

BY CIRCULATION

PAC Paper No. 6/2002

PILOTAGE ADVISORY COMMITTEE

Proposed Amendments to the Berthing Guidelines

Purpose

The purpose of this paper is to seek members' endorsement on the proposed amendments to the Berthing Guidelines as detailed in Annex 1.

Background

2. The proposed amendments printed in red in Annex 1 are to reflect current operational requirements and to update information of Government Mooring Buoys and various berthing facilities.

Recommendation

3. Members are recommended to endorse the proposed amendments.

Pilotage Unit
Vessel Traffic Section
Vessel Traffic Services Branch
Marine Department
December 2002

Briefing Notes on Proposed Amendments to Berthing Guidelines

Item	Description		Amendments	Implications
1.	Chapter 2	General Remarks	Add remark for tugs requirement explanation and under-keel clearance	Add remark for tugs requirement explanation and under-keel clearance.
2.	Chapter 4 & Location: KC1-8 & Location: KC6-7/O-F & Location: 9-14	Kwai Chung Terminal	To increase maximum allowable draft at Kwai Chung Terminal	To take full advantage of tidal height so as to increase the maximum allowable draft at Kwai Chung Terminal. Vessels must however ensure no delay in the berthing/unberthing schedule and comply with the conditions set out in the guidelines.
3.	Chapter 11 & Location: Buoy	Government Mooring Buoys	To delete withdrawn mooring buoys A41, A45 and B27.	None
4.	Location: CRC-A	China Resources T/Y main berth (A)	New Classifications according to vessels LOA and draft. To extend tidal window, and relax tug requirements.	<p>(i) LOA 180-184m Draft 10-12m Berthing window: extended to 24 hours. Berthing Tug: reduced by 1. Draft < 10m Escort Tug: eliminated.</p> <p>(ii) LOA 184-220m Draft 10-13m Berthing window: extended by 5 hours. Draft < 11m Berthing Tug: reduced by 1. Remarks: 2 pilots for berthing at LW.</p> <p>(iii) LOA 230-250m Berthing window: extended by 5 hours Tug: reduced by 1.</p>
5.	Location: CTX	Caltex T/Y main berth	New Classifications according to vessels LOA	(i) LOA 180-184m Draft < 12m Berthing window: extended by 2 hours

			and draft, extend tidal window, and relax tug requirements.	<p>Berthing Tug: reduced by 1.</p> <p>(ii) LOA 184-220m Berthing window: extended by 2 hours</p> <p>Draft < 11m Berthing tug reduced by 1.</p> <p>(iii) LOA 220-235m Berthing window: extended by 2 hours. Tug: reduced by 1.</p>
6.	Location: CTX-LPG	Caltex T/Y LPG berth	Amendments on berthing & unberthing and tug requirement.	<p>Unberthing window: extended to 24 hours.</p> <p>(i) LOA 80m Unberthing tug: increased by 1 when unberthing on falling tide.</p> <p>(ii) LOA 114m Unberthing tug: changed to 2 Grade I tugs when unberthing on falling tide.</p>
7.	Location: ESSO	Esso Oil Terminal main berth	New Classifications according to vessels LOA and draft, extend tidal window, and relax tug requirements.	<p>(i) LOA 180-184m Draft 10-12m Berthing window: extended to 24 hours. Berthing Tug: reduced by 1. Draft < 10m Escort Tug : eliminated.</p> <p>(ii) LOA 184-220m Draft 10-13m Berthing window: extended by 5 hours. Draft <11m Berthing Tug: reduced by 1. Remarks: 2 pilots for berthing at LW .</p> <p>(iii) LOA 230-250m Berthing window: extended by 5 hours Tug: reduced by 1.</p> <p>(iv) LOA 250-274m Berthing Time: extended by 5 hours.</p>

8.	Location: MOBIL	Mobil Oil Terminal main berth	New Classifications according to vessels LOA and draft, extend tidal window, and relax tug requirements.	<p>(i) LOA 180-184m Draft <12m Berthing window: extended by 3 hours. Berthing Tug: reduced by 1. Draft < 10m Escort Tug : eliminated.</p> <p>(ii) LOA 184-220m Draft 10-13m Berthing window: extended by 3 hours. Draft <11m Berthing Tug: reduced by 1. Remarks: 2 pilots for berthing at LW .</p> <p>(iii) LOA 230-250m Berthing window: extended by 3 hours Tug: reduced by 1.</p>
9.	Location: SHELL	Shell oil terminal main berth	New Classifications according to vessels LOA and draft, extend tidal window, and relax tug requirements.	<p>(i) LOA 120-150m Berthing window: change tidal window</p> <p>(ii) LOA 180-184m Draft <12m Berthing window: extended by 3 hours. Berthing Tug: reduced by 1. Draft < 10m Escort Tug: eliminated.</p> <p>(iii) LOA 184-220m Draft 10-13m Berthing window: extended by 2 hours. Draft <11m Berthing Tug: reduced by 1. Remarks: 2 pilots for berthing at LW .</p> <p>(iv) LOA 230-245m Berthing window: extended by 2 hours Tug: reduced by 1.</p>

10.	Location: TPGAS	Tolo Harbour Town Gas wharf	Add new section for vessels up to 228m and redefined period of “Day light”.	Increased maximum size of vessel to 228m.
11.	Location: OTN	Ocean Terminal North Berth	To change the location code.	None
12.	Location: OTNO	Ocean Terminal North Berth Outer-foul	To change the location code and number of pilots required for vessels over 230m.	LOA >230m Requirement for extra pilot lifted.
13.	Location: OTS	Ocean Terminal South Berth	To change the location code.	None
14.	Location: OTSO	Ocean Terminal South Berth Outer-foul	To change the location code.	None

Note : Please refer to the attached Items 1-14 for details of the proposed amendments

GENERAL REMARKS

- (1) These guidelines should be construed as the operations to be performed are conducted under normal conditions with due regards to weather, ship maneuverability, sea and swell etc.
- (2) The conditions hereto as regards to the number of tugs deployed and the working parameter require are based on the experience gained by pilot members in normal weather, sea and swell, and ship's manoeuvring conditions; and are deemed to be the minimum requirements as such. Should the condition and circumstances be changed which may affect any working parameter; the pilot may at his discretion to amend any requirements therein. Any additional tug in excess of the said requirement as required by the Master and/or ship's operators to enhance the safety be concurred and encouraged by **all pilots**. **When two or more Grade II tugs are stipulated in the Berthing Guidelines, they should not be replaced by 1 Grade I tug.**
- (3) Transverse thruster or thrusters in good working condition at one end may be accepted to substitute for one tug. Transverse thruster with under-power will not be considered as equivalence to one tug.
- (4) An under-keel clearance of 10% of the vessel's deepest draught is required in manoeuvring basins, sheltered fairways and approaches to berths. 15% under-keel clearance for any exposed waterways. **To ensure safe navigation, the required UKC must be maintained throughout the entire Berthing/Unberthing operation or transit at all tidal conditions. Ample margin must be allowed for the following when calculating the effective UKC:**
- (i) Listing due to inadequate GM (Vessel Tender),
 - (ii) Delay of berthing/unberthing due to delayed schedule, traffic congestion, weather etc. particularly on a falling tide.
- Warning:**
Owners or masters of vessels may be liable to lighten their vessels to avoid touching of bottom due to insufficient UKC.
- (5) Good liaison should be established with all concerned agents, berth operators and pilot etc. for vessels required to 'wedge-in' and 'wedge-out' to ensure ample and safe **fore-and-aft** clearances are achieved.
- (6) For vessel moving to and/or from a buoy, the working pilot may take a passage at the time he considers to the best and safest route for such vessel.
- (7) In any special circumstance of the case arises. e.g. adverse weather, No.3 or above typhoon signal is hoisted up, boisterous sea and swell, different pilot embarking and disembarking areas, hampered vessels or vessels with special construction or characteristics, etc. Special requirements for tugs, working condition, servicing time, etc. need to be further consulted.

Chapter: 4 BERTHING REMARKS

1. Kwai Chung Terminal

- a. Sufficient fore-and-aft clearances should be allowed for during berthing and unberthing operations. The following table shall be used to determine the clearances required:

<u>Vessel' s LOA</u>	<u>Minimum Clearance at Each End*</u>	<u>Remarks</u>
300m and above	25 metres	Note 2
200m to under 300m	20 metres	Note 1,2,3 & 4
Under 200m	15 metres	Note 1,2,3 & 4

Note 1 : A mooring rope serving as back spring is needed to be in place on the appropriate bollard of the berth before the vessel is closing in and reaches a position which is about half ship breadth from the outer-side of the vessels secured at the adjacent berths. Under adverse weather conditions, such as when wind speed is above 22 knots, additional tug(s) may be called for with the consent of the Master.

Note 2 : At the western most of KC5, KC6, KC7, KC10 and KC14, the southern most of KC4 and KC9, the northern most of KC8 and any other berth with one end open, a minimum clearance of 5 metres less than those specified in the above table would be acceptable at the end adjacent to the berth occupied by other ships, but in no circumstances should a clearance be less than 15 metres.

Note 3 : When a vessel is required to berth alongside in a reverse direction to its approach (i.e. stern in approach), such as the cases like portside alongside to KC1, KC2, KC3, KC4, KC7, KC11, KC12, KC13 & KC14 and starboard side alongside to KC6 & KC10, and additional 5 metres clearance at both ends, more than those specified in the table above should be allowed, but it needs not be more than 25 metres.


Note 4 : During typhoons and when visibility is less than 3 cables, terminal operators should endeavour to arrange the fore-and-aft clearance of not less than 25 metres for any length of vessel.

* Notwithstanding the requirements specified, Kwai Chung terminal operators should endeavour to arrange a clearance of not less than 25 metres as far as possible.

- b. Irrespective of the ship's length, a clearance of not less than 25 metres shall be maintained at the corner between berth KC1 and KC5; at the eastern most of KC6, KC7, KC10 and KC11.
- c. Any berthing movements within Kwai Chung which are not in compliance with the guidelines endorsed by the PAC should have the agreement from the Duty Pilot and/or one of the Executive Directors of HKPA. General Manager of HKPA would be responsible for coordinating with all the involved parties.

Maximum draft with respect to the available tide for Kwai Chung berths:

Height of tide (m)	KC1-8 Max draft (m)	KC9-14 Max draft (m)
0.0	11.09	12.54
0.1	11.18	12.63
0.2	11.27	12.72
0.3	11.36	12.81
0.4	11.45	12.91
0.5	11.55	13.00
0.6	11.64	13.09
0.7	11.73	13.18
0.8	11.82	13.27
0.9	11.91	13.36
1.0	12.00	13.45
1.1	12.09	13.54
1.2	12.18	13.63
1.22	12.20	13.65
1.3	12.27	13.73
1.38	12.35	13.80
1.40	12.46	14.00
2.00	12.91	14.55



Berthing Guidelines

PAC endorsed on 7 July 1999

Location : KC1-8

Kwai Chung berth 1-8

010 **Berthing** LOA: Max 130m
Draft: Max. 12.2m (min 10% UKC)
Time: 24 hrs.
Tugs: 1. If D>8m 2
Remarks: Ro-Ro vessel 2 tugs if adverse weather.

011 **Unberthing** LOA: Max 130m
Draft: Max. 12.2m (min 10% UKC)
Time: 24 hrs.
Tugs: 1. If no anchor down 2.
Remarks: Ro-Ro vessel 2 tugs if adverse weather.

020 **Berthing** LOA: Max 230m
Draft: Max. 12.2m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

021 **Unberthing** LOA: Max 230m
Draft: Max. 12.2m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 270m
Draft: Max. 12.2m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 incl. 1 GI est. if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks:

031 **Unberthing** LOA: Max 270m
Draft: Max. 12.2m (min 10% UKC)
Time: 24 hrs.
Tugs: 2. 1 if bow & stern thrusters fitted.
Remarks:

040 **Berthing** LOA: Max 350m
Draft: Max. 12.2m (min 10% UKC)
Time: 24 hrs.
Tugs: 3 incl. 1 GI est. if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks:

041 **Unberthing** LOA: Max 350m
Draft: Max. 12.2m (min 10% UKC)
Time: 24 hrs.
Tugs: 2. 1 if bow & stern thrusters fitted.
Remarks:

Berthing Guidelines

Pending

Location : KC1-8

Kwai Chung berth 1-8

<p>→ 010 Berthing LOA: Max 130m</p> <p>Draft: Max. 12.2m + tide ? 10% UKC</p> <p>Time: 24 hrs.</p> <p>Tugs: 1. If D>8m 2</p> <p>Remarks: Ro-Ro vessel 2 tugs if adverse weather.</p>	<p>011 Unberthing LOA: Max 130m</p> <p>Draft: Max. 12.2m + tide ? 10% UKC</p> <p>Time: 24 hrs.</p> <p>Tugs: 1. If no anchor down 2.</p> <p>Remarks: Ro-Ro vessel 2 tugs if adverse weather.</p>
<p>→ 020 Berthing LOA: Max 230m</p> <p>Draft: Max. 12.2m + tide ? 10% UKC</p> <p>Time: 24 hrs.</p> <p>Tugs: 2</p> <p>Remarks:</p>	<p>021 Unberthing LOA: Max 230m</p> <p>Draft: Max. 12.2m + tide ? 10% UKC</p> <p>Time: 24 hrs.</p> <p>Tugs: 2</p> <p>Remarks:</p>
<p>→ 030 Berthing LOA: Max 270m</p> <p>Draft: Max. 12.2m + tide ? 10% UKC</p> <p>Time: 24 hrs.</p> <p>Tugs: 2 incl. 1 GI est. if no bow thruster. 1 if bow & stern thrusters fitted.</p> <p>Remarks:</p>	<p>031 Unberthing LOA: Max 270m</p> <p>Draft: Max. 12.2m + tide ? 10% UKC</p> <p>Time: 24 hrs.</p> <p>Tugs: 2. 1 if bow & stern thrusters fitted.</p> <p>Remarks:</p>
<p>→ 040 Berthing LOA: Max 350m</p> <p>Draft: Max. 12.2m + tide ? 10% UKC</p> <p>Time: 24 hrs.</p> <p>Tugs: 3 incl. 1 GI est. if no bow thruster. 1 if bow & stern thrusters fitted.</p> <p>Remarks:</p>	<p>041 Unberthing LOA: Max 350m</p> <p>Draft: Max. 12.2m + tide ? 10% UKC</p> <p>Time: 24 hrs.</p> <p>Tugs: 2. 1 if bow & stern thrusters fitted.</p> <p>Remarks:</p>
<p>→ General Remarks: To ensure safe navigation, 10% UKC must be maintained throughout the entire Berthing/Unberthing operation at all tidal conditions. The tidal height to be used for calculating the maximum allowable draft should be the lowest within the 2 hours period during the berthing/unberthing operation. Ample margin must be allowed for the following when calculating the effective UKC:</p> <ol style="list-style-type: none"> 1) Listing due to inadequate GM (Vessel Tender) 2) Delay of berthing/unberthing due to delayed schedule, traffic congestion, weather etc. particularly on a falling tide. <p>Warning: Owners or masters of vessels may be liable to lighten their vessels to avoid touching of bottom due to insufficient UKC.</p>	

Berthing Guidelines

PAC endorsed on 7 July 1999

Location : KC6-7/O-F

Kwai Chung berth 6-7 outer-foul

010 **Berthing** LOA: Max 250m
Draft: Max. 12.2m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

011 **Unberthing** LOA: Max 250m
Draft: Max. 12.2m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

020 **Berthing** LOA: Max 290m
Draft: Max. 12.2m (min 10% UKC)
Time: 24 hrs.
Tugs: 3
Remarks: No stern in.
Full length of opposite berth must
be clear.

021 **Unberthing** LOA: Max 290m
Draft: Max. 12.2m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

Berthing Guidelines

Pending

Location : KC6-7/O-F

Kwai Chung berth 6-7 outer-foul

<p>→ 010 Berthing LOA: Max 250m</p> <p>Draft: Max.12.2m + tide ? 10% UKC</p> <p>Time: 24 hrs.</p> <p>Tugs: 2</p> <p>Remarks:</p>	<p>011 Unberthing LOA: Max 250m</p> <p>Draft: Max.12.2m + tide ? 10% UKC</p> <p>Time: 24 hrs.</p> <p>Tugs: 2</p> <p>Remarks:</p>
<p>→ 020 Berthing LOA: Max 290m</p> <p>Draft: Max.12.2m + tide ? 10% UKC</p> <p>Time: 24 hrs.</p> <p>Tugs: 3</p> <p>Remarks: No stern in. Full length of opposite berth must be clear.</p>	<p>021 Unberthing LOA: Max 290m</p> <p>Draft: Max.12.2m + tide ? 10% UKC</p> <p>Time: 24 hrs.</p> <p>Tugs: 2</p> <p>Remarks:</p>
<p>→ General Remarks: To ensure safe navigation, 10% UKC must be maintained throughout the entire Berthing/Unberthing operation at all tidal condition. The tidal height to be used for calculating the maximum allowable draft should be the lowest within the 2 hours period during the berthing/unberthing operation. Ample margin must be allowed for the following when calculating the effective UKC:</p> <ol style="list-style-type: none"> 1. Listing due to inadequate GM (Vessel Tender) 2. Delay of berthing/unberthing due to delayed schedule, traffic congestion, weather etc. particularly on a falling tide. <p>Warning: Owners or masters of vessels may be liable to lighten their vessels to avoid touching of bottom due to insufficient UKC.</p>	

Berthing Guidelines

Pending

Location : KC9-14

Kwai Chung berth 9-14

<p>→ 010 Berthing LOA: Max 130m Draft: Max.13.8m + tide ? 10% UKC Time: 24 hrs. Tugs: 1. If D>8m 2 Remarks: Ro-Ro vessel 2 tugs if adverse weather.</p>	<p>011 Unberthing LOA: Max 130m Draft: Max.13.8m + tide ? 10% UKC Time: 24 hrs. Tugs: 1. If no anchor down 2 Remarks: Ro-Ro vessel 2 tugs if adverse weather.</p>
<p>→ 020 Berthing LOA: Max 230m Draft: Max.13.8m + tide ? 10% UKC Time: 24 hrs. Tugs: 2 Remarks:</p>	<p>021 Unberthing LOA: Max 230m Draft: Max.13.8m + tide ? 10% UKC Time: 24 hrs. Tugs: 2 Remarks:</p>
<p>→ 030 Berthing LOA: Max 270m Draft: Max.13.8m + tide ? 10% UKC Time: 24 hrs. Tugs: 2 incl. 1 GI est. if no bow thruster. 1 if bow & stern thrusters fitted. Remarks:</p>	<p>031 Unberthing LOA: Max 270m Draft: Max.13.8m + tide ? 10% UKC Time: 24 hrs. Tugs: 2. 1 if bow & stern thrusters fitted. Remarks:</p>
<p>→ 040 Berthing LOA: Max 350m Draft: Max.13.8m + tide ? 10% UKC Time: 24 hrs. Tugs: 3 incl. 1 GI est. if no bow thruster. 1 if bow & stern thrusters fitted. Remarks: L>230m stern in 3 tugs.</p>	<p>041 Unberthing LOA: Max 350m Draft: Max.13.8m + tide ? 10% UKC Time: 24 hrs. Tugs: 2. 1 if bow & stern thrusters fitted. Remarks:</p>
<p>→ General Remarks: To ensure safe navigation, 10% UKC must be maintained throughout the entire Berthing/Unberthing operation at all tidal condition. The tidal height to be used for calculating the maximum allowable draft should be the lowest within the 2 hours period during the berthing/unberthing operation. Ample margin must be allowed for the following when calculating the effective UKC:</p> <ol style="list-style-type: none"> 1. Listing due to inadequate GM (Vessel Tender) 2. Delay of berthing/unberthing due to delayed schedule, traffic congestion, weather etc. particularly on a falling tide. <p>Warning: Owners or masters of vessels may be liable to lighten their vessels to avoid touching of bottom due to insufficient UKC.</p>	

Chapter:11 GOVERNMENT MOORING BUOYS

BUOY	LOA (m.)	Draft (m.)	BUOY	LOA (m.)	Draft (m.)
‘A’ Buoy:					
A06	183	6.4	A39*	183	7.4
A08	183	7.8	A41*	183	10.2 ←
A09	183	7.4	A43*	183	9.0
A10	183	8.8	A45*	183	10.9 ←
A11	183	8.5	A46*	183	10.8
A12	183	8.8	A60	183	7.8
A13	183	7.2	A62	198	10.2
A14	183	8.4	A70	170	9.7
A15	180	7.9	A71	183	8.8
A17*	183	8.5	A72	183	8.8
A18	183	7.0	A73	183	9.5
A19	183	6.7	A74	183	9.0
A29*	160	9.0	A76	170	9.1
A35*	160	9.5	A77	183	9.1
A36	160	8.1	A78	183	9.5
A38	183	6.4			
‘B’ Buoy:					
B01	120	4.8	B19	137	6.1
B02*	137	6.4	B20	137	7.2
B03*	137	6.7	B21	137	6.8
B04*	137	9.1	B22	137	5.9
B05	137	7.5	B23	137	6.0
B06	137	9.0	B24	137	5.0
B11	137	7.0	B25	110	5.7
B12	137	7.3	B26	137	9.3
B13	137	6.6	B27	137	5.3 ←
B14	137	6.8	B28	137	6.2
B15	137	7.0	B29	137	8.1
B16	137	5.9	B30	137	8.5
B17	137	6.6	B31	137	9.3
B18	137	4.8			

* = Classified as Non typhoon mooring buoy

Remarks:

	‘A’ buoy	‘B’ buoy
Normal weather max. length	183m	138m
Typhoon class max. length	183m	113m
Swinging radius	214m	168m
Buoy link diameter	146mm	146mm

The location and sounding of the GMBs are subject to change without notice. Agents/Operators are cautioned to check with Mardep for updated information when booking GMB.

Berthing Guidelines
Location : CRC-A

PAC endorsed on 7 July 1999

China Resources T/Y main berth (A)

010 **Berthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 (grade II)
Remarks: Port side to.

011 **Unberthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 (grade II)
Remarks:

020 **Berthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks: Port side to.

021 **Unberthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 180m
Draft: Max. 12m (min 10% UKC)
Time: 24 hrs.
Tugs: 2. If D>10m 1 GI est.
Remarks: Port side to.

031 **Unberthing** LOA: Max 180m
Draft: Max. 12m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

040 **Berthing** LOA: Max 220m
Draft: Max. 13m (min 10% UKC)
Time: D&N HW. If D<10m 24hrs.
Tugs: 3 incl. 1 GI est.
Remarks: Day 1 pilot, night 2 pilots.
Port side to.

041 **Unberthing** LOA: Max 220m
Draft: Max. 13m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

050 **Berthing** LOA: Max 250m
Draft: Max. 14m (min 10% UKC)
Time: D&N HW.
Tugs: 4 incl. 1 GI est.
Remarks: 2 pilots.
Port side to.

051 **Unberthing** LOA: Max 250m
Draft: Max. 14m (min 10% UKC)
Time: 24 hrs.
Tugs: 3
Remarks:

Berthing Guidelines

Pending

Location : CRC-A

China Resources T/Y main berth (A)

010 **Berthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 (grade II)
Remarks: Port side to.

011 **Unberthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 (grade II)
Remarks:

020 **Berthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks: Port side to.

021 **Unberthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

→ 030 **Berthing** LOA: Max 184m
Draft: Max. 12m (min 10% UKC)
Time: 24 hrs.
Tugs: 2. If Draft>10m 1 GI est.
Remarks: Port side to.

← 031 **Unberthing** LOA: Max 184m
Draft: Max. 12m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

→ 040 **Berthing** LOA: Max 220m
Draft: Max. 13m (min 10% UKC)
Time: **Draft=10m 24hrs.**
 Draft>10m, D&N HW-1 to HW+1
 D&N LW to LW+1
Tugs: 3 incl. 1 GI est.
 If Draft? 11m 2 incl. 1 GI est.
Remarks: Day 1 pilot, Night 2 pilots.
 Berthing at LW to LW+1 : 2
 pilots.
 Port side to.

041 **Unberthing** LOA: Max 220m
Draft: Max. 13m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

→ 050 **Berthing** LOA: Max 250m
Draft: Max. 14m (min 10% UKC)
Time: **D&N HW-1 to HW+1**
 D&N LW to LW+1
Tugs: **3 incl. 1 GI est.**
Remarks: 2 pilots. Port side to.

← 051 **Unberthing** LOA: Max 250m
Draft: Max. 14m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

Berthing Guidelines

Pending

Location : CTX

Caltex T/Y main berth

010 **Berthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: D&N HW-1 to HW+2 &
D&N LW to LW+3
Tugs: 2 (grade II)
Remarks: Starboard side to.

011 **Unberthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 (grade II)
Remarks:

→ 020 **Berthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: D&N HW-1 to HW+2 &
D&N LW+1 to LW+2
Tugs: 2
Remarks: Starboard side to.

021 **Unberthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

→ 030 **Berthing** LOA: Max 184m
Draft: Max. 12m (min 10% UKC)
Time: D&N HW to HW+1 &
D&N LW+2
Tugs: 2. If Draft>10m 1 GI est.
Remarks: Starboard side to.

← 031 **Unberthing** LOA: Max 184m
Draft: Max. 12m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

→ 040 **Berthing** LOA: Max 220m
Draft: Max. 12.6m (min 10% UKC)
Time: D&N HW to HW+1 &
D&N LW+2
Tugs: 3 incl. 1 GI est.
If Draft? 11m 2 incl. 1 GI est.
Remarks: Day 1 pilot, Night 2 pilots.
Berthing at LW+2 : 2 pilots.
Starboard side to.

041 **Unberthing** LOA: Max 220m
Draft: Max. 12.6m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

→ 050 **Berthing** LOA: Max 235m
Draft: Max. 12.6m (min 10% UKC)
Time: D&N HW to HW+1 &
D&N LW+2
Tugs: 3 incl. 1 GI est.
Remarks: 2 pilots.
Starboard side to.

← 051 **Unberthing** LOA: Max 235m
Draft: Max. 12.6m (min 10% UKC)
Time: D&N HW-1 to HW+2 &
D&N LW to LW+2
Tugs: 2
Remarks:

Berthing Guidelines

PAC endorsed on 7 July 1999

Location : CTX-LPG

Caltex T/Y LPG berth

010 **Berthing** LOA: Max 80m
Draft: Max. 6.5m (min 10% UKC)
Time: D&N LW to LW+3
Tugs: 1 (grade II)
Remarks: Starboard side to.
Bow not to pass 6.5m sign
board.

011 **Unberthing** LOA: Max 80m
Draft: Max. 6.5m (min 10% UKC)
Time: D&N LW to HW
Tugs: 1 (grade II)
Remarks:

020 **Berthing** LOA: Max 114m
Draft: Max. 6.5m (min 10% UKC)
Time: Day LW to LW+2
Tugs: 2 (grade II)
Remarks: Starboard side to.
Bow not to pass 6.5m sign
board.
Not to be replaced by 1 (grade I)
tug.

021 **Unberthing** LOA: Max 114m
Draft: Max. 6.5m (min 10% UKC)
Time: Day LW to HW
Tugs: 2 (grade II)
Remarks: Not to be replaced by 1 (grade I)
tug.

Berthing Guidelines

Pending

Location : CTX-LPG

Caltex T/Y LPG berth

010 **Berthing** LOA: Max 80m**Draft:** Max. 6.5m (min 10% UKC)**Time:** D&N LW to LW+3**Tugs:** 1 (grade II)**Remarks:** Starboard side to.
Bow not to pass 6.5m sign board.011 **Unberthing** LOA: Max 80m**Draft:** Max. 6.5m (min 10% UKC)**Time:** 24 hrs.**Tugs:** HW to LW: 2 (grade II) tug.

LW to HW: 1 (grade II) tug.

Remarks:020 **Berthing** LOA: Max 114m**Draft:** Max. 6.5m (min 10% UKC)**Time:** Day LW to LW+2**Tugs:** 2 (grade II)**Remarks:** Starboard side to.
Bow not to pass 6.5m sign board.021 **Unberthing** LOA: Max 114m**Draft:** Max. 6.5m (min 10% UKC)**Time:** 24 hrs.**Tugs:** HW to LW: 2 (grade I) tug.

LW to HW: 2 (grade II) tug.

Remarks:~~Not to be replaced by 1 (grade I) tug.~~

Berthing Guidelines

PAC endorsed on 7 July 1999

Location : ESSO

Esso oil terminal main berth

010 **Berthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 (grade II)
Remarks: Port side to.

011 **Unberthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 (grade II)
Remarks:

020 **Berthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks: Port side to.

021 **Unberthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 180m
Draft: Max. 12m (min 10% UKC)
Time: 24 hrs.
Tugs: 2. If D>10m 1 GI est.
Remarks: Port side to.

031 **Unberthing** LOA: Max 180m
Draft: Max. 12m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

040 **Berthing** LOA: Max 220m
Draft: Max. 13m (min 10% UKC)
Time: D&N HW. D<10m 24 hrs.
Tugs: 3 incl. 1 GI est.
Remarks: Day 1 pilot, night 2 pilots.
Port side to.

041 **Unberthing** LOA: Max 220m
Draft: Max. 13m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

050 **Berthing** LOA: Max 250m
Draft: Max. 14m (min 10% UKC)
Time: D&N HW
Tugs: 4 incl. 1 GI est.
Remarks: 2 pilots. Port side to.

051 **Unberthing** LOA: Max 250m
Draft: Max. 14m (min 10% UKC)
Time: 24 hrs.
Tugs: 3
Remarks:

060 **Berthing** LOA: Max 274m
Draft: Max. 14.63m (min 10% UKC)
Time: D&N HW. Jun.-Sept. HW-0.5
Tugs: 4 incl. 1 GI est.
Remarks: 2 pilots. Port side to

061 **Unberthing** LOA: Max 274m
Draft: Max. 14.63m (min 10% UKC)
Time: 24 hrs.
Tugs: 3
Remarks:

Berthing Guidelines

Pending

Location : ESSO

Esso oil terminal main berth

010 **Berthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 (grade II)
Remarks: Port side to.

011 **Unberthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 (grade II)
Remarks:

020 **Berthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks: Port side to.

021 **Unberthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

→ 030 **Berthing** LOA: Max 184m
Draft: Max. 12m (min 10% UKC)
Time: 24 hrs.
Tugs: 2. If Draft>10m 1 GI est.
Remarks: Port side to.

← 031 **Unberthing** LOA: Max 184m
Draft: Max. 12m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

→ 040 **Berthing** LOA: Max 220m
Draft: Max. 13m (min 10% UKC)
Time: **Draft? 10m 24hrs.**
Draft>10m, D&N HW-1 to HW+1
D&N LW to LW+1

041 **Unberthing** LOA: Max 220m
Draft: Max. 13m (min 10% UKC)
Time: 24 hrs.

→ **Tugs:** 3 incl. 1 GI est.
If Draft ? 11m 2 incl. 1 GI est.

Tugs: 2

→ **Remarks:** Day 1 pilot, Night 2 pilots.
Berthing at LW to LW+1: 2
pilots.
 Port side to.

Remarks:

→ 050 **Berthing** LOA: Max 250m
Draft: Max. 14m (min 10% UKC)
Time: **D&N HW-1 to HW+1**
D&N LW to LW+1
Tugs: 3 incl. 1 GI est.
Remarks: 2 pilots. Port side to.

051 **Unberthing** LOA: Max 250m
Draft: Max. 14m (min 10% UKC)
Time: 24 hrs.

Tugs: 2

Remarks:

→ 060 **Berthing** LOA: Max 274m
Draft: Max. 14.63m (min 10% UKC)
Time: **D&N HW to HW+1**
 (Jun.-Sept. HW-0.5)
Tugs: 4 incl. 1 GI est.
Remarks: 2 pilots. Port side to

061 **Unberthing** LOA: Max 274m
Draft: Max. 14.63m (min 10% UKC)
Time: 24 hrs.

Tugs: 3

Remarks:

Berthing Guidelines

PAC endorsed on 7 July 1999

Location : MOBIL

Mobil oil terminal main berth

010 **Berthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 (grade II)
Remarks:

011 **Unberthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 (grade II)
Remarks:

020 **Berthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: D&N HW-1 to HW+2 &
 D&N LW-2 to LW+1
Tugs: 2
Remarks: Port side to.

021 **Unberthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 180m
Draft: Max. 12m (min 10% UKC)
Time: D&N HW
Tugs: 2. If D>10m incl 1 GI est.
Remarks: Port side to.

031 **Unberthing** LOA: Max 180m
Draft: Max. 12m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

040 **Berthing** LOA: Max 220m
Draft: Max. 13m (min 10% UKC)
Time: D&N HW
Tugs: 3 incl. 1 GI est.
Remarks: Day 1 pilot, night 2 pilots.
 Port side to.

041 **Unberthing** LOA: Max 220m
Draft: Max. 13m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

050 **Berthing** LOA: Max 250m
Draft: Max. 14.6m (min 10% UKC)
Time: D&N HW
Tugs: 4 incl. 1 GI est.
Remarks: 2 pilots.
 Port side to.

051 **Unberthing** LOA: Max 250m
Draft: Max. 14.6m (min 10% UKC)
Time: 24 hrs.
Tugs: 3
Remarks:

Berthing Guidelines

Pending

Location : MOBIL

Mobil oil terminal main berth

010 **Berthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 (grade II)
Remarks:

011 **Unberthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 (grade II)
Remarks:

020 **Berthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: D&N HW-1 to HW+2 &
 D&N LW-2 to LW+1
Tugs: 2
Remarks: Port side to.

021 **Unberthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

→ 030 **Berthing** LOA: Max 184m
Draft: Max. 12m (min 10% UKC)
Time: D&N HW to HW+1
 D&N LW to LW+1
Tugs: 2. If D>10m 1 GI est.
Remarks: Port side to.

031 **Unberthing** LOA: Max 184m ←
Draft: Max. 12m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

→ 040 **Berthing** LOA: Max 220m
Draft: Max. 13m (min 10% UKC)
Time: D&N HW to HW+1
 D&N LW to LW+1
Tugs: 3 incl. 1 GI est.
 If Draft? 11m 2 incl. 1 GI est.
Remarks: Day 1 pilot, Night 2 pilots.
 Berthing at LW to LW+1: 2
 pilots.
 Port side to.

041 **Unberthing** LOA: Max 220m
Draft: Max. 13m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

→ 050 **Berthing** LOA: Max 250m
Draft: Max. 14.6m (min 10% UKC)
Time: D&N HW to HW+1
 D&N LW to LW+1
Tugs: 3 incl. 1 GI est.
Remarks: 2 pilots.
 Port side to.

051 **Unberthing** LOA: Max 250m
Draft: Max. 14.6m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 ←
Remarks:

Berthing Guidelines

PAC endorsed on 7 July 1999

Location : SHELL

Shell oil terminal main berth

010 **Berthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: D&N HW-1 to HW+2 &
 D&N LW to LW+2
Tugs: 2 (grade II)
Remarks: Starboard side to.

011 **Unberthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 (grade II)
Remarks:

020 **Berthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: D&N HW-1 to HW+1 &
 D&N LW to LW+2
Tugs: 2
Remarks: Starboard side to.

021 **Unberthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 180m
Draft: Max. 12m (min 10% UKC)
Time: D&N HW
Tugs: 2. If D>10m 1 GI est.
Remarks: Starboard side to.

031 **Unberthing** LOA: Max 180m
Draft: Max. 12m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

040 **Berthing** LOA: Max 220m
Draft: Max. 14.5m (min 10% UKC)
Time: D&N HW
Tugs: 3 incl. 1 GI est.
Remarks: Day 1 pilot, night 2 pilots.
 Starboard side to.

041 **Unberthing** LOA: Max 220m
Draft: Max. 14.5m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

050 **Berthing** LOA: Max 245m
Draft: Max. 14.5m (min 10% UKC)
Time: D&N HW
Tugs: 4 incl. 1 GI est.
Remarks: 2 pilots.
 Starboard side to.

051 **Unberthing** LOA: Max 245m
Draft: Max. 14.5m (min 10% UKC)
Time: D&N HW-1 to HW+2 &
 D&N LW-2 to LW+1
Tugs: 3
Remarks:

Berthing Guidelines

Pending

Location : SHELL

Shell oil terminal main berth

010 **Berthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: D&N HW-1 to HW+2 &
D&N LW to LW+2
Tugs: 2 (grade II)
Remarks: Starboard side to.

011 **Unberthing** LOA: Max 120m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 (grade II)
Remarks:

→ 020 **Berthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: D&N HW-1 to HW+2 &
D&N LW+1 to LW+2
Tugs: 2
Remarks: Starboard side to.

021 **Unberthing** LOA: Max 150m
Draft: Max. 10m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

→ 030 **Berthing** LOA: Max 184m
Draft: Max. 12m (min 10% UKC)
Time: D&N HW to HW+1 &
D&N LW+2
Tugs: 2. If Draft >10m 1 GI est.
Remarks: Starboard side to.

← 031 **Unberthing** LOA: Max 184m
Draft: Max. 12m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

→ 040 **Berthing** LOA: Max 220m
Draft: Max. 14.5m (min 10% UKC)
Time: D&N HW to HW+1 &
D&N LW+2
Tugs: 3 incl. 1 GI est.
If Draft? 11m 2 incl. 1 GI est.
Remarks: Day 1 pilot, Night 2 pilots.
Berthing at LW+2 : 2 pilots.
Starboard side to.

041 **Unberthing** LOA: Max 220m
Draft: Max. 14.5m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

→ 050 **Berthing** LOA: Max 245m
Draft: Max. 14.5m (min 10% UKC)
Time: D&N HW to HW+1 &
D&N LW+2
Tugs: 3 incl. 1 GI est.
Remarks: 2 pilots.
Starboard side to.

← 051 **Unberthing** LOA: Max 245m
Draft: Max. 14.5m (min 10% UKC)
Time: D&N HW-1 to HW+2 &
D&N LW to LW+2
Tugs: 2
Remarks:

Berthing Guidelines

PAC endorsed on 7 July 1999

Location : TPGAS

Tolo harbour Town Gas wharf

010 **Berthing** LOA: Max 122m
Draft: Max. 7.5m (min 10% UKC)
Time: Day light only (0800-1700)
Tugs: 2 (grade II)
Remarks: Vessel from Tolo harbour to
TSK or vice versa must change
pilot at Ngan Chau.

011 **Unberthing** LOA: Max 122m
Draft: Max. 7.5m (min 10% UKC)
Time: Day light only (0800-1700)
Tugs: 2 (grade II)
Remarks: Vessel from Tolo harbour to TSK
or vice versa must change pilot at
Ngan Chau.

020 **Berthing** LOA: Max 198m
Draft: Max. 11m (min 10% UKC)
Time: Day light only (0800-1700)
Tugs: 2. L>168m or D>9.15m 1 est.
from Chik Chau
Remarks: Vessel from Tolo harbour to
TSK or vice versa must change
pilot at Ngan Chau.

021 **Unberthing** LOA: Max 198m
Draft: Max. 11m (min 10% UKC)
Time: Day light only (0800-1700)
Tugs: 2. L>168m or D>9.15m 1 est. to
Chik Chau
Remarks: Vessel from Tolo harbour to TSK
or vice versa must change pilot at
Ngan Chau.

Berthing Guidelines

Pending

Location : TPGAS

Tolo harbour Town Gas wharf

→ * Day light / POB : Berthing & Unberthing
From (Sunrise) to (90 mins before Sunset)

010 **Berthing** LOA: Max 122m
Draft: Max. 7.5m (min 10% UKC)
Time: Day light only *
Tugs: 2 (grade II)
Remarks: Vessel from Tolo harbour to TSK or vice versa must change pilot at Ngan Chau.

011 **Unberthing** LOA: Max 122m
Draft: Max. 7.5m (min 10% UKC)
Time: Day light only *
Tugs: 2 (grade II)
Remarks: Vessel from Tolo harbour to TSK or vice versa must change pilot at Ngan Chau.

→ 020 **Berthing** LOA: Max 198m
Draft: Max. 11m (min 10% UKC)
Time: Day light only *
Tugs: 2. L>168m or Draft>9.15m 1 est. from Chik Chau
Remarks: Vessel from Tolo harbour to TSK or vice versa must change pilot at Ngan Chau.

021 **Unberthing** LOA: Max 198m
Draft: Max. 11m (min 10% UKC)
Time: Day light only *
Tugs: 2. L>168m or Draft>9.15m 1 est. to Chik Chau
Remarks: Vessel from Tolo harbour to TSK or vice versa must change pilot at Ngan Chau.

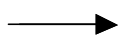
→ 030 **Berthing** LOA: Max 228m
Draft: Max. 11m (min 10% UKC)
Time: Day light only *
Tugs: 3. 2 est. from Chik Chau
Remarks: 2 pilots.
Vessel from Tolo harbour to TSK or vice versa must change pilot at Ngan Chau.

031 **Unberthing** LOA: Max 228m
Draft: Max. 11m (min 10% UKC)
Time: Day light only *
Tugs: 3. 2 est. to Chik Chau
Remarks: 2 pilots.
Vessel from Tolo harbour to TSK or vice versa must change pilot at Ngan Chau.

Original
Location : OTN

Ocean Terminal north outer-foul

(Proposed – change of location name & code only // guidelines remain unchanged)



Location : OTNO

Ocean Terminal north berth outer-foul

010 **Berthing** LOA: Max 175m
Draft: Max. 7.2m (min 10% UKC)
Time: D&N LW-1 to HW+1
Tugs: 2
Remarks: Starboard side to.

011 **Unberthing** LOA: Max 175m
Draft: Max. 7.2m (min 10% UKC)
Time: D&N LW-1 to HW+1
Tugs: 2
Remarks:

Original
Location : OTNO

Ocean Terminal north berth

(Proposed – change of location code // guidelines 040 & 041 delete ‘ 2 pilots’ remark)

→ Location : OTN

Ocean Terminal north berth

010 **Berthing** LOA: Max 80m
Draft: Max. 7.5m (min 10% UKC)
Time: 24 hrs.
Tugs: 1
Remarks:

011 **Unberthing** LOA: Max 80m
Draft: Max. 7.5m (min 10% UKC)
Time: 24 hrs.
Tugs: 1
Remarks:

020 **Berthing** LOA: Max 130m
Draft: Max. 8.5m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

021 **Unberthing** LOA: Max 130m
Draft: Max. 8.5m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 230m
Draft: Max. 8.5m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks: Starboard side to.

031 **Unberthing** LOA: Max 230m
Draft: Max. 8.5m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

040 **Berthing** LOA: Max 270m
Draft: Max. 8.5m (min 10% UKC)
Time: D&N LW-1 to HW-1
Tugs: 3 incl. 1 GI est.
→ **Remarks:** ~~2 pilots~~
Starboard side to.

041 **Unberthing** LOA: Max 270m
Draft: Max. 8.5m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 incl. 1 est.
Remarks: ~~2 pilots~~ ←

Original
Location : OTS

Ocean Terminal south outer-foul

(Proposed – change of location name & code only // guidelines remain unchanged)

→ **Location : OTSO**

Ocean Terminal south berth outer-foul

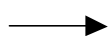
010 **Berthing** LOA: Max 175m
Draft: Max. 8.5m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

011 **Unberthing** LOA: Max 175m
Draft: Max. 8.5m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

Original
Location : OTSO

Ocean Terminal south berth

(Proposed – change of location code only // guidelines remain unchanged)



Location : OTS

Ocean Terminal south berth

010 **Berthing** LOA: Max 80m
Draft: Max. 7.5m (min 10% UKC)
Time: 24 hrs.
Tugs: 1
Remarks:

011 **Unberthing** LOA: Max 80m
Draft: Max. 7.5m (min 10% UKC)
Time: 24 hrs.
Tugs: 1
Remarks:

020 **Berthing** LOA: Max 130m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

021 **Unberthing** LOA: Max 130m
Draft: Max. 8m (min 10% UKC)
Time: 24 hrs.
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 230m
Draft: Max. 10.67m (min 10% UKC)
Time: 24 hrs.
Tugs: 2. If D>10m incl. 1 GI est.
Remarks:

031 **Unberthing** LOA: Max 230m
Draft: Max. 10.67m (min 10% UKC)
Time: 24 hrs.
Tugs: 2. If D>10m incl. 1 est.
Remarks:

040 **Berthing** LOA: Max 270m
Draft: Max. 10.67m (min 10% UKC)
Time: D&N HW-2 to LW+2
Tugs: 3 incl. 1 GI est.
Remarks: Port side to.
Max Fwd = 9.45m Aft =10.67m.

041 **Unberthing** LOA: Max 270m
Draft: Max. 10.67m (min 10% UKC)
Time: 24 hrs.
Tugs: 2 incl. 1 est.
Remarks: Max Fwd = 9.45m Aft =10.67m.

050 **Berthing** LOA: Max 290m
Draft: Max. 10.67m (min 10% UKC)
Time: D&N HW-2 to LW+1
Tugs: 3 incl. 1 GI est.
Remarks: 2 pilots. Port side to.
Max Fwd = 9.45m Aft =10.67m.

051 **Unberthing** LOA: Max 290m
Draft: Max. 10.67m (min 10% UKC)
Time: D&N HW-2 to LW+2
Tugs: 2 incl. 1 est.
Remarks: 2 pilots.
Max Fwd = 9.45m Aft =10.67m.