

Shiphandling Safety Guidelines

PORT OF EDEN

Issued by the Harbour Master, Eden

Final 1.0

24 October 2011

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PART 1 GENERAL INFORMATION

1.1 Eden Port Limits

The declared port limits and pilotage area encompass the area W of a line joining Red Point (Lat 37° 06'N Long 149° 57'E) with Worang Point, 2 nautical miles N, as shown on chart AUS192.

1.2 Pilotage

Pilotage is compulsory for all commercial vessels exceeding 30 meters LOA, unless a current Marine Pilotage Exemption Certificate or Certificate of Local Knowledge is held by the Master.

The pilot boarding ground is in position Lat 37° 04.4'S Long 149° 56.6'E

Vessels subject to pilotage regulations should not attempt to enter the port limits without embarking a pilot

1.3 Vessel Defects

The following defects, any of which may adversely affect the safe and efficient handling of the vessel, must be notified when the vessel is booked: -

- Deck machinery or equipment operating at less than normal capacity
- Lower than normal manning for the vessel
- Non-operational or reduced power thruster units
- Reduced main engine power
- Steering faults
- Non functioning Bridge equipment (such as gyro compass or radar)

PART 2 PILOT BOOKING PROCEDURES

- 2.1** Ships requiring entry to the Port of Eden must submit a Berthing Application Form no less than 7 days where possible, 48 hours as a minimum, prior to arrival at the pilot boarding ground.
- 2.2** Ships requiring the services of a pilot at the Port of Eden must submit arrival, removal and departure notices no less than the indicated number of hours prior to the desired movement;
- | | |
|-----------------------|--|
| Arrival: | 7 days where possible, 48 hours as a minimum |
| Removal or Departure: | 48 hours |
- 2.3** The berthing application form is to be submitted using the Sydney Ports Integrated SHIPs online system or by email to the Harbour Master's office, at the address listed below.
- Tel: (61) (2) 6496 1719
- Email: edenpilots@portauthoritynsw.com.au
- 2.4** Subsequent notices should, where possible, be made during ordinary office hours (Mon–Fri, 08:00–17:00) and may be forwarded by fax, email or telephone. The final notice prior to a pilot boarding time is to be made by 1500hrs that day.
- 2.5** Except in exceptional circumstances, notification to amend a pilot booking cannot be made between 1700 and 0700 on any day.
- 2.6** Cancellation charges may apply where a pilotage booking is amended or cancelled within 2 hours of a booked pilot boarding time.

PART 3 RADIO PROCEDURES

- 3.1** On arrival, vessels should make initial contact by calling 'Eden Harbour' on VHF Channel 16 or 08. Vessels are requested to call one (1) hour before arrival to confirm their ETA.

- 3.2** Port working frequencies are VHF Channel 08, 12

- 3.3** Whilst at anchor, either outside of port limits or inside Twofold Bay, a continuous listening watch shall be maintained on VHF Channels 08 and 16.

PART 4 ANCHORAGE

- 4.1** Vessels awaiting a berth or pilot may anchor outside of port limits, in the vicinity of the pilot boarding ground. This location has depths of approximately 38 metres, of moderate holding ground on a sand bottom.

Due to the exposed location of this anchorage **anchoring is not recommended** and is at the discretion of the vessels Master.

PART 5 MAXIMUM DRAFTS

5.1 Under Keel Clearance

The maximum draft of any vessel moving within the navigational channels of the Port shall be such that the under-keel clearance is not less than 10% of the vessel's deepest draught.

The maximum permitted drafts at a berth are detailed in the table below. Due to the presence of swell at the berths, the under keel clearances required are greater than that which can be tolerated at sheltered water berths.

Table 1 — Maximum Draft

Maximum Draft		
Woodchip Berth	11.3 m	
Multi Purpose Wharf	10.5 m	
Breakwater Wharf	A minimum UKC of 0.6m must be maintained at all times	Taking consideration of the vessel's LOA and the lowest, low water during the vessel's stay, the duty pilot is to calculate the maximum permissible fwd and aft draft.

PART 6 NORMAL TUG REQUIREMENTS

The tug requirements specified in the table below are the minimum requirements in good weather conditions. These requirements may be modified by the acting Harbour Master as the manoeuvring capabilities of the particular vessel (including trim, list, draught, engine or other deficiencies), weather, tide or other circumstances dictate.

Table 2 — Normal Tug Requirements

LOA	Number of Tugs
< 90 metres	Nil or 1 if required by the pilot
90 – 130 metres	1 tug
130 – 190 metres	2 tugs on arrival 1 or 2 on departure as required by the pilot
> 190 metres	2 tugs

NOTE: For ships < 190 metres LOA, tug/s may be substituted with a suitably powered thruster.

PART 7 REMOVAL CONDITIONS – CLOSURE OF BERTHS

The maximum permitted wind speed for passages to or from any berth in the port is 30 knots. This may be reduced at the discretion of the duty pilot depending upon the characteristics of the vessel concerned.

7.1 Woodchip Berth

Due to the lines handling operation, berthing and unberthing operations may only occur in daylight hours

- At dusk, the latest POB time for a vessel's arrival is 1 hour before the predicted time of sunset
- At dusk, the latest POB time for departure from the berth is 30mins before the predicted time of sunset
- At dawn, the earliest POB time for both arrival and departure is the predicted time of sunrise

Maximum permitted wind speed and sea conditions for berthing operations;

- Wind < 25kts
- Sea / swell less than 2.5 metres at the berth
- Visibility > 1 n. mile

NOTE: these parameters have been set having due regard to the safety of linesman and mooring boat operations.

Maximum wind speed and sea conditions for a vessel to remain at berth – see Table 3.

Table 3 — Effect of Wind Speed & Direction on Eden Woodchip Berth Area

Wind Speed (Knots)														
		1-3	4-6	7-10	11-18	19-21	22-25	26-35	36-40	41-47	48-55			
Wind Direction	N	NO EFFECT OF WIND OR SEA						No berthing due to wind & seas. Ship may remain in berth	SHIP MUST VACATE BERTH DUE TO HEAVY SEAS					
	1													
	2													
	3													
	E													
	5													
	6							No berthing due to wind. Ship may remain in berth- no effective seas						
	7													
	S													
	9							SHIP MAY REMAIN IN BERTH – NO EFFECTIVE SEAS						
	10													
	11													
	W													
	13													
	14													
	15													

7.2 Multi Purpose Wharf

The maximum sea & swell conditions for vessels to remain alongside the Multi Purpose Wharf are listed below. When conditions are forecast to exceed these limits, the acting Harbour Master is to make arrangements in sufficient time for the vessel to vacate the berth;

Maximum Permitted Wave Height for Vessels to Remain Alongside the MPW		
Wave Direction		
N to SE	Swell only, no significant wind	3.0 metres
N to SE	Combined sea and swell conditions	3.5 metres
SE to N		No limit stated due to no effective sea at berth

NOTE: In determining the maximum swell conditions, consideration has been given to the tendency of ground swell from a SE'ly direction to wrap around Jews Head and penetrate into East Boyd Bay.

7.3 Breakwater Wharf

The Breakwater Wharf is generally well protected from sea and swell conditions. However, during periods of a heavy, E - SE'ly ground swell, a significant surge can be experienced at all mooring locations within Snug Cove, including the Breakwater Wharf.

Experience has shown that ships > 50 metres LOA should be removed from the Breakwater Wharf when the swell exceeds 4.0 metres from a E - SE'ly direction. Smaller vessels are generally less subject to breakage of mooring lines and can generally ride out the conditions, provided they are well fendered. Removal of vessels < 50m LOA should be assessed on a case by case basis, dependant upon the type of vessel and weather conditions forecast.

Maximum Permitted Wave Height for Vessels > 50m LOA to Remain Alongside the Breakwater Wharf		
Wave Direction		
E to SE	Swell only, no significant wind	4.0 metres
E to SE	Combined sea and swell conditions	5.0 metres
N to NE, S to W		No limit stated due to no effective sea at berth, however conditions to be assessed on a case by case basis

PART 8 DEAD SHIPS

- 8.1** Dead ships may move only in daylight and during good weather conditions. Any defects shall be noted at the time of booking.

The acceptance of a booking for a dead ship movement and any conditions imposed are at the discretion of the acting Harbour Master.

PART 9 SUPERYACHTS

- 9.1** Eden is a Pilotage port and Pilotage is compulsory for vessels with an LOA of 30 metres or more.

However, under Section 75 of the *Marine Safety Act 1998*, a recreational vessel is exempted from pilotage.

Despite there being no requirement for recreational vessels to take a Pilot, superyacht masters may request this service for any passage within the Port Limits. A master is encouraged to request these services if in any doubt regarding the procedures within the port or regarding his/her ability to safely manoeuvre within the port.

In certain circumstances the Harbour Master may require a Pilot to conduct the vessel on its movement into, out of or within the port.

If the vessel is to be engaged in any commercial activity then the vessel must comply with the provisions of the *Marine Safety Act 1998*, the National Marine Safety Committee *Superyacht Policy*, and take a Pilot as required.

For details of what is considered commercial activity refer to the *Marine Safety Act 1998*.

Appendix A Woodchip Berth Information

Max deadweight:	100,000mt
Max LOA:	230m
Max beam:	n/a
Max draft:	11.3m
Berth Depth:	Minimum depth 12.5m
Docking side:	Starboard side alongside
Specific gravity:	1025
Number of Loaders:	1
(Loader) Max outreach:	23m
(Loader) Max clear height:	19.2m
Max air draft from waterline:	19.2m
Length of berth structure:	210m
Berth deck height from chart datum:	8.5m
Height to centre of fenders from chart datum:	7.3m
Cargo loading rate:	950 - 1050 mt per hour
Trimming:	Done manually

A.1 Mooring Lines

8 x 300 metre mooring lines are required for head lines & stern lines

2 x 250 metre mooring lines are required for spring lines

2 x 200 metre mooring lines are required for breast lines

Joining of hawsers (to make up the required 300m length for head & stern lines) is acceptable. This can be done via the “eye-through-the-eye’ method.

All mooring lines are run by lines boat, one (1) line at a time.

Many modern woodchip vessels are fitted with 8 mooring lines on drums fwd & aft. In such cases an additional short spring may be run and is recommended when adverse weather is forecast. Breast lines may also be doubled up.

Appendix B Multi Purpose Wharf Information

Max deadweight:	35,000mt
Max LOA:	185m
Max beam:	37.0m
Max draft:	10.5m
Length of berth structure:	200m
Berth depth:	Dredged depth 11.0m
Specific gravity:	1025
Docking side:	Either port or starboard side alongside
Max air draft from waterline:	n/a
Berth deck height from chart datum:	5.0m
Number of loaders:	Nil. Mobile cranes or ship's cranes only

B.1 Vehicle Load Limits on Berth

- a) On Wharf
 - T44 as per Austroads 96
 - B-Double with 44 ton load limit
 - 50 ton mobile crane wheel and out-rigger load
 - 10 ton forklift with 220kN front axle load
 - 100kN static live load with setting down impact
 - 20 kN distributed live load

- b) On Jetty
 - T44 as per Austroads 96
 - B-Double with 44 ton load limit

Appendix C Tug Specifications

Towage services at the port are provided by

Svitzer Australasia Pty Ltd and

Pacific Tug (Aust) PTY LTD

Tug Specifications		
Tug Name	COOMA	WISTARI
Operator	Svitzer	Svitzer
Callsign	VLYA	VMWT
Port of Registry	Eden	Eden
Flag	Australia	Australia
IMO Number	8222082	8112407
Owner	Svitzer	Svitzer
Year of build	1983	1982
LOA	34 m	34 m
Length waterline	31 m	30 m
Beam (moulded)	11 m	11 m
Depth (moulded)	5 m	5 m
Gross tonnage	473	368
Bollard Pull ahead	54 mt	50 mt
Main Engines	Daihatsu, 2 x 6DSM-28, 4 Stroke, Single Acting, In-Line (Vertical) Mcr 2,796kW (3,802hp)	Daihatsu, 2 x 8DSM-28, 4 Stroke, Single Acting, In-Line (Vertical) Mcr 2,834kW (3,854hp)
Propulsion	Flexible couplings & double reduction geared to screw shafts driving 2 Directional propellers	Flexible couplings & double reduction geared to screw shafts driving 2 Directional propellers
Fire Fighting Equipment	FiFi 1 rated 80m range	FiFi 1 rated 80m range

Tug Specifications		
Tug Name	FLINDERS BAY	KEPPEL BAY
Operator	Wide Bay Shipping	Wide Bay Shipping
Callsign	VKV7102	VLV7142
Port of Registry	Eden	Eden
Flag	Australia	Australia
IMO Number	9139464	828646
Owner	Pacific Tug	Pacific Tug
Year of build	1995	1983
LOA	26 m	34 m
Length waterline	24 m	30 m
Beam (moulded)	8.5 m	11 m
Depth (moulded)	3.5 m	4.5 m
Gross tonnage	214	428
Bollard Pull ahead	41 mt	54 mt
Main Engines	2 x Niigata 6L25HX 2400kw	2 x Niigata 8L27.5x 4,200 BHP
Propulsion	ASD Propellers 2 x Niigata 2P-11	ASD Propellers 2 x Niigata ZP3B
Fire Fighting Equipment	Nil	Yes

Appendix D Document control and history

History

Version	Date	Reason for change	Change Made By	TRIM #
Draft 1.0	20-10-11	New document	Josephine Clark	
Amendment	12-01-12	Superyachts	Paul Webster	
Amendment	11-04-16	Tug Specs	Paul Webster	
Amendment	11-01-17	Pacific Tug Specs	Paul Webster	

Approval

Version	Approved by		Date
	Name	Position	
Final 1.0	P Webster	Harbour Master	24-10-11