

# Extended Use Operational Environmental Management Plan

**Eden Breakwater Wharf Extension**

**October 2020**

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## Acronyms

Acronym/Term	Definition
BVSC	Bega Valley Shire Council
CCC	Community Consultative Committee
DAWE	Department of Agriculture, Water and the Environment
DPIE	NSW Department of Planning, Industry and Environment (formerly Department of Planning and Environment)
EIS	The Eden Breakwater Wharf Extension State Significant Infrastructure – Environmental Impact Statement, dated 3 November 2016
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPA	NSW Environment Protection Authority
km	Kilometers
LGA	Local Government Area
LOA	Length overall (for a vessel)
NSW	New South Wales
OEMP	Operational Environmental Management Plan
PANSW	Port Authority of New South Wales
SSI	State Significant Infrastructure

## Definitions

Term	Definition
Complaints	A written or verbal expression of dissatisfaction about an activity, or proposed activity, or failure to act by the Operator or anyone else directly or indirectly related to the Facility.
Council	Bega Valley Shire Council.
Extended Use	Use of the Facility when not occupied by a cruise vessel by fishing vessels, tugs, barges, lines boats, yachts and other vessels with sizes up to 100 metres in length.
Facility	Eden Cruise Ship Facility, including all infrastructure required to allow cruise ships to berth at the extended Eden Breakwater Wharf and land side areas, facilities and services for management of passengers' visitation including disembarkation, embarkation and transport.
Incident	An occurrence or set of circumstances that: <ul style="list-style-type: none"> <li>• Cause, or threatens to cause, material harm to the environment, community or any member of the community, being actual or potential harm to the health or safety of human beings or to threatened species, endangered ecological communities or ecosystems that is not trivial; or</li> <li>• Results in non-compliance with SSI Approval No. 7734 and EPBC Referral Decision 2016/7828.</li> </ul>
Infrastructure Approval	Infrastructure Approval (SSI) 7734 issued by the Executive Director, Priority Projects Assessment (as delegate of the Minister for Planning) Department of Planning and Environment under Section 115ZB of the <i>Environmental Planning and Assessment Act 1979</i> , (dated 5 July 2017) and modified on the 7 November 2018 (MOD 1) and on the 21 October 2020 (MOD 2)
Operator	The Port Authority of New South Wales is the Operator for the Facility and responsible for overall compliance with the OEMP, and the operational aspects of the Infrastructure Approval Mod 1 and Mod 2 and EPBC Act Referral Decision.
Port	Port of Eden
Relevant Maritime Authority	Port Authority of NSW

# 1 Introduction

This Extended Use Operational Environmental Management Plan (OEMP) has been prepared by the Port Authority of NSW (Port Authority) for the use of the Eden Breakwater wharf extension by vessels of sizes up to 100m in length at times when the Eden Cruise Ship Facility (the Facility) is not used by cruise ships (for details refer to Section 2.2).

The Facility was approved by the Executive Director of the Department of Planning, Infrastructure and Environment (DPIE) on the 5 July 2017 and modified by the Minister for Planning's delegate on the 7 November 2018 (MOD 1) and on the 21 October 2020 (MOD 2) pursuant to Part 5.2 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) (the Infrastructure Approval). The original approval provided for the extension of the existing Breakwater wharf by approximately 95m for use by large cruise ships. The MOD 2 approval allowed the use of the Eden Breakwater wharf extension by vessels up to 100m in length at times when the Facility is not occupied by a cruise ship, including 24/7 berthing and operational/maintenance activities from 7:00am to 10:00pm.

"Extended Use" is referred to in this document as the use of the Facility when not occupied by a cruise ship by any vessels up to 100m in length as described in Section 2.2 and the MOD 2 Assessment Report (MOD 2) available in the Major Projects DPIE website (<https://www.planningportal.nsw.gov.au/major-projects/project/37096>).

A separate OEMP and OEMP-subplans were prepared and approved by the DPIE for the use of the Facility by cruise ships (referred to in this document as the Cruise Ship OEMP). The Cruise Ship OEMP and associated OEMP-subplans, and the Extended Use OEMP are available on the Port Authority's website:

<https://www.portauthoritynsw.com.au/>

The Facility, declared State Significant Infrastructure (SSI 7734) by the Minister for Planning, was constructed by the former New South Wales (NSW) Department of Industry – Crown Lands (DoI) (now part of the DPIE). Construction of the Facility was completed in August 2019 and operation commenced in September 2019. The operation of the Facility is the responsibility of the Port Authority. The implementation of the Cruise Ship OEMP and the Extended Use OEMP is undertaken by the Port Authority.

The Eden Cruise Ship Facility is located on land within Snug Cove and the bed of Twofold Bay, within the Port of Eden (the Port) on the Sapphire Coast of NSW (refer to Section 2.1).

## 1.1 Extended Use OEMP Purpose

The purpose of the Extended Use OEMP is to provide the basis for environmental management of the Eden Breakwater wharf extension when it is used by non-cruise ship vessels of sizes up to 100m in length.

This Extended Use OEMP details how the performance outcomes, commitments and mitigation measures made in MOD 2 will be implemented and achieved during operation by:

- Identifying policy statutory and other obligations required to be fulfilled in relation to the Extended Use
- Identifying environmental risks associated with the Extended Use
- Documenting environmental mitigation measures and environmental performance outcomes
- Defining the roles and environmental responsibilities for management of the Extended Use and the relationship with relevant stakeholders
- Documenting suitable emergency preparedness and response procedures
- Outlining the Complaints management procedure
- Providing the methodology for reporting, managing and maintaining compliance

- Outlining training and induction for employees, including contractors and sub-contractors, for the Extended Use
- Allowing for periodic review and update of the extended use OEMP.

This Extended Use OEMP has been prepared in accordance with:

- Guidelines for the Preparation of Environmental Management Plans, Department of Infrastructure, Planning and Natural Resources, 2004
- Applicable conditions of the Infrastructure Approval (SSI 7734)
- Condition 4(b) of the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) Referral Decision (EPBC 2016/7828) (refer to Section 4.2).

## 1.2 Extended Use OEMP Infrastructure Approval Requirements

This OEMP addresses the requirements of Conditions of the Infrastructure Approval as shown in **Table 1**.

**Table 1: Requirements of Infrastructure Approval – Extended Use OEMP**

Condition	Requirement	Reference
A28	A complaints register must be maintained for the duration of construction and operation.	Section 3.4
A30	<p>The following information must be available to facilitate community enquiries and complaints within one (1) month from the date of this approval:</p> <ul style="list-style-type: none"> <li>(a) a 24 hour telephone number for the registration of complaints and enquiries about the SSI;</li> <li>(b) a postal address to which written complaints and enquiries may be sent;</li> <li>(c) an email address to which electronic complaints and enquiries may be transmitted; and</li> <li>(d) a mediation system for complaints unable to be resolved.</li> </ul> <p>This information must be accessible to all in the community regardless of age, ethnicity, disability or literacy level.</p>	Section 3.4
A33	The Secretary must be notified as soon as possible and in any event within 24 hours of the Proponent being made aware of any incident.	Section 3.5
D1A	An Extended Use Operational Environmental Management Plan (Extended Use OEMP) must be prepared to detail how the performance outcomes and commitments made and identified in the <i>Eden Cruise Facility Modification 2 to SSI 7734 Extending Use of Cruise Facility to other Vessels</i> and <i>Eden Cruise Facility Response to Submissions - Modification 2 to SSI 7734 Extending Use of Cruise Facility to other Vessels</i> will be implemented and achieved during the Extended Use operations	This document

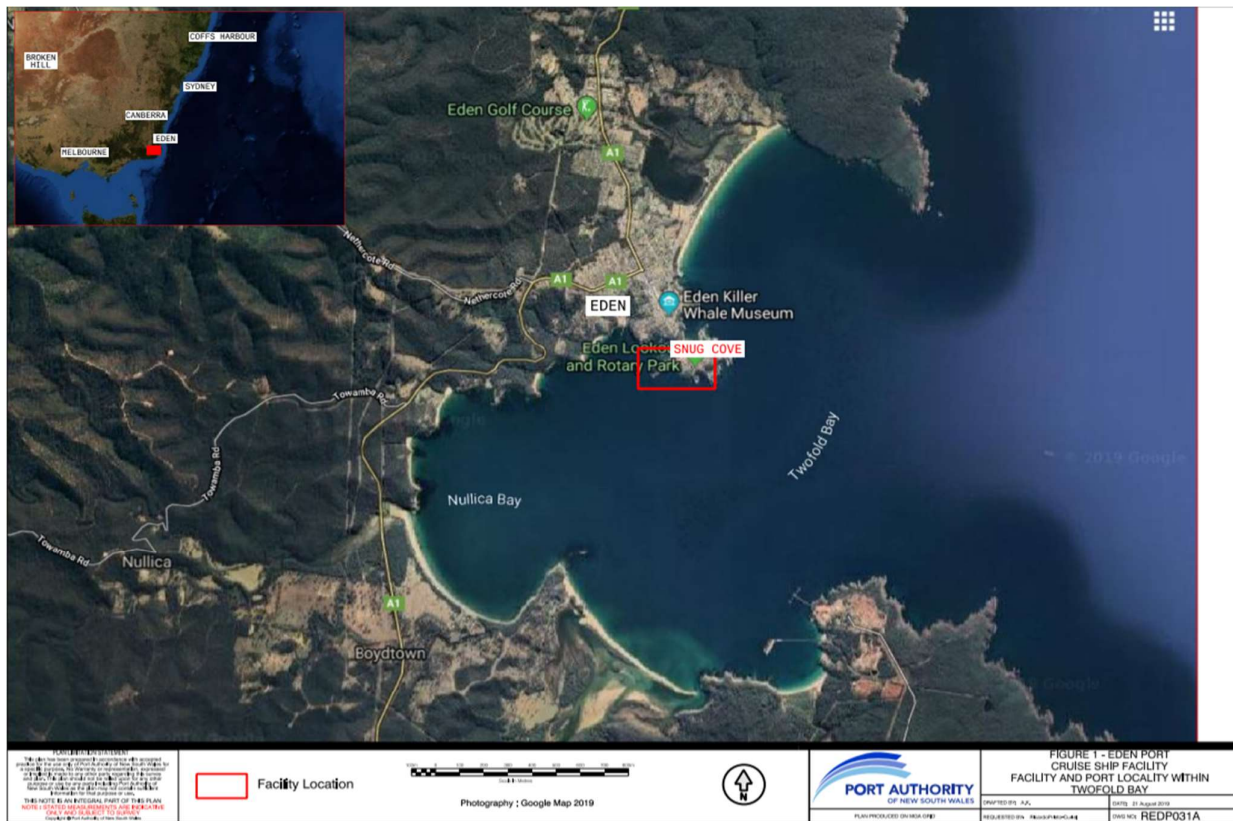
D5	The..... Extended Use OEMP, must be submitted to the Secretary for approval no later than one month prior to the commencement of relevant operations, unless another timeframe is agreed with the Planning Secretary.	This document
D6	The .... Extended Use OEMP, as approved by the Secretary and amended from time to time, must be implemented for the duration of relevant operations and must be made publicly available prior to the commencement of and for the duration of the relevant operations.	Sections 1, 2
E1	Vessels other than cruise ships up to 100m in length are permitted to remain at berth 24 hours per day when a cruise ship is not at berth	Section 2

## 2 Description of the Facility and Extended Use Operations

### 2.1 Location and Description of the Facility

The Port of Eden (the Port) is located within Twofold Bay in the Bega Valley Shire Local Government Area (LGA). It is the southern-most declared port in NSW, approximately equidistant between Sydney and Melbourne and approximately 40km from the NSW and Victorian border.

**Figure 1** shows the locality of the Port in relation to major centres and within Twofold Bay, with the Facility located in the red square.



**Figure 1: Eden Port Locality within Twofold Bay**

The Facility is located at the end of Weecoon Street within Snug Cove which is on the northern side of Twofold Bay. The Facility is located approximately 800 metres from the Eden town centre, with the closest residences being approximately 250 metres from the wharf.

Maritime facilities located in the vicinity of the Breakwater wharf extension include (refer to **Figure 2**):

- Breakwater Wharf
- Multipurpose Jetty
- Mooring Jetty
- NSW Water Police Mooring Facility
- Fishermen's Co-Operative 'T' Jetty
- Cat Balou Pontoon and Freedom Charters Berthing

- Northern and southern boat launching ramps
- Commercial and private swing moorings



**Figure 2: Eden Breakwater Wharf Extension within its context in Snug Cove, Eden (Source: Nearmap, 2019)**

The Breakwater Wharf, Multipurpose Jetty, Mooring Jetty and some other of the above marine facilities have been operational since 1970/80s and involve uses and activities similar to those covered by the Extended Use OEMP, such as fish unloading, berthing of yachts, tugs and other small to medium vessels, and repair and servicing of vessels.

### 2.1.1 Services

Table 2 shows the service assets at the Facility.

**Table 2: Service Assets**

Asset	Description
Wharf Lighting and Power Outlets	<ul style="list-style-type: none"> <li>▪ Electrical cables, conduits, pits, junction boxes, and distribution boards</li> <li>▪ 8 x 9m LED flood lighting poles and fittings – southern side of wharf</li> <li>▪ 12 x LED fender line light fittings – northern side of wharf</li> <li>▪ 5 x single phase General Power Outlets (GPO) along wharf.</li> </ul>
Dolphin Lighting	<ul style="list-style-type: none"> <li>▪ 10 x 5m light pole (2 per dolphin)</li> <li>▪ 10 x Solar powered LED light fittings.</li> </ul>
Potable Water	<ul style="list-style-type: none"> <li>▪ Ø100 water main along Wharf</li> <li>▪ 5 x ø65 water connections along Wharf</li> <li>▪ 18 x ø25 water connections along Wharf.</li> </ul>
Emergency Water (fire-fighting)	<ul style="list-style-type: none"> <li>▪ 5 x fire hydrants along Wharf.</li> </ul>

Sewage or fuel services will be provided through mobile licensed contractors.

## 2.2 Extended Use Activities

### 2.2.1 Extended Use Operations

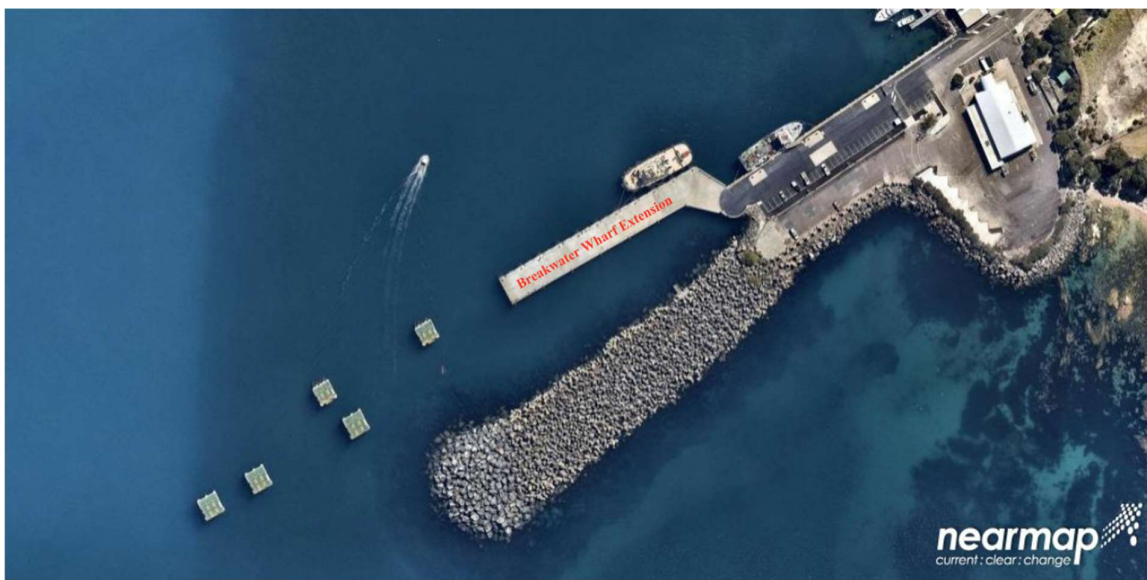
Extended Use operations involve the following:

- Use of the Eden Breakwater wharf extension (**Figure 3**) when not occupied by a cruise vessel by fishing vessels, tugs, barges, lines boats, yachts and other vessels with sizes up to 100 metres in length. These vessels would berth along both sides of the extended wharf where feasible and safe.
- Loading and unloading of fish, equipment, gear, parts, materials and other general dry and/or containerised freight and cargo during the non-night-time period hours described in Section 2.2.2. No bulk liquid cargo loading and unloading is proposed as part of these operations.
- Refuelling of vessels by road fuel truck.
- General vessel maintenance and servicing (including sewage, waste and sullage offload).

### 2.2.2 Timing of Extended Use Operation

Hours of operations are as follows:

- Vessels (as described above) are allowed to remain at berth on a 24/7 basis.
- Vessel operational activities (loading/unloading, refuelling, maintenance, servicing, passenger embarkation and disembarkation, etc) are allowed any time between 7:00am and 10:00pm. The hours between 7:00am and 10:00pm are also the hours that cruise ships are allowed to use the berth (except for extenuating circumstances) under the current Infrastructure Approval.



**Figure 3: Eden Breakwater Wharf Extension**

## 3 Roles and Responsibilities, Training, Investigations and Communications

### 3.1 Roles and Responsibilities

Table 3 identifies responsibilities for the Extended Use Operations.

**Table 3: Roles and Responsibilities**

Position	Responsibility
Operator, Port Authority	<ul style="list-style-type: none"><li>• Overall responsibility for the Extended Use Operations</li><li>• Responsibility for implementation of the Extended Use OEMP</li><li>• Responsibility to ensure compliance with Statutory Requirements as they relate to the Extended Use Operations</li><li>• Responsibility for compliance with the operational aspects of the Infrastructure Approval</li><li>• External communication in relation to matters concerning the Extended Use</li></ul>
Harbour Master	<ul style="list-style-type: none"><li>• Coordinate the safe transit of all Port users including cruise ships, fishing vessels, private vessels etc.</li><li>• Assist in waterside management of emergency response including oil spill, security threat, fire, and natural disaster</li><li>• Liaise with Port Authority's site staff regarding overall Port Security</li><li>• Oversee the implementation of the Extended Use OEMP. The Harbour Master will delegate OEMP responsibilities to site personnel as required</li></ul>
Business operators and users	<ul style="list-style-type: none"><li>• Carry out their activities to be compliant with the Extended Use OEMP and the Infrastructure Approval. Compliance will be overseen by Port Authority site personnel</li><li>• Exercise a duty of care to the environment at all times</li></ul>
All other staff and contractors (Work Health and Safety Officer, maintenance workers, etc.)	<ul style="list-style-type: none"><li>• Comply with the requirements of the Extended Use OEMP and the Infrastructure Approval</li><li>• Comply with all statutory requirements as far as they pertain to their respective roles</li><li>• Exercise a duty of care to the environment at all times</li><li>• Follow emergency response actions and reporting requirements in the event of environmental Incidents</li></ul>

All staff employed, and contractors appointed by the Operator will be formally advised of their obligations under the Extended Use OEMP.

### 3.2 Inductions and Training

Port Authority has developed a Facility induction to employees. Other details of the Inductions and training are provided in Section 3.2 of the Cruise Ship OEMP.

### 3.3 Community Consultative Committee

A Community Consultative Committee (CCC) has been established in accordance with the *Community Consultative Committee Guidelines State Significant Projects* (DP&E, 2019) as per requirements in the Infrastructure Approval.

The CCC comprises an Independent Chairperson and representatives from port businesses, maritime user groups, residents surrounding the Port, the BVSC and the Port Authority amongst others.

The CCC will continue to operate for a minimum of five years from the commencement of the operation of the Facility in accordance with the Infrastructure Approval. Matters related to Extended Use operations will be discussed during CCC meetings as required.

Details of the CCC are provided in Section 3.3 of the Cruise Ship OEMP and in the Community Communication Strategy prepared under the Infrastructure Approval.

### 3.4 Complaints and Enquiries Procedure

#### 3.4.1 Complaints Procedure

All complaints and enquires are managed in accordance with the Community Complaints Procedure developed and implemented by the Port Authority. A link to the procedure is below:

<https://www.portauthoritynsw.com.au/community/community-complaints-procedure/>

Service NSW manages Port Authority's complaints and enquiries line on a 24/7 basis. This ensures complaints are managed in real-time at any time of the day or night. The complaints and inquiry process generally involves the following:

- community enquiries and complaints are made by the 24/7 line: 02 9296 4962;
- Service NSW receives the complaint and takes details of the nature of the call (ie. date, time, vessel name, etc);
- a verbal response is provided, including an outline of how the call will be managed;
- action is taken by Service NSW depending on the nature of the complaint. This may include contacting Port Authority's operations team for real-time investigation and action if required (e.g. contacting a ship and/or the ship's agent in the event of a noise complaint);
- Service NSW emails the complaint to Port Authority;
- details on the response outcome is emailed to the complainant by Port Authority within three working days;
- complaints are registered, and allocated a reference number and kept in a central database by Port Authority.

Section 3.5.1 of the Cruise Ship OEMP presents further details of Port Authority's Complaints Response Procedure.

#### 3.4.2 Complaints Register

A Complaints Register will be maintained for the duration of Operation of the Extended Use as outlined in Section 3.5.2 of the Cruise Ship OEMP. The complaints register will be provided to the Secretary upon request, within the timeframe stated in the request.

### 3.5 Pollution Incident Management

Environmental hazards, incidents and emergencies will be managed as to minimise potential environmental impacts to the maximum extent practicable.

All pollution incidents and near misses must be reported to the Harbour Master or its delegate as soon as possible after becoming aware of the incident for corrective actions and investigations to occur.

Pollution incidents causing or threatening material harm to the environment will be notified to the EPA and relevant agencies immediately after the person becomes aware of the incident in accordance with Section 148 of the *Protection of the Environment Operations Act 1997* (POEO Act). Under Section 147 of the POEO Act, harm to the environment is material if:

- it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
- it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and
- loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

Material harm includes on-site harm, as well as harm to the environment beyond the premises where the pollution incident occurred.

Notifications under Section 148 of the POEO Act will be given immediately after becoming aware of the incident. After the initial notification, a written follow up notification must be prepared within 7 days of the date on which the incident occurred.

Pollution incidents causing or threatening material harm must be notified to each of the following relevant authorities:

- DPIE
- the EPA
- the Ministry of Health
- SafeWork NSW (formerly WorkCover)
- Bega Valley Shire Council
- Fire and Rescue NSW

If the incident presents an immediate threat to human health or property, Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service should be contacted first for emergency assistance - phone 000. The other response agencies must still be contacted after that to satisfy notification obligations.

If the incident does not require an initial combat agency, or once the 000 call has been made, notify the pollution incident to the relevant authorities in accordance with Section 148 of the POEO Act. Contact details of relevant authorities under Section 148 of the POEO Act and other key agencies are provided in Table 4.

Pollution Incidents notification must include the following information:

- Time, date and duration of the pollution Incident
- Location of Incident
- Details of Incident, including nature and circumstances in which the incident occurred
- Action taken or proposed to be taken to deal with the incident
- Any non-compliance with the Conditions of the Infrastructure Approval associated with the incident.

### 3.6 Emergency Contacts and Response

Port Authority has prepared and implemented existing emergency response procedures, including for marine pollution incidents. Port Authority will respond to all port-related incidents within the ports of Eden in accordance with the Port of Eden Marine Oil and Chemical Spill Contingency Plan. In addition to responding to marine pollution incidents, Port Authority also investigates the cause of the incident and may prosecute any breaches of the relevant marine pollution legislation.

For immediate emergencies which have the potential to threaten human life or environmental harm, the relevant government agencies and emergency services identified in Table 4 are to be contacted.

**Table 4: Emergency Contact Details**

Reporting Agency	Contact Details
NSW Police (000) - Eden Police Station and Water Police	Phone (02) 6496 1444 Address 229 Imlay St, Eden NSW 2551
Fire and Rescue NSW Fire (000)	Phone (02) 6496 1506 / (02) 6453 4786 Address 30 Mitchell St, Eden NSW 2551
Port of Eden Harbour Master – Captain Paul Webster	Phone (02) 6496 1719, 0438 374 034 Radio VHF Channel 16 or 08 (Port working frequencies are VHF Channel 08 and 12) Address Harbour Master/Pilot, Port of Eden Main Jetty (PO Box 137, Eden NSW 2551) Email <a href="mailto:edenpilots@portauthoritynsw.com.au">edenpilots@portauthoritynsw.com.au</a> <a href="mailto:pwebster@portauthoritynsw.com.au">pwebster@portauthoritynsw.com.au</a>
Port Authority	Phone Enquiries Line 9296 4962 (24-hour) or Reception 9296 4999 (8.30am - 5.00pm Monday to Friday) Email <a href="mailto:enquiries@portauthoritynsw.com.au">enquiries@portauthoritynsw.com.au</a>
Bega Valley Shire Council	Phone (02) 6499 2222
Ambulance Service of NSW (000)	Phone 131 233 Address Bass St, Eden NSW 2551
EPA	Phone (Environment Line) 131 555
NSW Ministry of Health Goulburn Public Health Unit	Phone: (02) 4825 4944 Phone (after hours): (02) 6080 8900 Fax: (02) 4822 5038 Goulburn PHU (Murrumbidgee & Southern NSW LHD) Locked Mail Bag 11, Goulburn NSW 2580
SafeWork NSW	13 10 50
DPI – Fisheries	Phone 1800 043 536
NPWS	Phone 1300 361 967

Reporting Agency	Contact Details
ORRCA	24-hour hotline (02) 9415 3333
DPIE – Principal Contact for non-compliance	Phone 1300 305 695 Online complaints: <a href="https://www.planningportal.nsw.gov.au/major-projects/services/complaint-form">https://www.planningportal.nsw.gov.au/major-projects/services/complaint-form</a> Email <a href="mailto:compliance@planning.nsw.gov.au">compliance@planning.nsw.gov.au</a>

## 4 Environmental Legislative Framework and Policies

### 4.1 Environmental Principles and Obligations

All staff working at the Facility will adhere to the requirements of the Extended Use OEMP and the overarching environmental principles and obligations presented in Section 4.1 of the Cruise Ship OEMP.

### 4.2 Legislative Framework

The key approvals for the Operation of the Facility include:

- Infrastructure Approval (SSI 7734)
- EPBC Act Referral Decision 2016/7828.

The Infrastructure Approval MOD 2 allowed the Extended Use of the Facility (for MOD 2 conditions refer to Table 1).

The Facility was also subject to a Referral decision under the EPBC Act, issued by the Commonwealth Department of the Environment and Energy (DoEE), dated 13 April 2017 (EPBC 2016/7828). Condition 4(b) of EPBC 2016/7828 is relevant to the operation of the Facility, and states the following:

*All cruise ships arriving at and departing from the Eden Breakwater wharf must be aware of the potential presence of whales and maintain a suitable speed within the Port of Eden limits to avoid collisions with whales.*

Vessel speed limits of 10 knots or less, except in circumstances where the Harbour Master or a Pilot considers that a higher speed is necessary to maintain safe navigation in the Port, has been adopted in the Cruise Ship OEMP and is adopted in the Extended Use OEMP.

No other approvals licences and/or permits are required for the Operation of the Facility.

The overall statutory framework relevant to the Operation of the Facility is outlined in Section 4.2 of the Cruise Ship OEMP.

## 5 Environmental Risks

An environmental risk analysis has been undertaken as part of the preparation of the Extended Use OEMP to identify potential environmental risks associated with the Extended Use operations with consideration of the environmental assessment undertaken for MOD 2 and the conditions of approval. The assessment considered the proposed mitigation and management measures for the Extended Use and presented the residual risks following their implementation.

This risk assessment process was based on AS/NZS 4360:2009 Risk Management, ISO14001 Environmental Management Systems, and Port Authority's Risk Procedure which uses a consequence and likelihood matrix to determine the level of risk.

Environmental risks identified in this Extended Use OEMP are indicative of those activities associated with the Extended Use operations. Table 5 presents the identified environmental risks along with an environmental residual risk rating of Low (L), Moderate (M), Significant (S), and Extreme (E) following the implementation of the mitigation measures outlined in Section 6.

**Table 5: Risk Register**

Environmental Issue	Activity	Potential Environmental Risks	Residual Risk Rating	Relevant Management Plan
Water Quality	<ul style="list-style-type: none"> <li>Vessel operations and maintenance</li> <li>Refuelling vessels</li> <li>Loading/unloading materials</li> </ul>	<ul style="list-style-type: none"> <li>Spills of fuel</li> <li>Wastewater runoff from vessels during maintenance / operations</li> <li>Accidental spills</li> <li>Littering</li> </ul>	M	Water and Sediment Quality (Section 6.1)
Sediment Quality	<ul style="list-style-type: none"> <li>Arrival and departure of vessels</li> </ul>	<ul style="list-style-type: none"> <li>Disturbance of sediment bed</li> <li>Discharges to waters / sediments</li> </ul>	L	Water and Sediment Quality (Section 6.1)
Biodiversity	<ul style="list-style-type: none"> <li>Vessel operations and maintenance</li> <li>Refuelling vessels</li> <li>Loading/unloading</li> </ul>	<ul style="list-style-type: none"> <li>Biodiversity impacts caused by discharges to water</li> <li>Fauna impacted or injured by vessels</li> </ul>	L	Ecology (Section 6.2)
Traffic, Transport and Access	<ul style="list-style-type: none"> <li>Staff and passenger embarkation /disembarkation</li> <li>Vehicle traffic associated with site activities</li> </ul>	<ul style="list-style-type: none"> <li>Vehicles causing congestion in local roads</li> <li>Pedestrian traffic disrupting normal traffic flow</li> <li>Impacts associated with</li> </ul>	L	Traffic, Transport and Access (Section 6.3)

Environmental Issue	Activity	Potential Environmental Risks	Residual Risk Rating	Relevant Management Plan
		increased port navigation <ul style="list-style-type: none"> <li>Public access restrictions</li> </ul>		
Noise	<ul style="list-style-type: none"> <li>Loading/unloading of materials and equipment</li> <li>Vessel maintenance</li> <li>Use of operational equipment (e.g. cranes)</li> <li>Night time use of auxiliary generators</li> </ul>	<ul style="list-style-type: none"> <li>Noise impacts to local sensitive receivers</li> </ul>	M	Noise and Visual (Section 6.4)
Air Quality	<ul style="list-style-type: none"> <li>Vessels at berth using diesel generators</li> <li>Unloading fresh materials (e.g. fish)</li> </ul>	<ul style="list-style-type: none"> <li>Air pollutants and odorous substances release</li> </ul>	L	Air Quality (Section 6.5)
Visual Amenity	<ul style="list-style-type: none"> <li>Night time berthing</li> <li>Vessel activities and maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Light impacts on sensitive receivers</li> <li>Visual amenity impacts</li> </ul>	L	Noise and Visual (Section 6.4)
Socio-economic	<ul style="list-style-type: none"> <li>Vessel activities, maintenance and refuelling</li> </ul>	<ul style="list-style-type: none"> <li>Short term reduction in local amenity from increased noise and visual impacts</li> </ul>	L	Noise and Visual (Section 6.4), Air Quality (Section 6.5)
Waste Management	<ul style="list-style-type: none"> <li>Vessels at berth / operations</li> <li>Vessel maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Littering impacts</li> <li>Poor housekeeping</li> <li>Inappropriate management of waste at the Facility</li> </ul>	L	Waste (Section 6.6)
Greenhouse Gas and Energy	<ul style="list-style-type: none"> <li>Vessels' operations whilst at berth</li> </ul>	<ul style="list-style-type: none"> <li>Increased energy consumption resulting in greater</li> </ul>	L	Greenhouse Gas and Energy (Section 6.7)

Environmental Issue	Activity	Potential Environmental Risks	Residual Risk Rating	Relevant Management Plan
		greenhouse gas emissions		
Hazards and Risks	<ul style="list-style-type: none"> <li>Vessels at berth / operations</li> <li>Vessel maintenance</li> <li>Refuelling</li> </ul>	<ul style="list-style-type: none"> <li>Risk of harm to people or the environment as a result of accidental contact with substances such as oil or fuel, cleaning products etc.</li> <li>Navigational safety impacts including vessel strikes in the Port, and damage to infrastructure</li> <li>Fires associated with vessels</li> </ul>	L	Hazards and Risks (Section 6.8)

## 6 Environmental Management

Specific environmental control measures are required to:

- Manage potential environmental impacts identified in MOD 2 Assessment Report, the Infrastructure Approval and from the risk assessment referred to in Section **Error! Reference source not found.**
- Outline the procedures to achieve the environmental performance outcomes and the mitigation measures
- Ensure compliance with all approvals, licences and permits.

Control measures are to be complied with by all staff, as relevant to their scope of work. For each environmental element, the following is identified:

- Performance objective
- Key performance indicators
- Management actions
- Monitoring
- Reporting
- Corrective actions
- Relevant references/standards.

All activities must be carried out in a competent manner. Suitable equipment, facilities, training, work practices and other necessary precautions will be taken to minimise risks and impacts to the environment and community.

All activities will be performed in a way that minimises risks and impacts on the natural environment and complies with this Extended Use OEMP, relevant legislation, regulations and rules, approvals, licences and permits.

The environmental impacts and management actions described in the Environmental Management Plans relate to the Extended Use operations. The risk rating listed in Table 6 is based on the risk assessment and matrix described in Section **Error! Reference source not found.**

**Table 6: Environmental Management Plans for the Extended Use OEMP**

Environmental Issue	Residual Risk Rating
Water and Sediment Quality	M
Biodiversity	L
Traffic, Transport and Access	L
Noise and Visual Amenity	M
Air Quality	L
Health, Safety and Socioeconomic	L
Waste Management	L
Greenhouse Gas and Energy	L
Hazards and Risks	L

## 6.1 Water and Sediment Quality

Element	Action
Potential Environmental Impact	<ul style="list-style-type: none"> <li>▪ Pollution of the Port waterway through introduction of contaminants by operational activities:               <ul style="list-style-type: none"> <li>– Oil and fuel spills</li> <li>– Cleaning activity runoff</li> <li>– General waste litter</li> <li>– Chemical contaminants from vessel hull coatings</li> <li>– Illegal or accidental discharge of vessel holding tanks (sewage, grey water, bilge water) or during refuelling</li> <li>– Spills during loading/unloading of materials and cargo</li> </ul> </li> <li>▪ Mobilisation of seabed sediments from propeller wash.</li> </ul>
Objectives	<ul style="list-style-type: none"> <li>▪ Avoid detrimental impact on the water quality and marine environment of the Port through operational activities</li> <li>▪ Contain and manage any spills, runoff or discharge events, and have procedures and appropriate equipment in place</li> <li>▪ Minimise the generation of sediment plumes during operational activities.</li> </ul>
Performance Indicators	<ul style="list-style-type: none"> <li>▪ No observable deterioration in water and sediment quality as a result of the Extended Use Operations</li> <li>▪ No detected injury/mortality to marine fauna as a result of deterioration in water and sediment quality</li> <li>▪ No pollution spills</li> <li>▪ Compliance with the POEO Act.</li> </ul>
Management Actions	<ul style="list-style-type: none"> <li>▪ Appropriate waste facilities will be readily accessible for the Operation of the Facility for workers and passenger waste (litter)</li> <li>▪ Marine debris clearing from waters and landside adjacent to the breakwater wharf extension and along the foreshore will be undertaken as required</li> <li>▪ All staff associated with the Extended Use will be educated on best practice for cleaning the wharf/land-based facilities</li> <li>▪ In-water cleaning will only occur on anti-fouling coatings suitable for in-water cleaning (obtainable from coating manufacturer) and in compliance with Anti-fouling and In-water Cleaning Guidelines (DA, 2015) and subject to agreement with relevant authorities including Port Authority, DPI-Fisheries and EPA</li> <li>▪ Any oils and hazardous chemicals will be stored in appropriately bunded and covered storage areas with containment for no discharge</li> <li>▪ Vessels within the Port will adhere to speeds of 10 knots or less, except in circumstances where the Harbour Master (or their Delegate) or a Pilot considers that a higher speed is necessary to maintain safe navigation in the Port</li> <li>▪ Emergency spill response equipment within Facility will be available and maintained</li> <li>▪ The Code of Practice Non-Cargo Oil Transfers in the Port of Eden (Issued by the Harbour Master, Eden, March 2012) will be implemented for the Extended Use operations, which includes, amongst other items, the following:               <ul style="list-style-type: none"> <li>- The Code of Practice covers transfers where a flexible or portable hose is used to transfer Fuel oils (such as marine diesel oil and heavy fuel oil), Lubricating oils, Hydraulic oils, Waste oils,</li> </ul> </li> </ul>

Element	Action
	<p>oil/water mixtures and oiled bilge water, Tank or hold washings, Grey water and sewage, and Ballast water not approved by AQIS or the EPA.</p> <ul style="list-style-type: none"> <li>- Vessels of 30m or more in length will require an Oil Transfer Permit by the Port of Eden prior to any transfers being conducted.</li> <li>- A port officer will attend operations requiring an Oil Transfer Permit to verify that permit conditions are being complied with.</li> <li>- The owner of commercial vessels less than 30m in length and recreational vessels has a duty to act responsibly, take precautions to ensure that the risk of accidental spillage from a fuel oil transfer operation is minimised, and comply with the Requirements of the Code of Practice. A Safety Checklist must be completed prior to commencing transfers.</li> <li>- Oil transfers are only permitted between the hours of sunrise and sunset. In exceptional circumstances the Harbour Master may grant approval for transfers to occur during the hours of darkness, however written approval must have been sought prior.</li> <li>- Any oil spill occurring during transfer operations, no matter how minor, must be immediately reported to the Harbour Master or his/her representative.</li> <li>- Road Tanker operators must coordinate with the owner of ships and vessels prior to any oil transfer.</li> <li>- All non-cargo liquid transfer operations conducted within the Port of Eden are to be recorded and may be audited for compliance by the Harbour Master.</li> <li>- the Master of the vessel and the person in charge of the tanker truck or pipeline operation, must ensure that all staff involved are provided with a formal training program.</li> </ul> <ul style="list-style-type: none"> <li>▪ Surfactants, dispersants and detergents will be restricted to the minimum amount required to complete tasks.</li> <li>▪ Low Environmental Health and Safety (EHS)-risk cleaning products will be preferentially selected (i.e. biodegradable detergents and dispersants)</li> <li>▪ In NSW State waters, Transport for NSW is responsible for ensuring that maritime Incidents (including oil and chemical spills) are responded to quickly and effectively and at the Port of Eden, Port Authority is the lead response agency</li> <li>▪ Spills and leaks will be contained in accordance with Port of Eden Marine Oil and Chemical Spill Contingency Plan, the Code of Practice Non-Cargo Oil Transfers in the Port of Eden, and the technical guidelines section of Bunding and Spill Management of the Authorised Officers (EPA's website).</li> <li>▪ Spill response strategy and procedures developed by PANSW will be followed in the event of a spill, PANSW will be contacted immediately:</li> </ul> <p>Harbour Master/Pilot, PANSW  Port of Eden  Main Jetty, Eden  NSW 2551  T: +61 2 6496 1719  E: <a href="mailto:edenpilots@portauthoritiesnsw.com.au">edenpilots@portauthoritiesnsw.com.au</a>  W: <a href="http://edenport.com.au/contact_us">http://edenport.com.au/contact_us</a></p>

Element	Action
Monitoring and Frequency	<ul style="list-style-type: none"> <li>Water quality at the Facility and adjacent areas will be visually monitored weekly or as required during Extended Use operations for any visible signs of contamination from sediment or hydrocarbons</li> <li>If visual monitoring indicates potential contamination water and sediment quality monitoring may be implemented</li> <li>If water quality monitoring is undertaken, the parameters for analysis will be selected based on the type of contamination observed, for example.: <ul style="list-style-type: none"> <li>if significant turbidity is observed, then TDS and turbidity will be measured</li> <li>if an oil chemical spill is observed, then hydrocarbons (TRH) and BTEX will be measured</li> <li>if paint spill is observed, then volatile organic compounds such as toluene, xylene or formaldehyde and solvents will be measured</li> </ul> </li> <li>The monitoring results will be assessed against ANZECC (2018 or as updated) water quality guidelines for protection of aquatic ecosystems.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>Reporting will be undertaken in accordance with Section <b>Error! Reference source not found.</b></li> </ul>
Corrective Actions	<ul style="list-style-type: none"> <li>If a release, spill or leak is identified the activity will cease, with containment by deploying spill kits the priority to minimise potential impacts.</li> <li>Containment will comply with the Port of Eden Marine Oil and Chemical Spill Contingency Plan, the Code of Practice Non-Cargo Oil Transfers in the Port of Eden, and with the technical guidelines section of Bunding and Spill Management of the Authorised Officers Manual (EPA's website).</li> <li>If a non-conformance and/or non-adherence to this plan is identified, corrective actions will be identified and implemented based on the results of any investigations and the best possible outcome for operational activities, the environment and the local community.</li> </ul>
Relevant References/Standards	<ul style="list-style-type: none"> <li>Code of Practice Non-Cargo Oil Transfers in the Port of Eden (Issued by the Harbour Master, Eden, March 2012)</li> <li>Anti-fouling and In-water Cleaning Guidelines (DA, 2015)</li> <li>Bunding and Spill Management of the Authorised Officers Manual (EPA's website)</li> <li>NSW State Waters Marine Oil and Chemical Spill Contingency Plan (RMS, 2016)</li> <li>Port of Eden Marine Oil and Chemical Spill Contingency Plan.</li> <li>NSW <i>Protection of the Environment Operations Act 1997</i></li> </ul>

## 6.2 Ecology Management

Element	Action
Potential Environmental Impact	<ul style="list-style-type: none"> <li>▪ Aquatic and terrestrial flora and fauna detrimentally impacted by operational activities causing habitat disruption</li> <li>▪ Aquatic and terrestrial fauna impacted or injured by entanglement, water pollution, lighting, noise, human interaction (e.g. feeding) and vessel strike</li> <li>▪ Invasive species introduction from ship hulls or ballast water</li> <li>▪ Shore birds being impacted by lighting, noise, entanglement, pollution, water pollution, human interaction (e.g. feeding), and vessel strike.</li> </ul>
Objectives	<ul style="list-style-type: none"> <li>▪ Minimise or avoid impacts on the abundance, species diversity, geographic distribution and ecological functions of aquatic and terrestrial flora and fauna</li> <li>▪ Minimise the risk of introduction and translocation of invasive species.</li> </ul>
Performance Indicators	<ul style="list-style-type: none"> <li>▪ No detected injury/mortality to aquatic and terrestrial fauna caused by entanglement, water pollution, lighting, noise, human interaction (e.g. feeding) and vessel strike.</li> </ul>
Management Actions	<ul style="list-style-type: none"> <li>▪ To reduce potential water and sediment quality impacts on flora and fauna during Operation of the Facility, all measures listed in Section <b>Error! Reference source not found.</b> will be implemented</li> <li>▪ To reduce potential marine debris impacts on flora and fauna, waste associated with Operation of the Facility all measures listed in Section <b>Error! Reference source not found.</b> will be implemented</li> <li>▪ All vessels at sea will adhere with the amendments to MARPOL Annex V (IMO, 1988) which came into force on 1 March 2018 - this broadly prohibits the discharge of garbage into the sea, excepting in the cases of food wastage, cargo residues, cleaning agents and additives, and animal carcasses. MARPOL is implemented in Australia through the <i>Protection of the Sea (Prevention of Pollution from Ships) Act 1983</i></li> <li>▪ Risk of vessel strike during operational activities will be reduced through: <ul style="list-style-type: none"> <li>– Education of all personnel</li> <li>– Active management such as information exchange by the Harbour Master, PANSW's site personnel to tug and vessels Operators, on known marine mammal activity (e.g. via community, commercial fishers, mussel farmers, NPWS whale watch and Cat Balou Cruises information)</li> <li>– Awareness of the presence of marine fauna in the local waterway by vessel operators so that they can adopt appropriate speeds and clearance when cetaceans are nearby</li> </ul> </li> <li>▪ Vessels within the Port will adhere to speeds of 10 knots or less, except in circumstances where the Harbour Master or a Pilot considers that a higher speed is necessary to maintain safe navigation in the Port</li> <li>▪ All injured marine mammals will be immediately reported to the ORRCA 24 hour hotline on 02 9415 3333 or NPWS on 1300 361 967</li> <li>▪ The four goals of the NSW Invasive Species Plan 2018 – 2021 (NSW DPI 2018) will be adopted for the Facility:</li> </ul>

Element	Action
	<ol style="list-style-type: none"> <li>1. Exclude – i.e. prevent the establishment of new invasive species. The challenge is to identify species, thoroughly assess potential invasiveness and implement effective barriers to prevent their establishment</li> <li>2. Eradicate or Contain – i.e. eliminate or prevent the spread of new invasive species. The challenge is to develop and deploy effective and efficient ways to eradicate or contain an introduced species before it becomes widespread</li> <li>3. Effectively Manage – i.e. reduce the impacts of widespread invasive species. The challenge is to manage or control of species to reduce their impact where benefits are greatest</li> <li>4. Capacity – i.e. ensure NSW has the ability and commitment to manage invasive species. The challenge is for NSW to have the knowledge, skills, resources and systems to address the impacts of invasive species</li> </ol> <ul style="list-style-type: none"> <li>▪ Vessels will manage any ballast water in accordance with the Australian Ballast Water Management Requirements (DAWE, 2020)</li> <li>▪ In-water cleaning will only occur on anti-fouling coatings suitable for in-water cleaning (obtainable from coating manufacturer) and in compliance with Anti-fouling and In-water Cleaning Guidelines (DA, 2015) and subject to agreement with relevant authorities including Port Authority, DPI-Fisheries and EPA</li> <li>▪ Staff and passenger education will be implemented about the potential risks to fauna posed by feeding – this may include signage on wharf and education to passengers regarding local wildlife upon arrival to Port</li> <li>▪ PANSW and business operators will report any Incidents involving aquatic or terrestrial fauna to ORRCA immediately</li> <li>▪ The Operator will report any fish kills associated with the Extended Use to DPI-Fisheries (1800 043 536) immediately and any water-based activities will cease until emergency response procedures are implemented and the issue is rectified and written approval to proceed is provided by DPI-Fisheries</li> </ul>
Monitoring and Frequency	<ul style="list-style-type: none"> <li>▪ Terrestrial and aquatic ecology at the Breakwater wharf extension and adjacent areas will be visually monitored for any visible signs of impacts to biodiversity</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>▪ Reporting will be undertaken in accordance with Section <b>Error! Reference source not found..</b></li> </ul>
Corrective Actions and Responsibilities	<ul style="list-style-type: none"> <li>▪ If a non-conformance and/or non-adherence to this plan is identified, corrective actions will be identified and implemented based on the results of any investigations and the best possible outcome for operational activities, the environment and the local community</li> <li>▪ Corrective actions outlined in Section <b>Error! Reference source not found.</b> will be applied as required.</li> </ul>
Relevant References/Standards	<ul style="list-style-type: none"> <li>▪ Australian Ballast Water Management Requirements (DAWE, 2020)</li> <li>▪ MARPOL Annex V (IMO, 1988)</li> <li>▪ <i>Protection of the Sea (Prevention of Pollution from Ships) Act 1983.</i></li> <li>▪ AS 4282:1997 – Control of the Obtrusive Effects of Outdoor Lighting</li> </ul>

### 6.3 Traffic, Transport and Access

Element	Action
Potential Environmental Impact	<ul style="list-style-type: none"> <li>▪ Vehicles associated with the Extended Use causing congestion and delays in adjacent public roads</li> <li>▪ Vehicle congestion causing injury or loss of life</li> <li>▪ Pedestrian traffic disrupting normal traffic flow.</li> <li>▪ Restrictions to public access</li> </ul>
Objectives	<ul style="list-style-type: none"> <li>▪ Ensure safe and efficient access of vehicles and pedestrians in and around the Facility</li> </ul>
Performance Indicators	<ul style="list-style-type: none"> <li>▪ No traffic or access complaints associated with the Extended Use operations</li> <li>▪ No traffic congestion associated with the Extended Use operations</li> <li>▪ No reports of injury or loss of life from vehicles related to Extended Use activities.</li> </ul>
Management Actions	<ul style="list-style-type: none"> <li>▪ The existing traffic and access infrastructure at the Facility, described in the Traffic, Transport and Access Management OEMP Sub-Plan prepared as part of the Cruise Ship OEMP, will be used as and when required for the Extended Use operations.</li> <li>▪ Any heavy wharf bound traffic associated with Extended Use operations will be informed of the existing heavy vehicle route along Calle Calle St (Mitchel St to Calle Calle St to Albert Terrace)</li> <li>▪ Vessels within the Port will adhere to speeds of 10 knots or less, except in circumstances where the Harbour Master or a Pilot considers that a higher speed is necessary to maintain safe navigation in the Port</li> <li>▪ Pedestrian access to the Facility will generally remain open during Extended Use Operations. When localised and temporary access restrictions are required at the Facility for certain operations and vessels (e.g. loading/unloading equipment of materials using a crane, refuelling, etc) to ensure public safety, the following will be implemented: <ul style="list-style-type: none"> <li>- Port Authority, in consultation with the vessel operator, will determine the area subject to access restrictions and duration;</li> <li>- signs will be erected around the area with the access restrictions;</li> <li>- the operations subject to the access restrictions will be supervised by site personnel or the vessel operator;</li> <li>- public access will be re-established once the operations have been completed.</li> </ul> </li> </ul>
Monitoring and Frequency	<ul style="list-style-type: none"> <li>▪ Complaints and Incidents will be documented and monitored to assess the effectiveness of this Extended Use OEMP.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>▪ Reporting will be undertaken in accordance with Section <b>Error! Reference source not found.</b></li> <li>▪ Complaint reporting will be undertaken in accordance with Section 4</li> <li>▪ In instances of Incidents Reporting will be undertaken in accordance with Section 5</li> </ul>
Corrective Actions and Responsibilities	<ul style="list-style-type: none"> <li>▪ If a non-conformance and/or non-adherence to this plan is identified, corrective actions will be identified and implemented based on the results of any investigations and the best possible outcome for operational activities, the environment and the local community</li> </ul>

Element	Action
	<ul style="list-style-type: none"> <li>Any corrective requirement from the relevant regulator(s) and/or BVSC will be adhered to.</li> </ul>
Relevant References/Standards	<ul style="list-style-type: none"> <li>Traffic, Transport and Access Management OEMP Sub-Plan (prepared under the Cruise Ship OEMP).</li> </ul>

## 6.4 Noise and Visual Amenity

Element	Action
Potential Environmental Impact	<ul style="list-style-type: none"> <li>Noise nuisance during Extended Use operations and night time berthing of vessels to local Sensitive Receivers</li> <li>Nuisance from wharf and vessel lighting during night time berthing of vessels</li> </ul>
Objectives	<ul style="list-style-type: none"> <li>Minimise Operational noise impact on nearby Sensitive Receivers</li> <li>Avoid nuisance to local receivers from wharf and vessel lighting.</li> </ul>
Performance Indicators	<ul style="list-style-type: none"> <li>No complaints received associated with noise and visual impacts of Extended Use operations</li> </ul>
Management Actions	<ul style="list-style-type: none"> <li>Extended Use operations and activities (e.g. loading/unloading, maintenance, refuelling, etc) will only be permitted between 7:00am to 10:00pm.</li> <li>The use of shore power will be encouraged to overnight berthing vessels.</li> <li>Should an investigation as a result of a noise or visual amenity complaint indicate that certain Extended use operations cause excessive impacts, then the Harbour Master will require that such operations be modified or stopped as to reduce impacts.</li> <li>Broadband reversing alarms, or 'quackers', will be used on mobile equipment at the berth as required during non-day period out of hours activities.</li> <li>Machinery and equipment not in use will be turned off.</li> <li>All maritime lighting associated with the Facility will have regard to the location of nearby residential dwellings.</li> <li>Lighting impacts will be minimised to the extent possible and comply with AS 4282: 1997 – Control of the Obtrusive Effects of Outdoor Lighting and relevant Australian Standards in the series AS/NZ 1158 – Lighting for Roads and Public Spaces.</li> </ul>
Monitoring and Frequency	<ul style="list-style-type: none"> <li>If noise or visual amenity complaints are received, the Harbour Master or its delegate will investigate the cause of the complaint. If the investigation indicates that certain Extended Use operations or activities cause excessive noise, the Harbour Master at its discretion may require noise monitoring be undertaken of such operations or activities.</li> <li>If noise monitoring is undertaken as a result of complaints, the monitoring will be compared to MOD 2 Predicted Noise Levels (worst case noise levels at the closest residences at By Street): 7am-10pm: 50 dB(A) LAeq 10pm-7am: 46 dB(A) LAeq</li> <li>Any noise monitoring will be undertaken in accordance with the AS1055.3:2018 and Noise Policy for Industry (EPA 2017) using a 15 minute LAeq attended measurement</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>Reporting will be undertaken in accordance with Section <b>Error! Reference source not found.</b></li> <li>Complaints reporting will be undertaken in accordance with Section 3.4</li> <li>Incidents reporting will be undertaken in accordance with Section 3.5</li> </ul>

Element	Action
Corrective Actions and Responsibilities	<ul style="list-style-type: none"> <li>▪ If a non-conformance and/or non-adherence to this plan is identified, corrective actions will be identified and implemented based on the results of any investigations and the best possible outcome for operational activities, the environment and the local community</li> <li>▪ Noise and visual amenity complaints will be handled in accordance with Section 3.4</li> </ul>
Relevant References/Standards	<ul style="list-style-type: none"> <li>▪ Noise Management OEMP Sub-plan (prepared under the Cruise Ship OEMP)</li> <li>▪ AS 4282: 1997 – Control of the Obtrusive Effects of Outdoor Lighting and relevant Australian Standards in the series AS/NZ 1158 – Lighting for Roads and Public Spaces.</li> </ul>

## 6.5 Air Quality

Element	Action
Potential Environmental Impact	<ul style="list-style-type: none"> <li>Release of air pollutants - NO<sub>2</sub>, SO<sub>2</sub>, CO or odorous substances.</li> </ul>
Objectives	<ul style="list-style-type: none"> <li>Minimise release of polluting and/or odorous air emissions produced during the Extended use operations.</li> </ul>
Performance Indicators	<ul style="list-style-type: none"> <li>No air quality complaints regarding black / dark smoke emission or odours received</li> </ul>
Management Actions	<ul style="list-style-type: none"> <li>Vessel engines and generators will be required to be operated efficiently to reduce air emissions while at berth at the Facility</li> <li>Should an investigation as a result of an air quality complaint indicate that certain Extended Use operations cause odour or other significant air quality impacts outside the Facility, then the Harbour Master will require that such operations be modified or stopped as to reduce any odour or air quality impacts.</li> </ul>
Monitoring and Frequency	<ul style="list-style-type: none"> <li>Air quality will be visually monitored for black / dark smoke emission and monitored for noticeable odours during Extended Use operations.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>Reporting will be undertaken in accordance with Section <b>Error! Reference source not found.</b></li> <li>Complaint reporting will be undertaken in accordance with Section 3.4</li> <li>Incidents reporting will be undertaken in accordance with Section 3.5</li> </ul>
Corrective Actions and Responsibilities	<ul style="list-style-type: none"> <li>If a non-conformance and/or non-adherence to this plan is identified, corrective actions will be identified and implemented based on the results of any investigations and the best possible outcome for operational activities, the environment and the local community</li> <li>Air quality complaints will be handled in accordance with Section 3.4</li> </ul>
Relevant References/Standards	<ul style="list-style-type: none"> <li>MARPOL Annex VI (IMO, 1997)</li> <li>National Environment Protection (Ambient Air Quality) Measure 2016 (NEPM).</li> </ul>

## 6.6 Waste Management

Element	Action
Potential Environmental Impact	<ul style="list-style-type: none"> <li>▪ Inappropriate handling of maintenance materials, cargo and equipment while vessels are berthed</li> <li>▪ Littering of surrounding environment</li> <li>▪ Illegal or accidental discharge of vessel holding tanks (sewage, grey water, bilge water).</li> </ul>
Objectives	<ul style="list-style-type: none"> <li>▪ Ensure best practice management for the handling, storage and disposal of maintenance materials related to vessels</li> <li>▪ Maintain the good housekeeping of the Facility without build-up of litter.</li> </ul>
Performance Indicators	<ul style="list-style-type: none"> <li>▪ No presence of litter on the Facility or in adjacent areas</li> <li>▪ No reported Incidents of spills, leaks or improper disposal of maintenances materials.</li> </ul>
Management Actions	<ul style="list-style-type: none"> <li>▪ Segregated general and recyclable waste receptacles will be provided and utilised during the Extended Use operations and routinely checked to ensure they are fit for purpose</li> <li>▪ Maintenance materials including oil and lubricants will be stored in a bunded area.</li> <li>▪ Waste will be transported for disposal by a licensed contractor, it will be disposed of at an appropriately licensed receiving facility and waste disposal dockets will be retained.</li> </ul>
Monitoring and Frequency	<ul style="list-style-type: none"> <li>▪ Regular maintenance and housekeeping at the Facility will be visually inspected as required to evaluate the effectiveness of waste storage and collection.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>▪ Reporting will be undertaken in accordance with Section <b>Error! Reference source not found.</b></li> </ul>
Corrective Actions and Responsibilities	<ul style="list-style-type: none"> <li>▪ In the case of identification of a non-conformance and non-adherence to this plan, corrective actions will be identified and implemented based on the results of any investigations and the best possible outcome for operational activities, the environment and the local community</li> <li>▪ In instances of ongoing non-conformance, a review of the Facility waste management systems will be undertaken, and appropriate measures implemented.</li> </ul>
Relevant References/Standards	<ul style="list-style-type: none"> <li>▪ MARPOL Annex V (IMO, 1988)</li> <li>▪ <i>Protection of the Sea (Prevention of Pollution from Ships) Act 1983.</i></li> </ul>

## 6.7 Greenhouse Gas and Energy

Element	Action
Potential Environmental Impact	<ul style="list-style-type: none"> <li>Increased energy consumption resulting in greater greenhouse gas (GHG) emissions.</li> </ul>
Objectives	<ul style="list-style-type: none"> <li>Minimise GHG emissions and energy consumption during Extended Use operations</li> </ul>
Performance Indicators	<ul style="list-style-type: none"> <li>No unsubstantiated significant increases in Facility energy consumption.</li> </ul>
Management Actions	<ul style="list-style-type: none"> <li>The potential to generate energy at the Facility (such as the use of photo-voltaic lighting) will be considered</li> <li>Low energy consumption appliances, equipment and systems will be utilised, where appropriate</li> <li>All equipment at the Facility will be maintained and operated efficiently to reduce air emissions.</li> </ul>
Monitoring and Frequency	<ul style="list-style-type: none"> <li>Energy consumption will be monitored at the Facility through, quarterly bills, electric main and sub-meters.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>Reporting will be undertaken in accordance with Section <b>Error! Reference source not found.</b></li> </ul>
Corrective Actions and Responsibilities	<ul style="list-style-type: none"> <li>In the case of identification of a non-conformance and non-adherence to this plan, corrective actions will be identified and implemented based on the results of any investigations and the best possible outcome for operational activities, the environment and the local community.</li> </ul>

## 6.8 Hazards and Risks

Element	Action
Potential Environmental Impact	<ul style="list-style-type: none"> <li>▪ Navigational safety including vessel strikes in the Port and damage to infrastructure</li> <li>▪ Passengers or staff falling from vessels potentially resulting in physical injury or drowning</li> <li>▪ Slips, trips and falls at wharf while passengers/crew embarking/disembarking travelling around Snug Cove</li> <li>▪ Fires associated with vessels and nearby facilities</li> <li>▪ Natural hazards including storm events which could cause direct or indirect damage to vessels and infrastructure</li> <li>▪ Vehicle or equipment accident or contact.</li> <li>▪ Introduction of disease, including human, other animal and plant disease.</li> </ul>
Objectives	<ul style="list-style-type: none"> <li>▪ Manage Operational hazards and risks to minimise impacts to human health or the environment.</li> <li>▪ Ensure navigational safety of vessels within the Port.</li> <li>▪ Maintain clear access ways to reduce the risk of slips, trips and falls.</li> </ul>
Management Actions	<ul style="list-style-type: none"> <li>▪ Port Authority has a responsibility to perform port safety actions under a Port Safety Operating Licence, including navigation aids for shipping, pilotage, port communications, hydrographic surveys of channels and berthing boxes, administration of dangerous good regulations, emergency response and investigation of marine pollution incidents and safe navigation.</li> <li>▪ Firefighting equipment will be provided and maintained.</li> <li>▪ Vessels within the Port will adhere to speeds of 10 knots or less, except in circumstances where the Harbour Master (or their Delegate) or a Pilot considers that a higher speed is necessary to maintain safe navigation in the Port.</li> <li>▪ Vehicles within the Port will adhere to speed limits and traffic flow direction.</li> <li>▪ The Traffic, Transport and Access Plan (Section 6.3), the Water and Sediment Plan (Section 6.1) and the Ecology Plan (Section 6.2) will be implemented.</li> <li>▪ The Code of Practice Non-Cargo Oil Transfers in the Port of Eden (Issued by the Harbour Master, Eden, March 2012) will be implemented.</li> <li>▪ To manage the potential impact of communicable disease the relevant NSW Public Health Unit Control Guideline for the particular infectious disease will be followed.</li> </ul>
Monitoring and Frequency	<ul style="list-style-type: none"> <li>▪ The Facility will be visual inspected during routine works to ensure good housekeeping practices are implemented</li> <li>▪ Emergency procedures and equipment will be regularly monitored to ensure currency and effectiveness</li> <li>▪ A port officer will attend operations requiring an Oil Transfer Permit to verify that permit conditions are being complied with.</li> <li>▪ Regular evacuation practice drills in compliance with Safe Work requirements and the <i>Work Health and Safety Act 2011</i> will be undertaken as required.</li> </ul>

Element	Action
Reporting	<ul style="list-style-type: none"> <li>▪ Reporting will be undertaken in accordance with Section <b>Error! Reference source not found..</b></li> </ul>
Performance Indicators	<ul style="list-style-type: none"> <li>▪ No loss of life, serious injury or damage/loss of property caused by the Operation of the Facility.</li> </ul>
Corrective Actions and Responsibilities	<ul style="list-style-type: none"> <li>▪ Relevant emergency service agencies will be consulted for advice and assistance on best practice actions as required</li> <li>▪ Any corrective requirement from the relevant emergency service agencies or BVSC will be adhered to</li> <li>▪ In the case of identification of a non-conformance and non-adherence to this plan, corrective actions will be identified and implemented based on the results of any investigations and the best possible outcome for operational activities, the environment and the local community.</li> </ul>
Relevant References/Standards	<ul style="list-style-type: none"> <li>▪ Code of Practice Non-Cargo Oil Transfers in the Port of Eden (Issued by the Harbour Master, Eden, March 2012)</li> <li>▪ Managing the Work Environment and Facilities (Safe Work Australia, 2019)</li> <li>▪ <i>Work Health and Safety Act 2011</i></li> </ul>

## 7 Inspections, Reporting and Auditing

Routine inspections, reporting and auditing will be undertaken throughout the duration of the Extended Use operations by Port Authority in accordance with the Infrastructure Approval and this Extended Use OEMP.

### 7.1 Inspections and Monitoring

Regular environmental inspections (weekly or as required) of the Extended Use operations will be undertaken by Port Authority's on-site personnel involving a walk-over of the land-based areas of the breakwater wharf extension. These inspections will involve a visual surveillance of Extended Use operations for environmental incidents or potential non-compliances with the Infrastructure Approval. If required, these inspections will be documented in the *Environmental Incident and Non-Compliance Form* provided in Operational Compliance Tracking Program in the event of environmental incidents or non-compliances with the Infrastructure Approval. A register of the inspection dates will be maintained. No inspections will be required at times/periods when the extended wharf is not in use. The visual inspections will check (but not limited to) the following:

- Visible signs of water or sediment contamination and disturbance
- Any signs of ecological impact
- Unusual noise or emissions to air from Extended Use operations
- Traffic congestion caused by Extended Use operations
- Presence of litter or waste at the wharf
- Presence of chemical containers in unbunded areas at the wharf

### 7.2 Reporting

In accordance with the requirements of Conditions A21 and A23 of the Infrastructure Approval, Operation Compliance Reports will be prepared and submitted to the Secretary for information on an annual basis or within another timeframe agreed with the Secretary.

### 7.3 Auditing

Compliance audits will be conducted annually by an independent, suitably qualified and experienced expert, or within another timeframe agreed with the Secretary. The Compliance Audits will be carried out in accordance with Conditions A24 to A27 of the Infrastructure Approval.

## 8 References

AS 3846-2005: The Handling and Transport of Dangerous Cargoes in Port Areas

DA (April 2015). Anti-fouling and In-water Cleaning Guidelines. Department of Agriculture and Water Resources.

DAWR (2017). Australian Ballast Water Management Requirements. Department of Agriculture and Water Resources.

DIPNR. (2004). Guideline for the Preparation of Environmental Management Plans. NSW: Department of Infrastructure, Planning and Natural Resources.

DPI (March 2018). NSW Invasive Species Plan 2018-2021. NSW Department of Primary Industries

EPA. (Website). Bunding and Spill Management of the Authorised Officers Manual. NSW Environment Protection Authority.

Harbour Master, Eden (March 2012). Code of Practice Non-Cargo Oil Transfers in the Port of Eden

McLaren Traffic Engineering. (2016). Traffic, Parking and Pedestrian Impact Assessment of the Eden Breakwater Wharf Extension. McLaren Traffic Engineering.

McLaren Traffic Engineering. (30 July 2019). Traffic Management Plan for Revised Pick-Up & Drop-Off Facilities for Buses and Taxis at Eden Breakwater Wharf in Eden NSW.

NEPM (2016). National Environment Protection (Ambient Air Quality) Measure. National Environment Protection Council.

Ports Australia (2007). Non Cargo Liquid Transfer Practices in Australian Ports

RMS (December 2016). NSW State Waters Marine Oil & Chemical Spill Contingency Plan. NSW Roads and Maritime Services.