that all significant safety and environmental risks are identified and controlled.

1.2 Port Organisational Structure



1.4 Safety and Environment Values Statement

The operation and management of the Port of Warrnambool is to be conducted in such a manner to ensure the safety and well-being of all port users and to ensure that Port activities do not adversely impact on the environment of the Port or adjacent waters.

1.5 Description of Port

The Port of Warrnambool is located in the Lady Bay, Warrnambool. The Port is protected from the Southern Ocean by a 600m long Breakwater wall, protecting the fishing fleet and the boat ramp. The Breakwater includes a lower landing (primarily for unloading purposes) and a pedestrian walkway on the upper level.

The majority of Port waters lie within Lady Bay, behind the ocean side of the Breakwater. The waters here are predominantly for the protected mooring of vessels. Two lighthouses are located at the Flagstaff Hill Maritime Museum.

1.6 Key Activities

The Port supports approximately ten commercial fishing boats and supplies access to the Southern Ocean and Lady Bay for amateur fishing boats and various other recreational vessels via the boat ramp.

1.7 Major Tenants, Licensees and Service Providers

The major tenants in the port are the various commercial fishermen and the Coastguard.

The lighthouses are considered port assets but are located at Flagstaff Hill Maritime Museum, outside the gazetted port boundary. Both the Warrnambool Yacht Club and the Harbour Pavilion are groups who are located outside the gazetted Port of Warrnambool boundary, but interact with activities occurring at the port.

1.8 Overview of the SEMP Process

Considering the size and responsibilities of the port, it was considered appropriate that the Port Manager and WCC Safety Officers carry out the majority of risk identification and control mechanisms associated with the production of the Port of Warrnambool's SEMP.

The identification of risks and hazards was based on the Port Activity Map which lists the possible uses of the port.

The impact of the identified risks and hazards was assessed using a risk assessment process based on the Australian Standard Risk Analysis Process.

Warrnambool City Council will undertake an annual review of this plan. In the event of any significant change in activity within the Port, the Plan will be adjusted and reviewed accordingly. An external and independent review is scheduled to take place every three years.

1.9 Significant Hazards/Risks and Prevention and Reduction Measures

Risk	Consequence	Likelihood	Residual Risk Rating	Controls
SAFETY				
Jumping off breakwater	4	C	High	Signage, supervision, ladders
Amateur boating	5	D	High	5knott limit, signage, algae removal at boat ramp, dredging, nav aid maintenance, ladders, weekly inspections
Boat launching and retrieval at boat ramp	2	A	High	Signage, boat ramp inspections, scheduled maintenance, dredging
Jet skiing (access / boat ramp)	4	C	High	Signage, nav aids, boat ramp maintenance, configuration dredging, enforcement by MSV authorised officers
Collisions (due to speeding or disregarding signage)	4	C	High	enforcement by MSV authorised officers
Swimming / snorkelling	3	C	High	Ladders, enforcement by MSV authorised officers, 5knott limit
Horse training	4	C	High	Consultation with ATA, beach permits required by horse trainers
ENVIRONMENTAL				
Boating (introduction of marine pests)	3	B	High	Consultation with port manager's network and other port users, biannual surveillance, boat quarantine and treatment if required, under direction of

1.10 Consultation

The Port of Warrnambool SEMP was produced by WCC staff who have experience with safety and environmental risk assessment.

Stakeholder input continues to be sought with the following groups:

- Professional Fishermen's Association
- Warrnambool Yacht Club
- Warrnambool offshore fishing club
- Flagstaff Hill Maritime Museum
- Department of Environment, Land, Water and Planning and
- Department of Economic Development, Jobs, Transport and Resources.

Also consulted for the SEMP development were:

- Environment Protection Agency
- WorkSafe and
- South Warrnambool Community Association

1.11 Contact Person(s)

Warrnambool City Council delegated representatives, who are responsible for managing queries relating to the management plan are:

Don Allen
Port Engineer
Warrnambool City Council
PO Box 198
Warrnambool VIC 3280
Phone – (03) 55 59 4662
Mobile – 0419 389 638
Email – dallen@warrnambool.vic.gov.au

Benjamin Storey
Manager Facilities & Projects
Warrnambool City Council
PO Box 198
Warrnambool VIC 3280
Mobile – 0409 797 842
Email – bstorey@warrnambool.vic.gov.au

Part 2 - Introduction

In early 2000 the Minister for Ports announced that Professor Bill Russell was to undertake a review of Victorian port reform. The subsequent report, *The Next Wave of Port Reform in Victoria 2001*, recommended a number of changes aimed at improving the efficiency of Victorian ports. The Government's response to the Russell Report was to commit to a range of actions across aspects of port management including safety and environmental management.

The *Port Services Act 1995* (now *Port Management Act 1995*) was amended in 2003 and included in part 6A the requirement for port managers to prepare Safety Management Plans and Environment Management Plans. The Port of Warrnambool prepared both together in this Safety and Environment Management Plan (SEMP).

The SEMPs were written to be working documents, identifying all significant risks involved in the spectrum of port activities and detailing the port's actions to control them. This enabled smoother integration of the different safety and environment regulatory regimes that currently apply.

As of July 2010 responsibility for local port management rests with the Department of Economic Development, Jobs, Transport and Resources (DEDJTR). Warrnambool City Council remained the local port manager for the Port of Warrnambool and the daily operation of the port is overseen by the Port Engineer, Don Allen.

The SEMPs are updated annually and triennially reviewed by an approved auditor registered with DEDJTR. The Port of Warrnambool has undergone three DEDJTR audits to assess the extent to which the implementation of the management plan achieved the safety and environment management planning objectives set out in the *Port Management Act 1995*. The next audit will be in 2019.

The *Ministerial Guidelines: Port Safety and Environment Management Plans* were revised in November 2012 and required the addition of Key Performance Indicators (KPIs) and an annual SEMPs Report from the Port Managers.

The Port of Warrnambool has taken reasonable steps to involve all tenants, licensees and service providers in the SEMPs process as participation of organisations is a key element in the successful development and implementation of the SEMPs.

2.1 Port functions

Warrnambool City Council has been appointed under the *Port Management Act 1995* to be the port manager for the Port of Warrnambool and under this Act has the following functions:

- To manage the operations of the port, particularly with respect to shipping and boating activities in the port, with a view to ensuring that those operations are carried out safely, efficiently and effectively;
- To provide, develop and maintain port facilities, including wharves, jetties, breakwaters, moorings and vehicle parks;
- To provide, develop and maintain, in accordance with any relevant standards developed by the Director of Transport Safety Victoria, navigational aids in the port;
- To carry out the functions and powers of a local authority in respect of any State waters within the port;
- To provide, develop and maintain, in accordance with any relevant standards developed by the Director of Transport Safety Victoria, navigation channels in the port;
- To manage the operations of the port, and the construction and operation of port facilities and navigation channels in a manner that minimises the risk of environmental damage;
- To participate in the control of marine and land pollution in the port as a relevant statutory authority under the Victorian component of the National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances;
- To allocate and manage moorings in the port;
- To exercise any other functions of the port manager of a local port under the *Port Management Act 1995* or any other Act
- To undertake dredging as per Section 44E of the *Port Management Act 1995*.

The *Port Management (Local Ports) Regulations 2015* gives the port manager the power to authorise activities such as:

- Setting aside areas for certain purposes;
- Fuelling operations;
- Activities on or adjacent to navigation aids;
- Movement of explosives through a local port;
- Discharge of explosives or fireworks
- Vehicle access to designated areas;
- Commercial or industrial activities e.g., private jetty development over port waters;
- Special events such as triathlons, yachting regattas and the like;
- Electrical installations on port structures;
- Mooring and berthing of vessels in local port waters.

2.2 Warrnambool Port Safety and Environment Policy

The Port of Warrnambool has introduced a Safety and Environmental Policy. The Policy states:

Warrnambool City Council is responsible for the management and control of the Port of Warrnambool. Warrnambool City Council is committed to operating in a safe and environmentally sustainable manner for the benefit of present and future generations.

To achieve this the Port of Warrnambool will:

- Establish, maintain and continually improve Safety and Environmental Management Plans for its port and ensure policies, objectives and targets for performance are relevant and appropriate;
- Meet all applicable safety and environmental legislation, regulations and other requirements to which the organisation subscribes;
- Conduct activities and operations with the aim to eliminate work-related injuries and illness, minimise waste, prevent pollution, promote efficient use of resources and reduce environmental impacts;
- Encourage staff, tenants, licensees, service providers and the community to participate in the development and implementation of the Safety and Environmental Management Plans; and
- Communicate and make available the Safety and Environmental Management Plans and Policy to staff, tenants, licensees, service providers and the community.

The Port of Warrnambool also recognises the safety and environmental planning objectives stated in the *Port Management Act 1995* S91CA. The objectives are:

- promoting improvements in safety and environmental outcomes at Victoria's ports;
- promoting and facilitating the development, maintenance and implementation of systems that enable compliance with the various safety and environmental duties that apply to the operation of the port; and
- promoting an integrated and systematic approach to risk management in relation to the operation of the port

2.3 The Port of Warrnambool Key Performance Indicators and Annual Report

The *Ministerial Guidelines: Port Safety and Environment Management Plans* were revised late in 2012 and required the addition of Key Performance Indicators (KPIs) from the Port Managers. The KPIs are used by the port managers to assess the extent to which implementation of the management plan achieves the safety and environment management planning objectives set out in section 91CA of the *Port Management Act 1995*.

The overall effectiveness of this management plan in achieving the safety and environmental performance outcomes will be assessed from 2014 in an annual SEMP report to the Minister and any bodies prescribed by the regulations as directed by the *Port Management Act 1995* S91HB.

The KPIs for the Port of Warrnambool are:

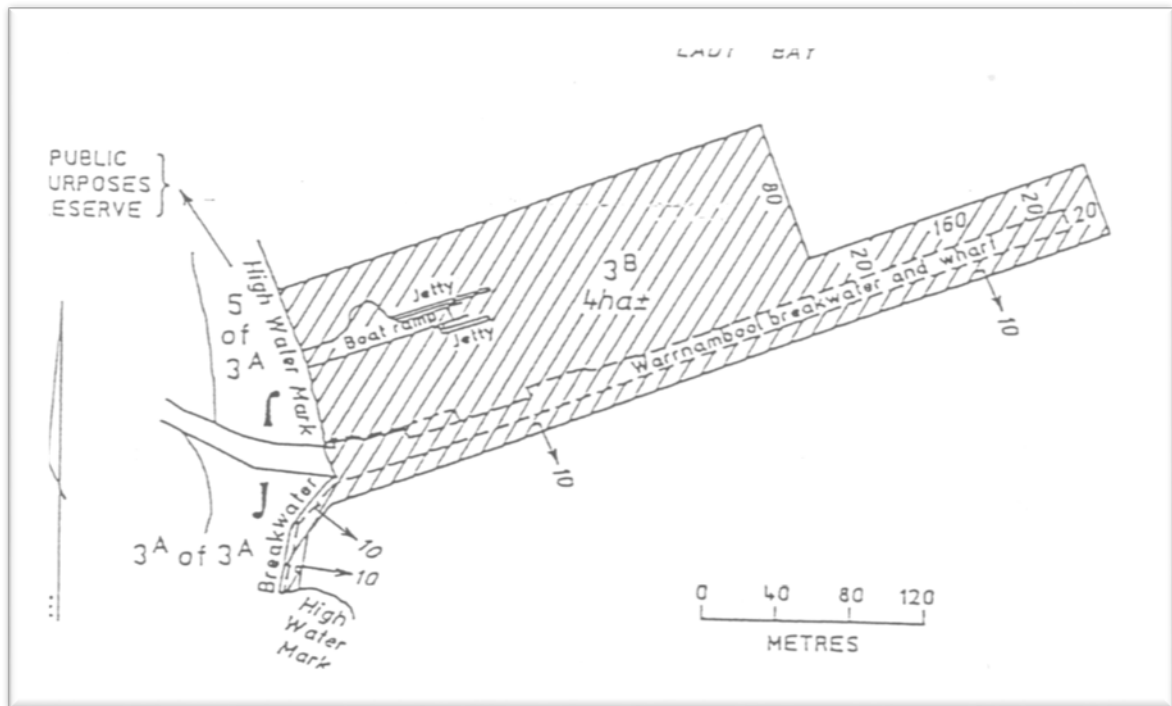
	KPI	Management Strategy
1	Ensure proper functioning of navigation aids – functioning 95% of the time or greater	<ul style="list-style-type: none"> • Weekly undocumented visual check inc. navigational aids • Monthly, SEMP audit • Notification from public
2	Timely completion of incident form – within 7 days of incident notification	<ul style="list-style-type: none"> • Complete incident report • Ensure signature of port officers • Carry out rectification measures • Report to DEDJTR monthly
3	Monthly inspection of assets for preventative maintenance works	<ul style="list-style-type: none"> • Carry out inspection and complete checklist • Carry out proactive maintenance work • Program significant works in future budgets
4	No workplace death	<ul style="list-style-type: none"> • Appropriate selection of staff and equipment • Staff training • Equipment servicing • Safe operating procedures and JSEAs / SWMSs
5	SEMP consultation with key users	<ul style="list-style-type: none"> • Mooring site holders provided with mooring conditions requiring they comply with SEMP process • SEMP published on WCC website • WCC kept informed of SEMP progress

Part 3 – Description of Port Areas

3.1 Area Applicable to this Management Plan

The area that is covered by this Safety and Environment Management Plan is within the boundary of the gazetted port (see below). The map on page 15 outlines the two lighthouses (Upper and Lower Lady Bay Lighthouses) that are port assets but are located beyond the gazetted port boundary.

MAP 1 Port Area



The key feature of the Port is the 600m long Breakwater wall. The Breakwater protects the fishing fleet and boat ramp from the Southern Ocean. The Breakwater and lower landing serve as loading and unloading areas for the commercial fisherman, with the Breakwater deck being wide enough to accommodate vehicles, a low loader and mobile crane. The Breakwater has fresh water, light and power connections.

Pedestrian access along the Breakwater is via an upper pedestrian path that runs the length of the Breakwater.

The majority of the port waters lie protected behind the Breakwater. This area is mainly used for the mooring of commercial and recreational vessels. This area is subject to an inflow of approximately 10,000 m³ of sand per annum. This silts the mooring area and therefore requires dredging on a five-yearly basis.

The two lighthouses (Lady Bay Upper Lighthouse and Lady Bay Lower Lighthouse) located at Flagstaff Hill Maritime Museum are considered Port of Warrnambool assets (refer to map 2). The Warrnambool City Council also manages Flagstaff Hill and the Council (as both manager of the Port and Flagstaff Hill) carries out maintenance and inspection works on the lighthouses. Recently, both lighthouses were fitted with exterior blue LED lights. The lighthouses were previously also fitted with a light sensor but due to the possibility of sea fog this featured was disabled. The light at the end of the Breakwater is also an aid to navigation.

The boat ramp is a port asset. The boat ramp is utilised by both commercial and recreational vessel operators.

The Volunteer Coastguard, Warrnambool Yacht Club, Offshore fishing club and the Harbour Pavilion are groups who are located outside the gazetted Port of Warrnambool boundary, but regularly interact with activities occurring at the port.

The Port is also in close proximity to two significant environmental features, the Merri Marine Sanctuary (managed by Parks Victoria) and Logan's Beach which is a Southern Right Whale nursery.

3.2 Port Operations

The Port supports approximately ten commercial fishing boats and Coastguard vessels.

The Port supplies access to the Southern Ocean for amateur and professional fishing boats via the boat ramp and crane lift. The boat ramp is also used as an access point for a wide array of other recreational vessels, such as yachts and jet skis.

The Breakwater is popular with visitors promenading along the upper walkway and recreational fisherman utilising the structure as a fishing location.

3.3 Key Tenancies within the Port

The major tenants in the port are the commercial fishermen and the Volunteer Coastguard.

3.4 Stakeholder Consultation

The following stakeholders had the opportunity to make comment on the Port of Warrnambool SEMP prior to certification. Appropriate comments from stakeholders have been incorporated into the plan. Considering the size and operations undertake at the port, the list given below was considered appropriate for consultation:

- Professional Fishermen's Association
- Warrnambool Yacht Club
- Flagstaff Hill Maritime Museum
- Harbour Pavilion
- Environment Protection Agency
- WorkSafe
- Department of Environment, Land, Water and Planning
- South Warrnambool Community Association
- Representative of the local commercial fishermen
- Warrnambool Offshore, Light Game Fishing Club

3.5 Dangerous goods or hazardous materials storage facilities

There are no dangerous good or hazardous material storage facilities within the Port of Warrnambool boundaries.

When required, refuelling of vessels is completed by mobile refuelling equipment.

MAP 2

Port of Warrnambool – Port and Stakeholder Positions



Part 4 – Identification of Hazards and Risks

4.1 Port Activity Map

The following table lists all the activities that occur within the Port. The activities are divided into five different zones within the port to identify where activities crossover. This process will aid in the identification of responsibilities and control options. The table also identifies the responsibilities of the port manager within the different zones. The other agencies involved with the management of the zone are also included.

1. OUTSIDE PORT WATERS Approaching or leaving port waters.	2. IN PORT WATERS Approaching or leaving the berth.	3. TRANSFER FROM PORT WATER TO PORT LAND AT THE BERTH (or Vice Versa)	4. ON PORT LAND	5. TRANSFER TO OR FROM PORT LAND
<p>Recreational</p> <ul style="list-style-type: none"> • Power Boating • Jet Skiing • Yachting • Surf Skiing • Canoeing • Sea Kayaking • Swimming • Wind Surfing • Kite boarding • Surfing • Regattas • Snorkelling • Surf Carnivals • Horse Training • Anchoring • Coastguard operations • Transfer of marine pests • Navigation 	<p>Recreational</p> <ul style="list-style-type: none"> • Fishing (from Breakwater) • Fishing (from boat ramp jetties) • Power Boating • Jet Skiing • Yachting • Surf Skiing • Canoeing • Sea Kayaking • Swimming • Wind Surfing • Surfing • Regattas • Jumping off Breakwater • Snorkelling • Surf Carnivals • Horse Training • Anchoring • Owner DIY vessel maintenance • Washing of various craft • Australian customs • Wastewater management 	<p>Recreational</p> <ul style="list-style-type: none"> • Fishing (from Breakwater) • Fishing (from boat ramp jetties) • Power Boating • Jet Skiing • Yachting • Canoeing • Sea Kayaking • Swimming • Regattas • Jumping off Breakwater • Snorkelling • Horse Training • Owner DIY vessel maintenance • Washing of various craft • Re-fuelling 	<p>Recreational</p> <ul style="list-style-type: none"> • Fishing (from Breakwater) • Fishing (from boat ramp jetties) • Jet Ski launching • Yacht launching • Regattas • Jumping off Breakwater • Cycling (on Breakwater) • Promenading • Pyrotechnic displays • Vehicle operations & movement • Washing of various craft • Fish cleaning • Vehicle security 	<p>Recreational</p> <ul style="list-style-type: none"> • Cycling (on Breakwater) • Promenading • Vehicle operations & movement • Horse training

<p>Commercial</p> <ul style="list-style-type: none"> • Commercial fishing • Dredging (spoil site) • Commercial shipping • Australian customs • Biofouling/ antifouling • Transfer of marine pests <p>Port Management Authority</p> <ul style="list-style-type: none"> • Lighthouse maintenance • Oil/ fuel spill response <p>Other Agency's Activities</p> <ul style="list-style-type: none"> • Parks Victoria • DELWP • Fisheries • Transport Safety Victoria • Surf Life Saving Club • Police • MSV 	<p>Commercial</p> <ul style="list-style-type: none"> • Coastguard operations • Commercial fishing • Owner DIY vessel maintenance • Hydrographic Surveying • Maintenance Work (i.e. painting, concreting, electrical, timber work) • Swing Mooring maintenance and certification • Clearance of flotsam/jetsam • Dredging • Washing of various craft <p>Port Management Authority</p> <ul style="list-style-type: none"> • Oil/ fuel spill response • Dredging • Mooring maintenance • Wastewater management <p>Other Agency's Activities</p> <ul style="list-style-type: none"> • Parks Victoria • DELWP • Fisheries • Transport Safety Victoria • Surf Life Saving Club • Police • MSV 	<p>Commercial</p> <ul style="list-style-type: none"> • Commercial fishing • Owner DIY vessel maintenance • Fish loading/unloading • Hydrographic Survey • Maintenance Work (i.e. painting, concreting, electrical, timber work) • Clearance of flotsam/jetsam • Washing of various craft • Crane lift, commercial vessels up to 20T • Refuelling <p>Port Management Authority</p> <ul style="list-style-type: none"> • Navigation aid maintenance and upgrade • Breakwater maintenance • Lower landing maintenance <p>Other Agency's Activities</p> <ul style="list-style-type: none"> • Parks Victoria • DELWP • Fisheries • Transport Safety Victoria • Surf Life Saving Club • Police • DEDJTR 	<p>Commercial</p> <ul style="list-style-type: none"> • Vehicle operations & movement • Fish loading/unloading • Horse training • Hydrographic surveying • Maintenance Work (i.e. painting, concreting, electrical, timber work) • Retaining wall maintenance • Navigation Aid maintenance • Washing of various craft <p>Port Management Authority</p> <ul style="list-style-type: none"> • Asset inspections/ monitoring • Breakwater maintenance • Lower landing maintenance • Signage • Breakwater access management • Litter control • Maintenance work on lighthouses at Flagstaff Hill <p>Other Agency's Activities</p> <ul style="list-style-type: none"> • Parks Victoria • DELWP • Fisheries • Transport Safety Victoria • Police • DEDJTR 	<p>Commercial</p> <ul style="list-style-type: none"> • Vehicle operations & movement • Horse training <p>Port Management Authority</p> <ul style="list-style-type: none"> • Maintain vehicle access • Maintain pedestrian access <p>Other Agency's Activities</p> <ul style="list-style-type: none"> • Parks Victoria • DELWP • Police • DEDJTR
---	--	---	--	--

4.2 Risk Assessment

Effective management of safety and environmental impacts and their associated risks involves a structured and systematic approach to analysing and assessing risk which enables controls to be targeted to provide efficient, cost-effective solutions which achieve the desired environmental outcomes.

Risk Assessment Framework

The development of the Port of Warrnambool risk assessment framework was based on the application of the following Australian-New Zealand and International Standards:

- AS/NZS ISO 31000:2009, Risk management - Principles and guidelines;
- AS/NZS 4801:2001 Occupational health and safety management systems - Specifications with guidance for use;
- AS/NZS ISO 14001:2015 Environmental management systems - Requirements with guidance for use and
- AS/NZS ISO 14004:2004, Environmental management systems - General guidelines on principles, systems and support techniques.

4.3 Definitions

Consequence

The outcome of an event expressed qualitatively or quantitatively, being a loss, injury, disadvantages or gain. There may be a range of possible outcomes associated with an event.

Control

The process of elimination or minimization of risks.

DEDJTR

Department of Economic Development, Jobs, Transport and Resources

DELWP

Department of Environment, Land, Water and Planning

DSE

Department of Sustainability and Environment

Event

An incident or situation which occurs in a particular place during a particular time interval.

Environment

Surroundings in which an organisation operates, including air, water, land and natural resources, flora fauna, humans and their interaction.

Environmental Aspect

Element of an organisation's activities, products or services that can interact with the environment.

Environmental Impact

Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products or services.

Frequency

A measure of the rate of occurrence of an event expressed as the number of occurrences of an event in a given time.

Likelihood

Used as a qualitative description of probability or frequency.

Probability

The likelihood of a specific event or outcome measured by the ratio of specific events or outcomes to the total number of possible events or outcomes.

Risk

The chance of something happening that will have an impact upon objectives. It is measured in terms of consequence and likelihood.

Risk Management

The culture, processes and structures that are directed towards the effective management of potential opportunities and adverse effects.

Risk Management Process

The systematic process of management policies, procedures and practices as applied to the tasks of establishing the context, identifying, analysing, evaluating, treating, monitoring and communicating risk.

Safety Hazard

A source or a situation with a potential to cause harm or loss in terms of human injury or ill health, damage to property, damage to the environment, or a combination of these.

Safety Hazard and Environmental Impact Risk Assessment

Overall process of identifying activities, products or services and estimating the magnitude and significance of risk and deciding what actions will be taken.

SEMP

Safety and Environment Management Plan.

TSV

Transport Safety Victoria

4.4 Risk Assessment Process

The risk assessment process involves comparing the level of risk found during the analysis process with previously established risk criteria. Each risk will be expressed as a value of Very High, High, Medium or Low risk. The outputs of this process will create a prioritised list of risks (or risk register) that require further action. Focus will be placed on Very High and High risks that are deemed to be significant. Low and Medium risks may fall into an acceptable level of risk category. These risks may require monitoring and periodic review to ensure they remain acceptable. A review of all risks is to be conducted annually or if there are major changes in the nature of activity conducted at the port.

The Port of Warrnambool has established the following risk qualitative measures to assess the impacts associated with key activities, products and services within the port. The consequence and likelihood descriptors were originally presented to the Department of Sustainability and Environment, Environment Protection Agency, Department of Transport and Parks Victoria for comment and approval. The matrix was drawn from the *Ministerial Guidelines: Port Safety and Environment Management Plans* November 2012 S4.6.

Table of safety impact consequence descriptors

1 – Insignificant	2 – Minor	3 – Moderate	4 – Major	5 – Catastrophic
<ul style="list-style-type: none"> • Minor injuries immediately treated on-site with first aid treatment • No need to contact regulatory authorities • No fines or prosecution 	<ul style="list-style-type: none"> • Moderate injuries requiring medical treatment but without hospital admission • Need to contact regulatory authorities due to potential non-compliance • Possible fines 	<ul style="list-style-type: none"> • Serious and / or extensive injuries requiring medical treatment with hospital admission • Need to contact regulatory authorities due to non-compliance • Possible fines and prosecution 	<ul style="list-style-type: none"> • Paraplegia, quadriplegia, brain damage or death • Need to contact regulatory authorities due to non-compliance • Fines and prosecutions likely 	<ul style="list-style-type: none"> • Multiple deaths • Need to contact regulatory authorities due to non-compliance • Severe fines and prosecutions likely and/or employees/directors jailed

Table of environmental impact consequence descriptors

1 – Insignificant	2 – Minor	3 – Moderate	4 – Major	5 – Catastrophic
<ul style="list-style-type: none"> • No observable environmental impact. • Localised temporary effects on environment within natural variability. • Effects not transmitted and not accumulating. • No need to contact regulatory authorities • No fines or prosecution 	<ul style="list-style-type: none"> • Localised temporary effects on environment beyond natural variability • For all cases, effects not accumulating & recovery within 5 years • Short term impacts to local viability of non-endangered species • Area of less than 5000m² of limited environmental significance affected • Need to contact regulatory authorities due to potential non-compliance • Possible fines 	<ul style="list-style-type: none"> • Alteration/disturbance of a component of an ecosystem but sustainability unaffected • Recovery within 10 years • Long term impacts to local viability of non-endangered species • Significant ecological events (e.g. algal bloom, fish kills) • For all cases, effects not transmitted or accumulating • Loss of resources, but sustainability unaffected • Need to contact regulatory authorities due to non-compliance • Possible fines and prosecution 	<ul style="list-style-type: none"> • Widespread environmental damage, involving alteration or loss of sustainability of one or more eco-systems or several components of these systems • Recovery within 50 years • Impacts likely to result in upward change in status of one or more endangered and threatened species • Likely loss of sustainability of unique habitats or landforms • Relatively widespread impacts (50-1—square kilometres) • Loss of sustainability of selected resources • Effects can be transmitted and/or accumulate • Need to contact regulatory authorities due to non-compliance • Fines and prosecutions likely 	<ul style="list-style-type: none"> • Irreversible damage to one or more eco-systems or landforms • No recovery • Extinction of one or more species or life cycle of species impaired • Area affected is 100 square kilometres or greater • Loss of sustainability of most resources • Effects are synergistic or cumulative, and/or can be transmitted and/or accumulate • Need to contact regulatory authorities due to non-compliance • Severe fines and prosecutions likely and/or employees/directors jailed

Table of Environmental Impact Likelihood Descriptors

	A	B	C	D	E
Indicative frequency	<ul style="list-style-type: none"> • Almost certain • 1 or more incidents in 1 month 	<ul style="list-style-type: none"> • Likely • 1 or more incidents in 1 year 	<ul style="list-style-type: none"> • Moderate • 1 or more incidents in 5 years 	<ul style="list-style-type: none"> • Unlikely • 1 or more incidents in 10 years 	<ul style="list-style-type: none"> • Rare • 1 or more incidents in 100 years
General definition	<ul style="list-style-type: none"> • Is expected to occur in most circumstances 	<ul style="list-style-type: none"> • Will probably occur in most circumstances 	<ul style="list-style-type: none"> • Should occur some time 	<ul style="list-style-type: none"> • Could occur at some time 	<ul style="list-style-type: none"> • May occur at some time but only in exceptional circumstances

Risk Assessment Matrix

		Consequence				
		1	2	3	4	5
Likelihood	A	MEDIUM	HIGH	HIGH	VERY HIGH	VERY HIGH
	B	MEDIUM	MEDIUM	HIGH	HIGH	VERY HIGH
	C	LOW	MEDIUM	HIGH	HIGH	HIGH
	D	LOW	LOW	MEDIUM	MEDIUM	HIGH
	E	LOW	LOW	MEDIUM	MEDIUM	HIGH

Key Outcomes:

Very High (Significant)
High (Significant)
Medium
Low

Immediate action required
Detailed research and management planning required
Management responsibility must be specified
Management by routine procedures

Part 5 – Impact of Hazards and Risks

The following table documents all significant land and water based risks that are conducted within the port.

The Activity Map in Chapter 4 was used as a basis for the identification of risks within the port. The previous chapter outlines the methodology used in determining the risk rating for each activity listed.

#	Activity	Hazard	BEFORE CONTROLS			AFTER CONTROLS		
			Consequence	Likelihood	Initial Risk Rating	Consequence	Likelihood	Residual Risk Rating
SAFETY								
1	Fishing (recreational from Breakwater)	Strong currents, inclement weather including overtopping of Breakwater by very large waves, lack of experience or knowledge	4	C	H	4	E	M
		Deficient, defective or no safety equipment	4	E	M	4	E	M
		Deficient, defective or no signage or navigational aids	4	C	H	4	E	M
2	Fishing (jetties on boat ramp)	Strong currents, inclement weather, lack of experience or knowledge	2	E	L	2	E	L
		Deficient, defective or no safety equipment	2	E	L	2	E	L
		Deficient, defective or no signage or navigational aids	2	E	L	1	E	L
3	Commercial boating	Strong currents, inclement weather, lack of experience or knowledge	4	D	M	4	E	M
		Deficient, defective or no signage or navigational aids	4	D	M	4	E	M
		Collision with other boats, infrastructure, swimmers or other obstructions	2	D	L	2	D	L
4	Amateur boating	Collision with other boats, infrastructure, swimmers and other obstructions	2	C	M	2	C	M
		Strong currents, inclement weather, lack of experience or knowledge	5	D	H	5	D	H
		Deficient, defective or no signage or navigational aids	4	D	M	4	E	M
5	Boat launching and retrieval at boat ramp	Inclement weather including large waves, lack of experience or knowledge, strong currents	2	A	H	2	A	H
		Slippery surface	1	A	M	1	C	L
		Deficient, defective or no signage or navigational aids	1	E	L	1	E	L
6	Boat launching, crane to low loader	Public safety, asset capacity, rigging.	4	E	M	4	E	M
6	Swing moorings	Collision with other boats and infrastructure	1	D	L	1	C	L
7	Jet skiing (access, boat ramp)	Inclement weather, lack of experience or knowledge	4	E	M	4	C	H
		Deficient, defective or no signage or navigational aids	2	D	L	2	E	L
		Collision with other boats, infrastructure, swimmers or other obstructions due to speeding or disregarding signage	4	E	M	4	C	H
8	Surf skiing / stand up paddle boarding / canoeing / sea kayaking	Strong currents, inclement weather, lack of experience or knowledge	1	D	L	1	D	L
		Deficient, defective or no signage or navigational aids	1	D	L	1	E	L
		Collision with other boats, infrastructure, swimmers or other obstructions	2	D	L	2	D	L

Port of Warrnambool – Safety & Environment Management Plan
Version 9

9	Swimming	Deficient, defective or no signage or navigational aids	4	E	M	4	E	M
		Collision with other swimmers, boats, infrastructure or other obstructions	4	C	H	4	D	M
		Inclement weather, lack of experience or knowledge	3	C	H	3	C	H
10	Regattas	Strong currents, inclement weather, lack of experience or knowledge	2	C	M	1	D	M
		Deficient, defective or no signage or navigational aids	2	D	L	2	D	L
		Collision with other boats, infrastructure, swimmers or other obstructions	2	D	L	2	D	L
11	Jumping off breakwater	Strong currents, inclement weather, lack of experience or knowledge	4	C	H	4	C	H
		Collision with other swimmers, boats, infrastructure or other obstructions	4	C	H	4	C	H
12	Snorkelling	Inclement weather, lack of experience or knowledge	3	C	H	3	C	H
		Deficient, defective or no signage or navigational aids	4	E	M	4	E	M
13	Cycling (on Breakwater)	Slip, trip or fall	4	C	H	4	D	M
		Collision with other cyclists, pedestrians, vehicles or infrastructure	4	C	H	4	D	M
		Deficient, defective or no signage	4	C	H	1	D	L
		Inclement weather including overtopping of Breakwater by very large waves	4	E	M	4	E	M
14	Surf Carnivals	Strong currents, inclement weather, lack of experience or knowledge	2	B	M	2	B	M
		Deficient, defective or no signage or navigational aids	1	D	L	1	D	L
		Collision with other boats, infrastructure, swimmers or other obstructions	1	D	L	1	D	L
15	Other organised sporting events (SLSC Breakwater to Surf Club swim)	Strong currents, inclement weather, lack of experience or knowledge	2	B	M	2	B	M
		Deficient, defective or no signage or navigational aids	1	D	L	1	D	L
		Collision with other boats, infrastructure, swimmers or other obstructions	1	D	L	1	D	L
16	Promenading (along Breakwater)	Slip, trip or fall	2	C	M	2	C	M
		Inclement weather including overtopping of Breakwater by very large waves	4	E	M	4	E	M
17	Pyrotechnics displays	Close proximity exposure to explosives	3	D	M	3	E	M
18	Horse training	Slip, trip or fall	4	D	M	4	C	H
		Horse injuring beach user	3	E	M	3	D	M
19	Mooring in port (lines)	Collision with other boats or infrastructure	2	D	L	2	D	L
20	Owner DIY vessel maintenance (oil change, degreasing, antifouling)	Slip, trip or fall	3	D	M	3	D	M
		Vehicle fall into water	4	E	M	4	E	M
21	Bathymetric surveying	Strong currents, inclement weather, lack of experience or knowledge	1	E	L	1	E	L
		Deficient, defective or no signage or navigational aids	1	E	L	1	E	L
		Collision with other boats, infrastructure, swimmers or other obstructions	1	E	L	1	E	L
22	Maintenance (painting, contractor)	Deficient maintenance and works regime (or program)	3	C	H	2	B	M
23	Maintenance (concreting, contractor)	Deficient maintenance and works regime (or program)	3	C	H	2	B	M
24	Maintenance (electrical, contractor)	Deficient maintenance and works regime (or program)	3	C	H	2	B	M
25	Maintenance (timber work, contractor)	Deficient maintenance and works regime (or program)	3	C	H	2	B	M
26	Mooring maintenance (contractor)	Deficient maintenance and works regime (or program)	3	C	H	2	B	M
27	Retaining wall maintenance (contractor)	Deficient maintenance and works regime (or program)	3	C	H	2	B	M

Port of Warrnambool – Safety & Environment Management Plan
Version 9

28	Navigation aid / beacon maintenance (contractor)	Deficient maintenance and works regime (or program)	2	B	M	2	E	L
29	Pollution & spill response	Exposure to contaminants	2	C	M	2	D	L
30	Lighthouses maintenance	Slip, trip or fall	2	D	L	2	E	L
31	Vehicle movement on breakwall	Collisions with pedestrians	5	C	H	4	D	M
		Vehicle entering the water	5	C	H	4	E	M
		Wave overtopping wall and striking vehicle	4	E	M	4	E	M
ENVIRONMENT			BEFORE CONTROLS			AFTER CONTROLS		
32	Dredging	Disturbance to sediment – creation of turbid waters	1	B	M	1	B	M
33	Dredge plant operations	Oil spill from dredge plant	2	C	M	2	D	L
		Air pollution from dredge plant	1	C	L	1	C	L
		Noise pollution	1	C	L	1	C	L
		Oil spill from dredge striking engine blocks previously used as mooring blocks	2	D	L	2	E	L
34	Boating (oil & fuel leak)	Oil and fuel leak contamination of beaches, soil, water, air	2	B	M	2	B	M
		Degreasing, solvents contamination of beaches, soil, water, air	2	B	M	2	B	M
35	Oil Spill (passing ships)	Oil and fuel leak – contamination of beaches, soil, water, air	4	E	M	4	E	M
36	Beach activities	General waste – contamination of beaches, soil, water, air	1	A	M	1	A	M
37	Organised sport events	General waste – contamination of beaches, soil, water, air	1	A	M	1	A	M
38	Promenading	General waste – contamination of beaches, soil, water, air	1	A	M	1	A	M
39	Fishing/ fish cleaning	General waste – contamination of beaches, soil, water, air	1	A	M	1	A	M
40	Swing mooring	Mechanical damage to seabed and benthic flora	1	B	M	1	B	M
41	Owner DIY vessel maintenance	Oil and fuel leak contamination of beaches, soil, water, air	2	B	M	2	B	M
42	Washing of various craft	Inappropriate disposal of waste – contamination of beaches, soil, water	1	A	M	1	A	M
43	Vehicle operations & movements	Spill contamination of beach, soil, water	1	D	L	1	D	L
44	Maintenance works (contractor works)	Painting - Spill contamination of beach, soil, water	1	B	M	1	D	L
		Concreting - Spill contamination of beach, soil, water	2	C	M	2	C	M
		Timber works - Spill contamination of beach, soil, water	2	D	L	2	D	L
45	Fuelling (not from a fixed installation)	Explosion or fire	2	C	M	2	C	M
		Spill contamination of beach, soil, water	1	B	M	1	B	M
46	Boating	Marine pest arrival, particularly Undaria	2	C	M	3	B	H
47	Marine pest control	Destruction of non-target species, public safety	3	D	M	2	E	L

Part 6 – Controls to Prevent and Reduce Hazards and Risks

All high and very high risk outcomes were deemed as significant and therefore must be further examined. The following table outlines those activities with significant residual risk i.e. remain at high or very high after controls are in place. The table also examines the current control measures associated with the risk and outlines any further controls that may be required. Time frames for the implementation of proposed new controls and the responsible person for the implementation of these controls are also outlined.

In assessing control measures, the concept of a ‘hierarchy of controls’ has been considered. The hierarchy of controls recognises that different types of controls have different effectiveness and/or reliability. For new or additional controls, where reasonable and practicable, upper hierarchy controls will be favoured. It is also important to note those available resources and funding also influence the hierarchy on control selected to minimise the risk.

The hierarchy of controls includes:

1. Elimination (E)
2. Substitution (S)
3. Engineering Controls (EC)
4. Administrative Controls (A)
5. Personal Protective Equipment (PPE)

In the table below, the hierarchy of control for both the existing and additional controls is indicated next to the control in brackets.

Activity	Risk Rating	Current Controls	Required Control	Time frame/ targets	Responsible person	Monitoring of control measures
SAFETY						
Jumping off Breakwater	H	Signage (EC), Ladders on breakwall (EC), Enforcement of Local Port Regulations (E)	Enforcement of Local Port Regulations (E)	N/A	Port Staff, Enforcement Officers	Weekly inspections over summer period. MSV enforcement as

						required
Jet skiing (access / collisions)	H	Caution signage at boat ramp entrance (EC) Removal of algae growth on boat ramp (EC) Dredging (EC) Regular maintenance of navigation beacons (EC)	Enforcement of Local Port Regulations (E)	Ongoing	N/A Port Manager WCC works department	Algae removal documented in WCC works diary Dredging Management Plan Nav aids on monthly checklist Periodic signage review, independent
Swimming / snorkelling (interaction with vessels)	H	5 knot limit in port waters (EC) Signage at boat ramp (EC) Ladders on breakwall (EC)	Enforcement of Local Port Regulations (E)	Ongoing	Port Manager, Enforcement Officers	Regular inspections by WCC staff, particularly over summer period Signage and ladders on monthly checklist
Amateur boating	H	5 knot limit in port waters (EC) Signage at boat ramp (EC) Removal of algae growth on boat ramp (EC) Dredging (EC) Regular maintenance of navigation beacons (EC) Ladders on breakwall (EC)	Enforcement of Local Port Regulations (E)	Ongoing	Port Manager WCC works department	Nav aids, signage and ladders on monthly checklist Algae removal documented in WCC works diary Dredging in accordance with adopted management plan
Boat launching and retrieval	H	Caution signage at boat ramp entrance (EC) Removal of algae growth on boat ramp (EC) Dredging (EC)		Ongoing	Port Manager WCC works department	Signage on monthly checklist Algae removal documented in WCC works diary Dredging in accordance with

						adopted management plan
Horse training	H	Consultation with Australian Trainers Association (ATA) re limiting numbers of horses on the beach at peak times and riding etiquette(A) Setting curfews on horses on beach times (E)	Enforcement of permit conditions (E)	Ongoing	Port Manager ATA	Horse trainer's beach permits d
ENVIRONMENT						
Boating (marine pest arrival)	H	Port manager's network (E) Consultation with other port users (E) Boat quarantine and treatment if required (EC)		Ongoing	Port Manager	Register of vessels; Port Manager's network; Awareness; Biannual infrastructure inspections;

6.1 Interaction with Emergency Management

The Warrnambool City Council reviewed the Port Emergency Management Plan in 2011 and adopted it on 17 May 2011. It has now been integrated into their emergency management system and will be reviewed in 2017. Most of the significant residual risks – boating accidents, drowning, medical emergencies, vehicle accidents and hazardous substances in the waterways are included in the port's Emergency Management Plan. The residual environmental risk of general waste is not in the plan and could be better managed at a planning level.

Part 7 – Implementation

7.1 Responsible person(s)

The Committee of Management (Warrnambool City Council) will be responsible for the implementation of this plan. The Port Manager under delegation will carry out the implementation process.

7.2 Implementation Procedures for Management Plan

Annual Budgets will reflect costs for risk and control issues raised within the Plan.

Control measures are prioritised according to the assessment outlined in the Plan. The activities that were assessed as very high and high are the focus of upcoming works in accordance with the timeframes outlined in Part 6.

Funding to implement these control measures is via the Council's annual operating budget from the Department of Economic Development, Jobs, Transport and Resources. If additional funds are required, the Council will seek further funds via the annual Budget process with the Department.

The Port of Warrnambool Safety and Environment Plan includes a formalised checklist for assessing both safety and environmental risks. The very high and high risks are the main focus of routine inspections of the port. The port manager has worked with the Council's safety and environmental officers to develop procedures that are coordinated with the Council's current risk management system. The Council's current risk management system is designed to assess hazards, outline the required control measures and inform the relative department that action is required.

The implementation of this risk assessment system aids in ensuring that the controls listed in Part 6 are effective in minimising the identified hazards and also determines the potential need for revision. The checklist system also ensures that the current controls remain adequate.

7.3 Process for involvement of tenants, licensees and service providers in development and implementation

When future arrangements are made concerning tenant agreements and license renewals, the issues and risks raised in this plan will be incorporated into any new agreements. The level of incorporation of the plan into a new agreement and/or license will be dependent upon the activity undertaken and the possible risk involved. The plan will be used as a reference to determine any associated risks with the tenant's activities.

During the initial period of community consultation notices were placed in the local newspaper and relevant newsletters to inform the public that copies of the Port of Warrnambool SEMP were available at the Warrnambool City Council office and on Council website. Feedback on the SEMP is encouraged and relevant feedback from tenants, licensees, service providers and the public is assessed in the annual review of the SEMP (process outlined in Part 8).

7.4 Documentation and implementation systems

Project reports are completed when works are carried out at the Port. The Port Engineer keeps records of works in a designated work diary. Monthly inspection forms are kept and incident forms are kept in the Warrnambool City Council file system.

7.5 Port Incident Register

Incidents are to be reported to the port manager as soon as possible after the event. Any incidents are forwarded to the Department of Economic Development, Jobs, Transport and Resources on a monthly basis. The Incident Report form is attached as Appendix 3.

Details of all incidents reported will be retained on the Council's and the Department's file system for any future reference.

7.6 Regulatory Compliance Register

The register below outlines key safety and environmental legislation, agreements, conventions, standards and other related documentation that Warrnambool Port must comply with.

International

Title	Comment
Agreement between the Government of Australia and the Government of Japan for the Protection of Migratory Birds in Danger of Extinction and their Environment 1974	
Agreement between the Government of Australia and the Government of People's Republic of China for the Protection of Migratory Birds in Danger of Extinction and their Environment 1986	
Basle Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1989 (Basle Convention)	
Convention for the Protection of the Natural Resources and Environment of the South Pacific Region 1986	
Convention for the Protection of the World Cultural and Natural Heritage 1972	
Convention of Biological Diversity, Rio de Janeiro, 1992	
Convention on International Trade in Endangered Species 1973	
Convention on the Conservation of Migratory Species of Wild Animals, Bonn 1979	
Convention on the Conservation of Nature in the South Pacific 1976	
Convention on Wetlands of International Importance (RAMSAR), Iran 1971	
Food and Agriculture Organisation of the United Nations International Code of Conduct for Sustainable Fishing 1995	
Guidelines for the Control and Management of Ships Ballast Water to Minimise the Transfer of Harmful Aquatic Organisms and Pathogens (IMO) 1997	
International Convention for the Prevention of Pollution from Ships (MARPOL), 1973/78	
International Convention for the Safety of Life at Sea (SOLAS) 1974	
International Convention on Prevention of Marine Pollution by Dumping of Wastes and other Matter, London 1972	
International Maritime Organisation Dangerous Goods Code (IMDG Code) 2004	
Kyoto Declaration and Plan of Action on the Sustainable Contribution of Fisheries to Food Security 1997	
South Pacific Regional Environment Program Protocol Concerning Co-operation in Combating Pollution Emergencies in the South Pacific Region 1986	
South Pacific Regional Environment Program Protocol for the Prevention of Pollution of the South Pacific Region by Dumping 1986	
The Jakarta Mandate on Marine and Coastal Biological Diversity 1995	

The United Nations Convention on the Law of the Sea (UNCLOS) 1982	
United Nations Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks 1992	
United Nations Commission on Environment and Development (UNCED) 1992	
Agenda 21, Chapter 17 (covering the protection and use of oceans, seas and coastal areas) 1992	
United Nations Framework Convention on Climate Change 1992	

Commonwealth

Legislation	Applicable Aspect
Aboriginal & Torres Strait Islander Heritage Protection Act 1984	Promotes the protection of archaeological sites, places and objects.
Environment Protection & Biodiversity Conservation Act 1999 Environment Protection and Biodiversity Conservation Regulations 2000	Promotes the conservation of biodiversity and ecologically sustainable use of Australia's natural resources. Implements Australia's environmental responsibilities (i.e. Ramsar wetlands).
Environment Protection (Sea Dumping) Act 1981 Environment Protection (Sea Dumping) Regulations 1983	Provides protection to the environment by regulating dumping into the sea of wastes
Historic Shipwrecks Act 1976 Historic Shipwreck Regulations 1978	Protects the wrecked vessels and articles of historical significance.
Maritime Transport Security Act 2003	When applicable, port managers must take appropriate measures to enhance maritime security to meet the Maritime Transport Security Regulations 2003.
National Plan to Combat Pollution of the Sea by Oil & other Noxious and Hazardous Substances National Marine Chemical Spill Contingency Plan National Marine Oil Spill Contingency Plan	These plans are designed to give effect to the International Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances 2000

Occupational Health & Safety (Maritime Industry) Act 1993	Secures the health, safety and welfare at work of maritime industry workers.
Occupational Health & Safety (Maritime Industry)(National Standards) Regulations 2003	
Occupational Health & Safety (Maritime Industry) Regulations 1995	
Protection of the Sea (Prevention of Pollution from Ships) Act 1983	Prevents the discharge of harmful substances from ships.
Protection of the Sea (Prevention of Pollution from Ships) (Orders) Regulations 1994	
Whale Protection Act 1980	When applicable, port managers must ensure the protection and conservation of whales.

State (Victoria) SAFETY Legislation

Legislation	Applicable Aspect
Dangerous Goods Acts 1985	Ports Managers are to ensure a safe workplace in relation to the manufacture, storage, transfer, sale, purchase and use of dangerous goods on the port.
Dangerous Goods (Storage & Handling) Regulations 2012	
Emergency Management Act 2013	Provides for the organisation of emergency management in Victoria.
Equipment (Public Safety) Act 1994	Ensures the safety of the public, in relation to port equipment and equipment sites.
Equipment (Public Safety)(General) Regulations 2007	
Equipment (Public Safety)(Incident Notification) Regulations 1997	
Gas Safety Act 1997	Makes provision for the safe conveyance, measurement, control of gas and to generally regulate gas safety.

Gas Safety (Gas Installation) Regulations 1999	
Major Events (Crowd Management) Act 2003	Promotes the safety and enjoyment of participants and spectators at major events.
Marine Safety Act 2010 Marine Safety Regulations 2012 Marine (Further Amendment) Act 2001	Port Managers must ensure that they follow a range of marine safety requirements and standards that are administered by Transport Safety Victoria (i.e. navigation aids).
Occupational Health & Safety Act 2004	Port Manager shall provide and maintain so far as practicable a working environment that is safe and without risk to health.
Occupational Health & Safety (Certification of Plant Users and Operators) Regulations 2003	Ensures the minimization of incidents involving cranes, forklifts hoists and other mechanical load shifting equipment, pressures equipment and scaffolding.
Occupational Health & Safety (Hazardous Substances) Regulations 1999	Intended to protect employees against risks to health associated with the use of hazardous substances
Occupational Health & Safety (Incident Notification) Regulations 1997	Purpose is to identify whether preventative action is necessary following an incident at a workplace
Occupational Health & Safety (Issue Resolution) Regulations 1999	Prescribes a procedure to ensure effective resolution of safety issues as they arise.
Occupational Health & Safety (Manuel Handling) Regulations 1999	Intended to reduce the number and severity of staff injuries associated with tasks involving manual handling.
Occupational Health & Safety (Noise) Regulations 2004	Ensures the control of excessive noise in the workplace
Occupational Health & Safety (Plant) Regulations 1995	Protects workers against risk arising from plant and systems of work associated with plant.
Occupational Health & Safety (Prevention of Falls) Regulations 2003	Intended to prevent incidents as workplaces involving falls of more than 2m and reduce injuries resulting from those falls.
Port Management Act 1995 Port Management (Local Ports) Regulations 2015	Port Managers responsibility to produce SEMP and ensure reasonable steps are taken to implement the measures and strategies specified in the plan.

Quarantine Act 1908	When applicable, the correct management of quarantine items must be followed.
Quarantine Regulations 2000	
Road Safety Act 1986	Provides safe, efficient and equitable road use.
Road Transport Reform (Dangerous Goods) Regulations 2000	Ensuring the safe transportation of dangerous goods to and from the port.
Seafood Safety Act 2003	Ensures that all sectors of the seafood chain are required to manage food safety risk in accordance with relative standards.

State (Victoria) ENVIRONMENTAL Legislation

Title	Applicable Aspect
Archaeological & Aboriginal Relics Preservation Act 1972	Protects all Aboriginal cultural heritage sites, places and objects.
Catchment and Land Protection Act 1994	Provided an integrated management and protection of catchments, also involving the encouragement of community participation and control of noxious weeds and pest animals.
Catchment and Land Protection Regulations 2002	
Coastal Management Act 1995	Provides strategic planning and management for the Victorian coast, such as Coastal Action Plans.
Crown Land (Reserves) Act 1978	Provides for the reservation and management of coastal Crown Land.
Environment Protection Act 1970	Provides legislative framework to protect Victoria's environment. The 'precautionary principle' is relevant to port managers under this Act.
Environment Protection (Fees) Regulations 2001	Sets fees that are payable under the Environment Protection Act 1970.
Environment Protection (Prescribed Waste) Regulations 1998	Proscribes the transport and management of waste prescribed under the Environment Protection Act 1970.
Environment Protection (Scheduled	Provide exemptions from provisions of the Environment Protection Act 1970.

Premises & Exemptions) Regulations 2007	
Fisheries Act 1995 Fisheries Regulations 1998	Provides legislative framework for the regulation, management and conservation of Victorian fisheries.
Flora & Fauna Guarantee Act 1988 Flora & Fauna Guarantee Regulations 2011	Enables the conservation of Victoria native flora and fauna, providing procedures that can be used for the conservation, management and control of flora and fauna
Freedom of Information Act 1982 Freedom of Information Regulations 1998	Provides the public with the right to access information in the possession of the Government of Victoria and other bodies constituted under the law of Victoria
Heritage Act 1995 Heritage (General) Regulations 2005 Heritage (Historic Shipwrecks)(General) Regulations 1996	Provides protection of places and objects of cultural and heritage significance. The Act ensures that such places become registered as significant features.
Heritage Rivers Act 1992	Provides protection of public land in particular parts of the river areas in Victoria that have significant conservation, recreation and cultural heritage attributes.
Land Act 1958 Land Act Regulations 1996	Details the sale and occupation of Crown Land.
National Parks Act 1995 National Parks (Park) Regulations 2003	Makes a provision for National, State, Marine National parks and Marine Sanctuaries for the preservation and protection of the natural environment.
Planning and Environment Act 1987 Planning and Environment Regulations 1998	Provides framework for the planning, use, development and protection of land in Victoria
Pollution of Waters by Oil & Noxious Substances Act 1986	Ensures the protection of the sea and port waters from pollution by oil and other noxious substances.

Pollution of Waters by Oil and Noxious Substances Regulations 2002	
State Environment Protection Policy	Subordinate legislation made under the provisions of the <i>Environment Protection Act 1970</i> , providing more detailed requirements and guidance for the application of the Act.
State Environment Protection Policy (Air Quality Management) 2001	Establishes a framework for managing emissions into the air environment from all sources in Victoria.
State Environment Protection Policy (Ambient Air Quality) 1999	Sets air quality objectives and goals for the state of Victoria.
State Environment Protection Policy (Groundwaters of Victoria) 1997	Developed to meet community demands for an integrated framework of environment protection goals for groundwater
State Environment Protection Policy (Waters of Victoria) 1988	Aims to provide a coordinated approach for the protection and, where necessary, rehabilitation of the health of Victoria's water environment.
Pollution of Waters by Oil & Noxious Substances Act 1986	Ensures the protection of the sea and port waters from pollution by oil and other noxious substances.
Pollution of Waters by Oil and Noxious Substances Regulations 2002	
Victorian Coastal Strategy 2002	Provides a vision for the Victorian coast and the actions Victorians need to take today to achieve that vision.

Local/Regional

Coastal Board	Title
Western	Central West Victoria Regional Coastal Action Plan
Western	Central West Victoria – Guide to Coastal Waterway Planning and Management.
Western	South West Victoria Regional Coastal Action Plan

Relevant Standards

Code	Title
HB 76:2010	Dangerous Goods – initial emergency response guide
AS/NZS ISO 14001:2015	Environmental Management Systems – general guidelines on principles, systems and supporting techniques.
HB 203:2012	Managing environment related risk
AS 1657:2013	Fixed Platforms, Walkways, Stairways and Ladders – Design, Construction and Installation
AS/NZS 4801:2001	Occupational Health and Safety Management Systems – Specification with guidance for use
AS/NZS 31000:2009	Risk Management – Principles and guidelines
AS 4997:2005	Guidelines for the Design of Maritime Structures
AS 1940:2004	Storage and Handling of Flammable and Combustible Materials

Guidelines

Organisation	Title
Australian and New Zealand Environment Conservation Council	Best Practice Guidelines for Waste Reception Facilities at Ports, Marinas & Boat Harbours in Australia and New Zealand.
Department of the Environment	Australian and New Zealand Guidelines for fresh and Marine Water Quality 2000
DELWP	Melbourne 2030
EPA Victoria	Guidelines for the Monitoring & Assessment of Coastal Point Source Discharges 1999
EPA Victoria	Noise Control Guidelines 1992
Life Saving Victoria	Aquatic and Recreational Signage Style Guide
Transport Safety Victoria	Boating Operating Rules
Transport Safety Victoria	Vessel Operating and Zoning Rules for Victorian Waters 1999
Transport Safety Victoria	Standard for the provision and maintenance of navigation aids in Victorian State Waters
Victorian Coastal Council	Siting and Design Guidelines for Structures on the Victorian Coast 1998
WorkSafe	Managing Safety in Your Workplace

Part 8 – Review and Revision

The Plan is reviewed annually by the Committee of Management (Warrnambool City Council).

The annual review by the Council will address the following:

- Activity map (Part 4.1) to determine if any major activity changes have occurred.
- If new activities have been undertaken in the port, a risk assessment on the hazards associated with the activity will be completed.
- Progress in implementation of risk reduction measures (Part 6) will be updated.
- Adequacy and performance of current controls (Part 6) will be assessed.
- The need to update any or all sections of the plan (i.e. new tenants, stakeholders) will also be assessed.

Additional reviews will be considered whenever any of the following occur:

- Capital works within the port exceeding \$1,000,000.
- Change in nature, scale and extent of major activities within the port (this may include a new tenant or stakeholder becoming involved at the port).

If the Council considers that the content and implications of the plan are significantly changed, then the plan will be circulated for further consultation. The key stakeholders outlined in Part 1.10 will be consulted during a review of the plan. If a new tenant or stakeholder becomes involved in the port, they will be added to the list of key stakeholders for consultation.

Tenants, licensees, service providers and the public are encouraged to participate in reviews of the plan by personal communication with port management, notice on the Council website and notices in the local media that the Council is seeking comments on the plan. Copies of the plan are available at the Warrnambool City Council Office and on the Council website.

When significant amendments are required, copies of amendments will be distributed to document holders listed in Part 9 or they will be emailed a copy of the revised plan.

The Warrnambool City Council will engage an external, third party review of the plan on a triennial basis (every three years). This review will provide an independent assessment of the plan, drawing attention to any areas of concern and/or opportunities for improvement. The plan will be amended to reflect any changes.

Following any major revision of the plan, the Port Manager will formally endorse the plan (as per Part 1.3).

Part 9 – Copies

A copy is published on the Warrnambool City Council website (www.warrnambool.vic.gov.au)

The following agencies, organisations and stakeholders have been provided with a copy of this plan:

- Department of Economic Development, Jobs, Transport and Resources
- Department of Environment, Land, Water and Planning
- Flagstaff Hill Maritime Museum
- Warrnambool Yacht Club
- Representative of the Professional Fishermen's Association
- Warrnambool Offshore & Light Game Fishing Club

Appendix 1 - Certification

General Comment on plans provisions for s. 91D (1)(a) of the <i>Port Services Act 1995</i>	
None	
Certifiable: <input checked="" type="radio"/> Y / N	
Certifiers Signature: <i>Paul Adell</i>	Date: 31/08/05

General Comment on plans provisions for s. 91D (1)(b) of the <i>Port Services Act 1995</i>	
None	
Certifiable: <input checked="" type="radio"/> Y / N	
Certifiers Signature: <i>Paul Adell</i>	Date: 31/08/05

General Comment on plans provisions for s. 91D (1)(c) of the <i>Port Services Act 1995</i>	
None.	
Certifiable: <input checked="" type="radio"/> Y / N	
Certifiers Signature: <i>Paul Adell</i>	Date: 31/08/05

General Comment on plans provisions for s. 91D (1)(d) of the Port Services Act 1995	
<i>It is proposed in Section 7.2 that a checklist will be developed for routine assessment of safety and environment risks at the port. A copy of this checklist once developed should be attached to the SEMP as an Appendix. The checklist should be prepared and implemented prior to the next internal review in twelve months and use of the form must be demonstrated in the external audit in three years time. A standard job safety analysis form for contractors should also be prepared and attached to the SEMP.</i>	
<i>Port emergency management details are still in planning and should be confirmed during the next external audit.</i>	
Certifiable: <input checked="" type="radio"/> Y / N	
Certifiers Signature: <i>Paul Adell</i>	Date: 31/08/05

General Comment on plans provisions for s. 91D (1)(e) of the Port Services Act 1995	
<i>No additional comments.</i>	
Certifiable: <input checked="" type="radio"/> Y / N	
Certifiers Signature: <i>Paul Adell</i>	Date: 31/08/05

General Comment on plans provisions for s. 91D (1)(f) of the Port Services Act 1995	
<i>No further comment.</i>	
Certifiable: <input checked="" type="radio"/> Y / N	
Certifiers Signature: <i>Paul Adell</i>	Date: 31/08/05


General Comment on plans provisions for s. 91D (1)(g) of the Port Services Act 1995	
<p><i>A checklist will be developed for routine assessment of safety and environment risks at the port. A copy of this checklist once developed should be attached to the SEMP as an Appendix. The checklist should be prepared and implemented prior to the next internal review in twelve months. The use of the form must be demonstrated in the external audit in three years time. A standard job safety analysis form for contractors should also be prepared and attached to the SEMP.</i></p> <p><i>The incident form should be modified to allow reporting of environmental incidents.</i></p> <p><i>Public and stakeholder consultation should be undertaken with consideration of the Public Participation Spectrum (Fig 3 of the Ministerial Guidelines, May 2005). The minimum level that should be applied is the "Consult" level.</i></p>	
Certifiable:	<input checked="" type="radio"/> Y / <input type="radio"/> N
Certifiers Signature:	<i>Paul Adell</i> Date: 31/08/05

Appendix 2 - Audit

The Port of Warrnambool undertakes an external third party review of the SEMP on a triennial basis. This review provides an independent assessment of the plan, drawing attention to areas of concern and / or opportunities for improvement.

The Port has been audited three times, the last in 2016, as required by *Port Management Act 1995*, s91E. These reviews guide port management in designing appropriate risk controls.

Appendix 3 - Warrnambool City Council Incident Form



PORT OF WARRNAMBOOL - INCIDENT FORM

Council is collecting this information so that it may investigate the incident described on this form. The information is only used by Council for this purpose and will not be disclosed unless required under law.

Date: **Time:**

Location:

Incident:

Reported By

Name:

Address:

.....**Post Code:**

Telephone: (BH) **(AH)**.....

Investigated By:

Extent (Damage/Injury):

Cause:

Action Taken:

Details of Incident: (If there is not enough room, attach a separate page.)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Appendix 4 - Warrnambool City Council SWMS

Safe Work Method Statement (SWMS)



Job Undertaken:

High Risk Tasks:

SWMS No:

Location of Job:

Person Responsible:

(Ensuring compliance with SWMS)

Date:

Contractor:

Permit to work required? Yes **No**

- Job controls for all tasks:**
- No worker to work in isolation
 - PPE to be worn i.e. hard hats, vests, boots, ear protection (when appropriate).
 - Qualified first aider on site at all times

Task No.	Actual Task	Risks	Risk Control	Person Responsible

Safe Work Method Statement SWMS

The personnel listed below have been made aware and understand the procedure, hazards and control measures outlined in the Safe Work Method Statement. They will abide by the control measures outlined within the Save Work Method Statement.

Name	Position	Signature	Date

If there are any changes, additions or deletions made to this SWMS, all work needs to stop and all modifications need to be listed and covered with the above personnel and the contractor representative at a toolbox meeting with their names listed below.

Name	Position	Signature	Date

Record name of person making changes, additions or deletions, date and time of toolbox meeting.

Person making changes: _____

Toolbox meeting date: _____

Comment: _____

Time: _____

Appendix 5 – Port of Warrnambool Inspection Checklist

Port of Warrnambool Safety and Environment Monthly Inspection

Month of:
 Inspection date:
 Inspecting officer:

Navigational Aides	Checked?	If action required, please comment.
Upper Lighthouse - Light Working - Paint Condition		
Lower Lighthouse - Light Working - Paint Condition		
Breakwater Light - Light Working		
Speed Marker Buoys - 5 No. in Bay		

Breakwater	Checked?	If action required, please comment.
Bollards - Paint Condition		
Breakwater Deck - Pot Holes Ladders - Paint Condition - Rungs - Handles Upper Walkway - Deck - Handrails - Stair Condition		
Lighting - Working - Flood Lights Working - Connects to Wall okay		
Lower Landing - Stairs okay - Bait Slides okay - Bollards Paint - Buffers (Fenders) - Signage Condition okay - Deck trip points		
Gates - Operational		

Boat Ramp	Checked?	If action required, please comment.
Weed Growth - Needs Cleaning		
Hoses - Have Fitting Attached Lights - Working		
Signage - in Place		
Wheel Chocks - In Place		
Decks - No Trip Points		
Ladders – Okay		
Bollards - Conditions Okay (Fenders Attached)		
Fish Cleaning Board - Condition Okay		
Pollution observed		