PILOTAGE ADVISORY COMMITTEE WORKING GROUP

Proposed Amendments to the Berthing Guidelines

Purpose

The purpose of this paper is to seek members' advices and comments on proposed amendments to the Berthing Guidelines (BGL).

Proposed Amendments

- 2. It was proposed to amend the BGL with updated information as follow:-
 - A. Chapter 3 amend paragraph 4 in respect of the "depth at berth" and "Max. Sailing or Arrival Draft at KC Basin" for Kwai Chung berths as shown in *Annex I*.
 - B. Chapter 4 adding a requirement for 6,000HP tug and one 5000HP tug for vessel with LOA>370m & Draft>14.0m; and two 5000HP tugs for vessels with >350m in paragraph 2 as shown in *Annex II*.
 - C. Chapter 12
 - (i) **Chevron T/Y main berth** (**CVX**) extend the Maximum LOA from 235m to 250m with displacement not exceeding 110,000 MT; and

(ii) Kwai Chung berths –

- (a) draft increased subsequent to the deepening of the basin;
- (b) tidal windows adjusted; and
- (c) number and power of tugs adjusted for handling heavily laden ships.

As shown in Annex III.

3. Hong Kong Pilots Association Limited has provided a brief summary on the background and rationale for their proposed changes related to Kwai Chung berths. The brief is attached at *Annex IV* for reference.

Presentation

4. Hong Kong Pilots Association will present this paper and illustrate the proposed changes for members' comments.

Pilotage Unit Port Control Division Marine Department May 2022

Chapter 3 BERTHING REMARKS

Fore and Aft Clearance

1. Sufficient fore-and-aft clearances should be allowed for during berthing and unberthing operations. Good liaison should be maintained among all concerned parties for vessels required to 'wedge-in' and 'wedge-out' to ensure ample and safe fore-and-aft clearances are achieved. The following table shall be used to determine the clearances required for Kwai Chung Terminals:

Vessel's LOA	Minimum Clearance at Each End
>370m	35 metres
> 300m to ≤370m	25 metres
> 200m to ≤300m	20 metres
≤ 200	15 metres

Note: 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 21 knots, additional tug(s) may be called for with the consent of the Master.

Note: 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: 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 & KC15-20, an additional 5m clearance at both ends, more than those specified in the table above should be allowed, but it needs not be more than 25 metres for LOA≤370m, or 35 metres for LOA >370m.

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 LOA≤370m, or 35 metres for LOA>370m.
Note 5	•	Notwithstanding the requirements specified, Kwai Chung terminal operators should endeavour to arrange a clearance of not less than 25 metres as far as possible. For vessels of LOA>370m, 35 metres are required.

2. Berthing of ships with LOA exceeding berth length requires an extra length of quay front from adjacent berth(s). 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. For vessels of LOA>370m, 35 metres are required.

Depth of Berths

- 3. The depths of berths provided in these guidelines are as declared by the berth operators. Close liaison among the ships agent, berth operators and pilots should be maintained at all times to ensure sufficient depth for berthing and unberthing of the vessels.
- 4. Declared Depths at Kwai Chung Berths: (KC basin maintained depth 15.0m)

Berth No.	Depth at berth*	Max. Sailing or Arrival Draft at KC Basin
KC 1, 2, 3	14.0m	14.0m + HoT – 10% UKC
KC 2, 5	15.5m	15.0 15.5m + HoT – 10% UKC
KC 4 & 6	14.2m	14.2m + HoT – 10% UKC
KC 7	15.5m	15.0 15.5m + HoT – 10% UKC
KC 8 & 9	15.5 16.0m	15.0 16.0m + HoT – 10% UKC
KC 10 -14	15.5m	15.0 15.5m + HoT – 10% UKC
KC 15 – 20 16	15.5m	15.0 15.5m + HoT – 10% UKC
KC 17 – 19	16.5m	16.5m + HoT – 10% UKC
KC 20	15.5m	15.5m + HoT – 10% UKC

*Remarks:

- (a) Depth at berths (50m from berth to seaward) were declared and maintained by terminal operators and may subject to change. Masters, agents & operators are cautioned to check with terminal operator for updated information.
- (b) Vessels intending to sail or arrive with draft exceeding **15.0m** should submit the following information to HKPA in ample time for consideration as required.
- i. Water density used for calculating the declared draft;
- ii. Draft at water density SG 1.017;
- iii. TPC (tonnes per centimetre);
- iv. Estimated GM at sailing;
- v. Squat Table; and
- vi. Heeling Table.

Annex II

Chapter 4 GUIDELINES ON TUG REQUIREMENTS

Tugs Used for Port Operations – General Requirements

- 1. Tugs used for port operations should meet the following requirements:
 - (a) Locally licensed and properly manned;
 - (b) Fitted with VHF radio;
 - (c) Fitted with AIS transponder;
 - (d) Fitted with twin screw/propulsion preferably with azimuth propellers;
 - (e) With adequate power and bollard pull; and
 - (f) Tug master be able to communicate with pilot(s) effectively.

(New tug for listing must meet with these general requirements. Existing tugs with single screw will be allowed to remain on list in chapter 5 but will not be used for berthing and unberthing.)

Grades of Tug

2. Tugs mentioned in these guidelines are categorized in two grades, i.e. grade II of lesser power (with at least 1248 HP) and grade I of higher power (with at least 2600 HP). The table below illustrates the general application of tugs currently listed in the BGL for container vessels. For tug requirements concerning bulker and tanker vessels, see paragraph 7 below and relevant BGL for the specific berth.

Grade	Power (HP)	Bollard Pull (BP)	General Application For Container Vessels	
	≥6,000	≥78	LOA>370m & Draft>14.0m ¹	
	≥5,000	≥62	$LOA > 350m^2$	
	≥4,000	≥52	LOA>300m or Draft >12.5m	
I	≥3,600	≥50	LOA>300m or Draft>12.5m	
	≥3,200	≥42	LOA≤300m and Draft≤12.5m	
	≥3,000	≥38	LOA≤300m and Draft≤12.5m	
	≥2,600	≥35	LOA≤200m	
II	≥1,200	≥18	Not applicable	

Note¹ at least one of the attending tugs should be of 5000HP 6000HP or more & one tug of 5000HP or more;

Note² at least one of the attending tugs should be of 5000HP or more; at least two if Draft >14.0m.

Tugs Information

3. A list of tugs suitable for port operations is at Chapter 5 for reference. New tugs for listing shall meet with the specifications above. Owners/Operators of new tugs should contact the Pilotage Advisory Committee (attention:- MO Pilotage, see Chapter 11 for contact information) for enquiry on listing their tugs in Chapter 5 for reference.

Number and Grades of Tugs Required

- 4. The number of tugs deployed and the working parameters required are based on the experience gained by pilot members in normal weather, sea and swell, and ship's manoeuvering conditions; and are deemed to be the minimum requirements. Subjected to the prevailing circumstances and working parameters; the pilot may, in order to maintain adequate safety margin, at his discretion amend any requirements therein. Any additional tug in excess of the said requirement as required by the Master and/or ship's operators to further enhance the safety is encouraged.
- 5. The grade of tug required in these guidelines will be Grade I unless specified otherwise.
- 6. When two or more Grade II tugs are stipulated in the Berthing Guidelines, they should not be replaced by one Grade I tug. The requirement on the number of tugs under this BGL shall remain unchanged.
- 7. For all bulk and oil terminals (including CLPTSK & HKELECT), where the BGL stipulates 3 tugs are required, at least 2 tugs must be 3,600 HP each or min. 7,200 HP together (Tug 2,600HP not accepted). If 4 tugs are required, at least 2 tugs must be 3,600 HP each. Detailed requirements of tug are contained in each relevant BGL.

Transverse Thruster(s)

8. Transverse thruster(s) in good working condition may be accepted to substitute for one tug. Transverse thruster with under-power will not be considered as equivalent to one tug. Transverse thruster(s) shall meet with conditions stipulated below,

- (a) It is in good working condition, such that the control button can be adjusted to full power operating position.
- (b) It can run continuously for not less than 30 minutes.
- (c) It must be totally immersed in water.
- (d) It must not be interrupted by the operation of the main engine or other auxiliary engine.
- (e) The thruster power required for different length overall are as follow:-

Vessel's	Actual minimum	Actual minimum
Length Overall	Horse Power	Kilo Watts
≤130m	600	447
>130 to ≤170m	800	597
>170m to ≤200m	1000	746
>200m to ≤230m	1500	1119
>230m to ≤270m	2000	1491
>270m to ≤300m	2500	1864
>300m to ≤340m	3000	2237
>340m to ≤370m	3500	2610
>370m to ≤400m	4000	2983

- (f) Master should consider pilot's recommendation to use tug even the above conditions are met, especially in adverse weather or confined maneuvering area.
- (g) Depending on circumstances, thrusters may not be considered as substitute for tug for berthing and/or unberthing.

Azipod

9. Vessel equipped with azipods may be accepted to substitute for one tug.

Berthing Guidelines <u>Annex III</u>

Chapter: 12 BERTHING GUIDELINES

** INDEX **

Code	Locations	Code	Locations
ASB-JB	ASB Biodiesel Terminal (Junk Bay)	NLA	North Lamma anchorage
BUOY	Government mooring buoy	NWLA	North West Lamma anchorage
CCEMENT	China Cement Company (TSK)	OTN	Ocean Terminal north berth
CFT	China ferry terminal	OTN/O-F	Ocean Terminal north berth outer-foul
CHT-PC	Central Harbour Transit – Passenger Ship	OTS	Ocean Terminal south berth
	(Conventional)	OTS/O-F	Ocean Terminal south berth outer-foul
CHT-PH	Central Harbour Transit – Passenger Ship	PAFF-E	Permanent Aviation Fuel Facility East
	(Highly Maneuverable)		Berth
		PAFF-W	Permanent Aviation Fuel Facility West
			Berth
CLPTSK	China light power station (TSK)	PSSA-E	Pun Shan Shek anchorage east
CMKEN-N	China Merchant Kennedy Town north	PSSA-W	Pun Shan Shek anchorage west
	berth		
CMKEN-S	China Merchant Kennedy Town south berth	RDGA	Reserved dangerous goods anchorage
CVX	Chevron T/Y main berth	RTT-1	River Trade Terminal No.1 berth
CVX-5	Chevron T/Y No. 5 berth	RTT-2	River Trade Terminal No.2 berth
CVX-6A	Chevron T/Y No. 6A berth	RTT-4	River Trade Terminal No.4 berth
CVX-LPG	Chevron T/Y LPG berth	RTT-5	River Trade Terminal No.5 berth
EMTY-E1	ExxonMobil T/Y east terminal berth 1	SEATRIAL	Sea trial, compass adjustment & equipment
EMTY-E4	ExxonMobil T/Y east terminal berth 4		calibration
EMTY-W1	ExxonMobil T/Y west terminal berth 1	SHACHAU	Sha Chau oil terminal (TSK)
EMTY-W2	ExxonMobil T/Y west terminal berth 2	SHELL	Shell oil terminal main berth
EURO-1	Euro-Asia berth 1	SHELL-1E	Shell No. 1 east & west berth
EURO-2	Euro-Asia berth 2	SHELL-2E	Shell No. 2 & 3 east & west berth
EURO-3P	Euro-Asia berth 3P	SHELL-LPG	Shell oil terminal LPG berth
HKELECT(N)	Lamma power station north wharf	SINO-A	Sinopec T/Y main berth (A)
HKELECT(S)	Lamma power station south wharf	SINO-B	Sinopec T/Y west berth (B)
JBDGA	Junk Bay DG anchorage	SINO-C	Sinopec T/Y east berth (C)
KC1 -2	Kwai Chung berth 1—2	SINO-CW	Sinopec Chai Wan berth
KC 2	Kwai Chung berth 2	SINO-3	Sinopec T/Y No. 3 berth
KC3	Kwai Chung berth 3	SLA	Anchorages South of Lamma Island
KC4	Kwai Chung berth 4	SSK-1	Sham Shui Kok Anchorage No. 1
KC5	Kwai Chung berth 5	SSK-2	Sham Shui Kok Anchorage No. 2
KC6	Kwai Chung berth 6	SSK-TD	Sham Shui Kok Trans-shipment Dock
KC6/O-F	Kwai Chung berth 6 outer-foul	SWSTL	Shiu Wing steel wharf (TSK)
KC7	Kwai Chung berth 7	THA	Tolo harbour anchorage
KC7/O-F	Kwai Chung berth 7 outer-foul	TOW	Ship under tow
KC8, 9	Kwai Chung berth 8& 9	TOW-BERTH	Ship under tow to/from berth
KC10C, 10E	Kwai Chung berth 10C & 10E	TPGAS	Tolo harbour Town Gas wharf
KC10W	Kwai Chung berth 10W	TSK-MHB	Tap Shek Kok Material Handling Berth
KC11	Kwai Chung berth 11	TYD	Floating docks west of T/Y Island
KC12	Kwai Chung berth 12	URMPS /	Transit Mawan – Bulker & Tanker (All
KC13-14	Kwai Chung berth 13-14	URMA	vessels other than passenger & container ship)
KC15	Kwai Chung berth 15	URMPS-C /	Transit Mawan – Container ship
KC16	Kwai Chung berth 16	URMA-C	
KC 16 17-19	Kwai Chung berth 16 17-19	URMPS-PC/	Transit Mawan – Passenger ship
KC20	Kwai Chung berth 20	URMA-PC	(Conventional)
KEL-1	Kellett Anchorage No. 1	URMPS-PH/	Transit Mawan – Passenger ship (Highly

KEL-2	Kellett Anchorage No. 2
KEL-3	Kellett Anchorage No. 3
KTCT-1	Kai Tak Cruise Terminal berth 1
KTCT-2	Kai Tak Cruise Terminal berth 2
KTCT-2/O-F	Kai Tak Cruise Terminal berth 2 outer-foul
KYCA	Kau Yi Chau DG anchorage
LOP	Lok On Pai oil berth
MFT	Macau ferry terminal
MWA	Ma Wan anchorage

URMA-PH	Maneuverable)
WA-1	Western anchorage No.1
WA-2	Western anchorage No.2
WA-3	Western anchorage No.3
WQA	Western quarantine anchorage
YMTA	Yau Ma Tei anchorage
YUENFAT	Yuen Fat wharf No.2 berth

Location: CVX Chevron T/Y main berth

010 **Berthing** LOA: Max 120m 011 **Unberthing** LOA: Max 120m

Draft: Max 8m (min 10% UKC) **Draft:** Max 8m (min 10% UKC)

Time: D&N HW-1 to HW+2 & D&N LW **Time:** 24 hrs

to LW+3

Tugs: 2 (grade II) Tugs: 2 (grade II)

Remarks: Starboard side to **Remarks:**

020 **Berthing** LOA: Max 150m 021 **Unberthing** LOA: Max 150m

Draft: Max 10m (min 10% UKC) **Draft:** Max 10m (min 10% UKC)

Time: D&N HW-1 to HW+2 & D&N **Time:** 24 hrs

LW+1 to LW+2

Tugs: 2
Remarks: Starboard side to

Tugs: 2
Remarks:

030 **Berthing** LOA: Max 184m 031 **Unberthing** LOA: Max 184m

Draft: Max 12m (min 10% UKC) **Draft:** Max 12m (min 10% UKC)

Time: D&N HW to HW+1 & D&N LW+2 Time: 24 hrs Tugs: 2. If D>10m 1 GI escort. Tugs: 2 Remarks: Starboard side to Remarks:

040 **Berthing** LOA: Max 220m 041 **Unberthing** LOA: Max 220m

 Draft:
 Max 12.6m (min 10% UKC)
 Draft:
 Max 12.6m (min 10% UKC)

 Time:
 D&N HW to HW+1 & D&N LW+2
 Time:
 24 hrs

Tugs: 3 incl 1 GI escort

Remarks: Day 1 pilot, Night 2 pilots.

Tugs: 2

Remarks: Remarks:

Berthing at LW+2: 2 pilots.

Starboard side to.

050 **Berthing** LOA: Max 235 250m 051 **Unberthing** LOA: Max 235

250m

Draft: Max 12.6m (min 10% UKC) **Draft:** Max 12.6m (min 10% UKC)

Time: D&N HW to HW+1 & D&N LW+2 **Time:** D&N HW-1 to HW+2 & D&N LW

to LW+2

Tugs: 3 incl 1 GI escort **Tugs:** 2 **Remarks:** 2 pilots. **Remarks:**

Starboard side to.

General Remark:

- 1. Thrusters are not considered as substitute for tug.
- 2. Not exceeding displacement of 110,000 MT due to the design limitation of terminal.

bow thruster.

Remarks: Starboard side to

Location: KC1-2 Kwai Chung berth 1-2

(Declared Depth at berth 14.0m)

010 Draft: Time:	Berthing LOA: Max 130m Max 14.0m + tide – 10% UKC 24 hrs	011 Draft: Time:	Unberthing LOA: Max 130m Max 14.0m + tide – 10% UKC 24 hrs
Tugs:	1. 2 if D>8m. Ro-Ro vessel 2 tugs if adverse weather.	Tugs:	1. 2 if no anchor down. Ro-Ro vessel 2 tugs if adverse weather.
020 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 230m Max 14.0m + tide – 10% UKC 24 hrs	021 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 230m Max 14.0m + tide – 10% UKC 24 hrs
030 Draft: Time: Tugs:	Berthing LOA: Max 270m Max 14.0m + tide – 10% UKC 24 hrs 2 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	031 Draft: Time: Tugs:	Unberthing LOA: Max 270m Max 14.0m + tide – 10% UKC 24 hrs 2. 1 if bow & stern thrusters fitted.
Remarks:		Remarks:	
040 Draft: Time: Tugs:	Berthing LOA: Max 340m Max 14.0m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	041 Draft: Time: Tugs:	Unberthing LOA: Max 340m Max 14.0m + tide – 10% UKC 24 hrs 2. 1 if bow & stern thrusters fitted.
Remarks:	:	Remarks:	
050 Draft: Time: Tugs:	Berthing LOA: Max 360m Max 14.0m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 2 if bow & stern thrusters fitted. D>13.0m, 4 incl 1 GI escort if no bow thruster.	051 Draft: Time: Tugs:	Unberthing LOA: Max 360m Max 14.0m + tide – 10% UKC 24 hrs 2. 1 if bow & stern thrusters fitted. D>13.0m, 3, 2 if bow & stern thrusters fitted.
Remarks	Starboard side to GT >130000, LOA: Max 370m refers.	Remarks:	GT >130000, LOA: Max 370m refers.
050 060 Draft: Time: Tugs:	Berthing LOA: Max 370m Max 14.0m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 2 if bow & stern thrusters fitted. D>13.0m, 4 incl 1 GI escort if no	051 061 Draft: Time: Tugs:	Unberthing LOA: Max 370m Max 14.0m + tide – 10% UKC 24 hrs 2. 1 if bow & stern thrusters fitted. D>13.0m, 3, 2 if bow & stern

thrusters fitted.

Remarks:

General Remark:

- 1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.
- 2. LOA>350m, at least one tug \geq 5000HP.
- 3. If berth KC5 is occupied, fore-and-aft clearance from KC1 corner of not less than 25m plus the beam of vessel at berth KC5 is required.

Location: KC1-2 Kwai Chung berth 1-2

(Declared Depth at berth <u>14.0-15.5</u>m)

010 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 130m Max 14.0 15.5m + tide – 10% UKC 24 hrs 1. 2 if D>8m. Ro-Ro vessel 2 tugs if adverse weather.	011 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 130m Max 14.0 15.5m + tide – 10% UKC 24 hrs 1. 2 if no anchor down. Ro-Ro vessel 2 tugs if adverse weather.
020 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 230m Max 14.0 15.5m + tide – 10% UKC 24 hrs	021 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 230m Max 14.0 15.5m + tide – 10% UKC 24 hrs
030 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 270m Max 14.0 15.5m + tide – 10% UKC 24 hrs 2 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	031 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 270m Max 14.0 15.5m + tide – 10% UKC 24 hrs 2. 1 if bow & stern thrusters fitted.
040 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 340m Max 14.0 15.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	041 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 340m Max 14.0 15.5m + tide – 10% UKC 24 hrs 2. 1 if bow & stern thrusters fitted.
050 Draft: Time: Tugs:	Berthing LOA: Max 360m Max 15.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 2 if bow & stern thrusters fitted. D>13.0m, 4 incl 1 GI escort if no bow thruster. GT >130000, LOA: Max 370m refers.	051 Draft: Time: Tugs:	Unberthing LOA: Max 360m Max 15.5m + tide – 10% UKC 24 hrs 2. 1 if bow & stern thrusters fitted. D>13.0m, 3, 2 if bow & stern thrusters fitted. GT >130000, LOA: Max 370m refers.
050 060 Draft: Time:	Berthing LOA: Max 370m Max 14.0 15.5m + tide – 10% UKC 24 hrs D>14.0m, D&N LW+1 to LW+3 & HW-2 to HW+2	051 061 Draft: Time:	Unberthing LOA: Max 370m Max-14.0 15.5m + tide – 10% UKC 24 hrs D>14.0m, D&N LW+1 to HW+2 if Starboard side to

Tugs: 3 incl 1 GI escort if no bow thruster.

2 if bow & stern thrusters fitted. D>13.0m, 4 incl 1 GI escort if no

bow thruster.

Tugs: 2.

1 if bow & stern thrusters fitted. D>13.0m or Starboard side to, 3, 2 if bow & stern thrusters fitted.

D>14.0m, 4

Remarks: Remarks:

General Remark:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.

- 2. Declared depth of 15.5m is applicable to berth KC2 and 143m northward from the north end of berth KC2 (from Bollard No.549 to Bollard No.1934). The quayside of berth KC1 and KC2 are painted in orange to indicate the berth with depth of not less than 15.5m.
- 3. LOA>350m, at least one tug \geq 5000HP.
- 4. LOA>350m & D>14.0m, at least two tugs \geq 5000HP.

if bow & stern thrusters fitted.

Remarks:

Location: KC3 Kwai Chung berth 3

D>13.0m, 4 incl 1 GI escort if no

bow thruster.

Remarks:

(Declared Depth at berth 14.0m)

0	Berthing LOA: Max 130m Max 14.0m + tide – 10% UKC 24 hrs 1. 2 if D>8m. Ro-Ro vessel 2 tugs if adverse weather	011 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 130m Max 14.0m + tide – 10% UKC 24 hrs 1. 2 if no anchor down. Ro-Ro vessel 2 tugs if adverse weather
020 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 230m Max 14.0m + tide – 10% UKC 24 hrs	021 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 230m Max 14.0m + tide – 10% UKC 24 hrs 2
030 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 270m Max 14.0m + tide – 10% UKC 24 hrs 2 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	031 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 270m Max 14.0m + tide – 10% UKC 24 hrs 2. 1 if bow & stern thrusters fitted.
040 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 340m Max 14.0m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	041 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 340m Max 14.0m + tide – 10% UKC 24 hrs 2. 1 if bow & stern thrusters fitted.
050 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 360m Max 14.0m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 2 if bow & stern thrusters fitted. D>13.0m, 4 incl 1 GI escort if no bow thruster. GT >130000, LOA: Max 370m refers.	051 Draft: Time: Tugs:	Unberthing LOA: Max 360m Max 14.0m + tide – 10% UKC 24 hrs 2. 1 if bow & stern thrusters fitted. D>13.0m, 3, 2 if bow & stern thrusters fitted. GT >130000, LOA: Max 370m refers.
050 060 Draft: Time: Tugs:	Berthing LOA: Max 370m Max 14.0m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 2 if bow & stern thrusters fitted.	051 061 Draft: Time: Tugs:	Unberthing LOA: Max 370m Max 14.0m + tide – 10% UKC 24 hrs 2. 1 if bow & stern thrusters fitted. D>13.0m or Starboard side to, 3, 2

General Remark:

- Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.
 LOA>350m, at least one tug ≥5000HP.

Location: KC4 Kwai Chung berth 4

(Declared Depth at berth 14.2m)

	Berthing LOA: Max 130m Max 14.2m + tide – 10% UKC 24 hrs 1. 2 if D>8m. Ro-Ro vessel 2 tugs if adverse weather	011 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 130m Max 14.2m + tide – 10% UKC 24 hrs 1. 2 if no anchor down. Ro-Ro vessel 2 tugs if adverse weather.
020 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 230m Max 14.2m + tide – 10% UKC 24 hrs	021 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 230m Max 14.2m + tide – 10% UKC 24 hrs
030 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 270m Max 14.2m + tide – 10% UKC 24 hrs 2 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	031 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 270m Max 14.2m + tide – 10% UKC 24 hrs 2. 1 if bow & stern thrusters fitted.
040 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 340m Max 14.2m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	041 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 340m Max 14.2m + tide – 10% UKC 24 hrs 2. 1 if bow & stern thrusters fitted.
050 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 360m Max 14.2m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 2 if bow & stern thrusters fitted. D>13.0m, 4 incl 1 GI escort if no bow thruster. GT >130000, LOA: Max 370m refers.	051 Draft: Time: Tugs:	Unberthing LOA: Max 360m Max 14.2m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted. D>13.0m, 3, 2 if bow & stern thrusters fitted. GT >130000, LOA: Max 370m refers.
050 060 Draft: Time:	Berthing LOA: Max 370m Max 14.2m + tide – 10% UKC 24 hrs D>14.0m, D&N LW+1 to LW+3 & HW-2 to HW+2	051 061 Draft: Time:	Unberthing LOA: Max 370m Max 14.2m + tide – 10% UKC 24 hrs D>14.0m, D&N LW+1 to HW+2 if Starboard side to

Tugs: 3 incl 1 GI escort if no bow thruster.

2 if bow & stern thrusters fitted. D>13.0m, 4 incl 1 GI escort if no

bow thruster.

Tugs: 2, 1 if bow & stern thrusters fitted.

D>13.0m or Starboard side to, 3, 2 if bow & stern thrusters fitted.

D>14.0m, 4

Remarks: Remarks:

General Remark:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.

2. LOA>350m, at least one tug \geq 5000HP.

ON TRIAL

Location: KC5 Kwai Chung berth 5

D>14.0m, D&N LW+1 to LW+3 &

HW-2 to HW+2

(Declared Depth at berth 15.5m)

010 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1. 2 if D>8m. Ro-Ro vessel 2 tugs if adverse weather	011 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1. 2 if no anchor down. Ro-Ro vessel 2 tugs if adverse weather
020 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 230m Max 45.0 15.5m + tide – 10% UKC 24 hrs	021 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 230m Max 15.0 15.5m + tide – 10% UKC 24 hrs
030 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 270m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	031 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 270m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted.
040 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 300m Max 15.0 15.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted. GT >90000, LOA: Max 340m refers.	041 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 300m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted. GT >90000, LOA: Max 340m refers.
050 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	051 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted. D&N LW+1 to HW+1, thrusters not considered.
060 Draft: Time:	Berthing LOA: Max 370m Max 45.0 15.5m + tide – 10% UKC 24 hrs	061 Draft: Time:	Unberthing LOA: Max 370m Max 15.0 15.5m + tide – 10% UKC 24 hrs

D>14.0m, D&N HW-1 to LW+2

Tugs: 3 incl 1 GI escort if no bow thruster.

2 if bow & stern thrusters fitted. D>12.5m, 4 incl 1 GI escort if no

bow thruster.

Remarks: Remarks:

Tugs:

3, 2 if bow & stern thrusters fitted.

D>14.0m, 4

ON TRIAL

Location: KC5 Kwai Chung berth 5

(Declared Depth at berth 15.5m)

 070
 Berthing
 LOA: Max 400m
 071
 Unberthing
 LOA: Max 400m

 Draft:
 Max 15.0 15.5m + tide - 10% UKC
 Draft:
 Max 15.0 15.5m + tide - 10% UKC

Time: 24 hrs **Time:** 24 hrs

D>14.0m, D&N LW+1 to LW+3 & D>14.0m, D&N HW-1 to LW+2

HW-2 to HW+2 4 incl 1 GI escort if no bow thruster.

Remarks: All quay cranes at KC1 with distance **Remarks:** All quay cranes at KC1 with

less than 150m from KC5 quayside distance less than 150m from KC5 must be boom up. 210m southward from KC1 corner is not occupied. distance less than 150m from KC5 quayside must be boom up. 210m southward from KC1 corner is not

Tugs:

Port side to. occupied.

General Remark:

Tugs:

- 1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.
- 2. LOA>350m, at least one tug \geq 5000HP.
- 3. LOA>350m & D>14.0m, at least two tugs \geq 5000HP.
- 4. LOA>370m & D>14.0m, at least one tug \geq 6000HP & one tug \geq 5000HP.
- 5. Max draft is limited to 14.5m if vessel enters into the zone of 30m westward from east end of berth KC5. The quay side is painted in orange to indicate the zone with depth of less than 15m.
- 6. If berth KC1 is occupied, fore-and-aft clearance from KC5 corner of not less than 25m plus the beam of vessel at berth KC1 is required.

Kwai Chung berth 6 Location: KC6

(Declared Depth at berth 14.2m)

010 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 130m Max 14.2m + tide – 10% UKC 24 hrs 1. 2 if D>8m. Ro-Ro vessel 2 tugs if adverse weather	011 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 130m Max 14.2m + tide – 10% UKC 24 hrs 1. 2 if no anchor down. Ro-Ro vessel 2 tugs if adverse weather
020 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 230m Max 14.2m + tide – 10% UKC 24 hrs	021 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 230m Max 14.2m + tide – 10% UKC 24 hrs 2
030 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 270m Max 14.2m + tide – 10% UKC 24 hrs 2 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted. Stern in 3 tugs	031 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 270m Max 14.2m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted.
040 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 300m Max 14.2m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted. Stern in 3 tugs, thrusters not considered GT >90000, LOA: Max 340m refers.	041 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 300m Max 14.2m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted. GT >90000, LOA: Max 340m refers.
050 Draft: Time:	Berthing LOA: Max 340m Max 14.2m + tide – 10% UKC 24 hrs D>12.5m, D&N LW+1 to LW+3 & HW-2 to HW+2	051 Draft: Time:	Unberthing LOA: Max 340m Max 14.2m + tide – 10% UKC 24 hrs
Tugs:	3 incl 1 GI escort if no bow thruster. 2 if bow & stern thrusters fitted.	Tugs:	2, 1 if bow & stern thrusters fitted. D>12.5m, 3, 2 if bow & stern

Remarks: Port side to **Remarks:**

HW-2 to HW+2

060 Berthing LOA: Max 350m 061 Unberthing LOA: Max 350m **Draft:** Max 14.2m + tide - 10% UKC **Draft:** $Max\ 14.2m + tide - 10\%\ UKC$

thrusters fitted.

Time: 24 hrs

24 hrs Time: D>12.5m, D&N LW+1 to LW+3 &

Tugs: 3 incl 1 GI escort if no bow thruster. **Tugs:** 3, 2 if bow & stern thrusters fitted.

2 if bow & stern thrusters fitted. D>12.5m, 4 incl 1 GI escort if no

bow thruster.

Remarks: Port side to Remarks:

General Remark:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.

2. LOA>295m berthing KC6, quay cranes at berth KC7W are required to be boom up.

Location: KC6/O-F Kwai Chung berth 6 outer-foul

(Declared Depth at berth 14.2m)

 010
 Berthing
 LOA: Max 200m
 011
 Unberthing
 LOA: Max 200m

 Draft:
 Max 10.0m + tide - 10% UKC
 Draft:
 Max 10.0m + tide - 10% UKC

Time:24 hrsTime:24 hrsTugs:2Tugs:2Remarks:Thrusters not considered if stern inRemarks:

 020
 Berthing
 LOA: Max 250m
 021
 Unberthing
 LOA: Max 250m

 Draft:
 Max 14.2m + tide - 10% UKC
 Draft:
 Max 14.2m + tide - 10% UKC

 Time:
 24 hrs
 Time:
 24 hrs

 Tugs:
 2
 Tugs:
 2

Remarks: Thrusters not considered **Remarks:** Thrusters not considered

 030
 Berthing
 LOA: Max 290m
 031
 Unberthing
 LOA: Max 290m

 Draft:
 Max 14.2m + tide - 10% UKC
 Draft:
 Max 14.2m + tide - 10% UKC

Time: 24 hrs **Time:** 24 hrs **Tugs:** 3 **Tugs:** 2

Remarks: No stern in. **Remarks:** Thrusters not considered

Full length of opposite berth must be clear and quay cranes must be boom

up.

General Remark:

Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.

Location: KC7 Kwai Chung berth 7

HW-2 to HW+2

(Declared Depth at berth 15.5m)

010 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1. 2 if D>8m. Ro-Ro vessel 2 tugs if adverse weather	011 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1. 2 if no anchor down. Ro-Ro vessel 2 tugs if adverse weather
020 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 230m Max 15.0 15.5m + tide – 10% UKC 24 hrs	021 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 230m Max 15.0 15.5m + tide – 10% UKC 24 hrs
030 Draft: Time: Tugs:	Berthing LOA: Max 270m Max 45.0 15.5m + tide – 10% UKC 24 hrs 2 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted. Stern in 3 tugs	031 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 270m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted.
Kemai Ks.	Stelli III 3 tugs	Kemai Ks.	
040 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 300m Max 15.0 15.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted. Stern in 3 tugs, thrusters not considered GT >90000, LOA: Max 340m refers	041 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 300m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted. GT >90000, LOA: Max 340m refers
050 Draft: Time:	Berthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs D>12.5m, D&N LW+1 to LW+3 & HW-2 to HW+2	051 Draft: Time:	Unberthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs
Tugs:	3 incl 1 GI escort if no bow thruster. 2 if bow & stern thrusters fitted. D>12.5m. 4 incl1 GI escort if no bow thruster	Tugs:	2, 1 if bow & stern thrusters fitted. D>12.5m, 3, 2 if bow & stern thrusters fitted.
Remarks:	Starboard side to	Remarks:	
060 Draft: Time:	Berthing LOA: Max 350m Max 15.0 15.5m + tide – 10% UKC 24 hrs D>12.5m, D&N LW+1 to LW+3 &	061 Draft: Time:	Unberthing LOA: Max 350m Max 15.0 15.5m + tide – 10% UKC 24 hrs

Tugs: 3 incl 1 GI escort if no bow thruster. **Tugs:** 3, 2 if bow & stern thrusters fitted.

2 if bow & stern thrusters fitted. D>12.5m, 4 incl 1 GI escort if no

bow thruster.

Remarks: Starboard side to Remarks:

General Remark:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.

2. LOA>295m berthing KC7, quay cranes at berth KC6W are required to be boom up.

Location: KC7/O-F Kwai Chung berth 7 outer-foul

(Declared Depth at berth 15.5m)

010 **Berthing** LOA: Max 200m 011 **Unberthing** LOA: Max 200m **Draft:** Max 10.0m + tide - 10% UKC **Draft:** Max 10.0m + tide - 10% UKC

Time: 24 hrs
Tugs: 2

Remarks: Thrusters not considered if stern in

Remarks:

020 **Berthing** LOA: Max 250m 021 **Unberthing** LOA: Max 250m **Draft:** Max 15.0 15.5m + tide - 10% UKC **Draft:** Max 15.0 15.5m + tide - 10% UKC

 Time:
 24 hrs
 Time:
 24 hrs

 Tugs:
 2
 Tugs:
 2

Remarks: Thrusters not considered **Remarks:** Thrusters not considered

030 **Berthing** LOA: Max 290m 031 **Unberthing** LOA: Max 290m **Draft:** Max 15.0 15.5m + tide – 10% UKC **Draft:** Max 15.0 15.5m + tide – 10% UKC

 Time:
 24 hrs
 Time:
 24 hrs

 Tugs:
 3
 Tugs:
 2

Remarks: No stern in. **Remarks:** Thrusters not considered

Full length of opposite berth must be clear and quay cranes must be boom

up.

General Remark:

Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.

ON TRIAL

Location: KC8-9 Kwai Chung berth 8-9

HW-2 to HW+2

(Declared Depth at berth 15.5 16.0m)

010 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 130m Max 45.0 16.0m + tide – 10% UKC 24 hrs 1. 2 if D>8m. Ro-Ro vessel 2 tugs if adverse weather	011 Draft: Time: Tugs: Remarks	Unberthing LOA: Max 130m Max 15.0 16.0m + tide – 10% UKC 24 hrs 1. 2 if no anchor down. Ro-Ro vessel 2 tugs if adverse weather	
020 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 230m Max 15.0 16.0m + tide – 10% UKC 24 hrs	021 Draft: Time: Tugs: Remarks	Unberthing LOA: Max 230m Max 45.0 16.0m + tide – 10% UKC 24 hrs 2	
030 Draft: Time: Tugs:	Berthing LOA: Max 270m Max 15.0 16.0m + tide – 10% UKC 24 hrs 2 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	031 Draft: Time: Tugs:	Unberthing LOA: Max 270m Max 15.0 16.0m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted.	
Remarks:		Remarks:		
040 Draft: Time: Tugs:	Berthing LOA: Max 340m Max 15.0 16.0m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	041 Draft: Time: Tugs:	Unberthing LOA: Max 340m Max 15.0 16.0m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted.	
Remarks:		Remarks	:	
050 Draft: Time:	Berthing LOA: Max 360m Max 16.0m + tide – 10% UKC 24 hrs D>14.0m, D&N LW+1 to LW+3 &	051 Draft: Time:	Unberthing LOA: Max 360m Max 16.0m + tide – 10% UKC 24 hrs	
Tugs:	HW-2 to HW+2 3 incl 1 GI escort if no bow thruster. 2 if bow & stern thrusters fitted. D>13.0m, 4 incl 1 GI escort if no	Tugs:	2, 1 if bow & stern thrusters fitted. D>13.0m, 3, 2 if bow & stern thrusters fitted.	
Remarks:	bow thruster. GT >130000, LOA: Max 370m refers.	Remarks	: GT >130000, LOA: Max 370m refers.	
050 060 Draft: Time:	Berthing LOA: Max 370m Max 45.0 16.0m + tide – 10% UKC 24 hrs D>14.0m, D&N LW+1 to LW+3 &	051 061 Draft: Time:	Unberthing LOA: Max 370m Max 15.0 16.0m + tide – 10% UKC 24 hrs D>14.0m, D&N LW+1 to HW+2	

Tugs: 3 incl 1 GI escort if no bow thruster.

2 if bow & stern thrusters fitted.

D>13.0m, 4 incl 1 GI escort if no

bow thruster.

Tugs: 23, 42 if bow & stern thrusters

fitted.

D>13.0m, 3, 2 if bow & stern-

thrusters fitted.

Remarks: Remarks:

 060 070
 Berthing
 LOA: Max 400m
 061 071
 Unberthing
 LOA: Max 400m

 Draft:
 Max 15.0 16.0m + tide - 10% UKC
 Draft:
 Max 15.0 16.0m + tide - 10% UKC

Time: 24 hrs **Time:** 24 hrs

D>14.0m, D&N LW+1 to LW+3 & D>14.0m, D&N LW+1 to HW+2

HW-2 to HW+1

Tugs: 4 incl 1 GI escort if no bow thruster. **Tugs:** 4 **Remarks:** Remarks:

General Remark:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.

- 2. LOA>350m, at least one tug \geq 5000HP.
- 3. LOA>350m & D>14.0m, at least two tugs \geq 5000HP.
- 4. LOA>370m & D>14.0m, at least one tug \geq 6000HP & one tug \geq 5000HP.

Location: KC10C,10E Kwai Chung berth 10C & 10E

(Declared Depth at berth 15.5m)

010 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1. 2 if D>8m. Ro-Ro vessel 2 tugs if adverse weather	011 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1. 2 if no anchor down. Ro-Ro vessel 2 tugs if adverse weather
020 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 230m Max 15.0 15.5m + tide – 10% UKC 24 hrs	021 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 230m Max 45.0 15.5m + tide – 10% UKC 24 hrs 2
030 Draft: Time: Tugs:	Berthing LOA: Max 270m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	031 Draft: Time: Tugs:	Unberthing LOA: Max 270m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted.
Remarks:	Stern in 3 tugs	Remarks:	
040 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 300m Max 15.0 15.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted. Stern in 3 tugs	041 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 300m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted. GT >90000, LOA: Max 340m
	GT >90000, LOA: Max 340m refers.		refers.
050 Draft: Time: Tugs:	Berthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	051 Draft: Time: Tugs:	Unberthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted. D>12.5m, 3, 1 if bow & stern thrusters fitted.

General Remarks:

Remarks: Port side to

- 1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.
- 2. LOA>270m berthing stern in, each tug 3600 HP min. In case 3 tugs are used, min total 10800 HP. Min 2 tugs if bow and/or stern thruster(s) are fitted.

Remarks:

ON TRIAL

Location: KC10W Kwai Chung berth 10W

(Declared Depth at berth 15.5m)

	(Beetarea Bepitt at vertit 15.5m)			
010 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1. 2 if D>8m. Ro-Ro vessel 2 tugs if adverse weather	011 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1. 2 if no anchor down. Ro-Ro vessel 2 tugs if adverse weather	
020 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 230m Max 15.0 15.5m + tide – 10% UKC 24 hrs	021 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 230m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2	
030 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 270m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted. Stern in 3 tugs	031 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 270m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted.	
040 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 300m Max 15.0 15.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted. Stern in 3 tugs GT >90000, LOA: Max 340m refers.	041 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 300m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted. GT >90000, LOA: Max 340m refers.	
050 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted. Stern in 3 tugs	051 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted. D>12.5m, 3, 1 if bow & stern thrusters fitted.	
060 Draft:	Berthing LOA: Max 370m Max 45-0 15.5m + tide - 10% UKC	061 Draft:	Unberthing LOA: Max 370m Max 15.0 15.5m + tide = 10% UKC	

Bertning LOA: Max 5/0m	001	Undertning LOA: Max 5/0m
Max 15.0 15.5m + tide – 10% UKC	Draft:	$Max \frac{15.0}{15.5}m + tide - 10\% UKC$
24 hrs	Time:	24 hrs
D>14.0m, D&N LW+1 to LW+3 &		D>14.0m, D&N LW+1 to HW+2
HW-2 to HW+1		
3 incl 1 GI escort if no bow thruster.	Tugs:	3, 2 if bow & stern thrusters fitted.
2 if bow & stern thrusters fitted.		D>14.0m, 4
	24 hrs D>14.0m, D&N LW+1 to LW+3 & HW-2 to HW+1 3 incl 1 GI escort if no bow thruster.	Max 15.0 15.5m + tide - 10% UKC 24 hrs D>14.0m, D&N LW+1 to LW+3 & HW-2 to HW+1 3 incl 1 GI escort if no bow thruster. Tugs:

D>12.5m, 4 incl 1 GI escort if no

bow thruster.

Remarks: Port side to **Remarks:**

General Remarks:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.

- 2. LOA>270m berthing stern in, each tug 3600 HP min. In case 3 tugs are used, min. total 10800 HP. Min. 2 tugs if bow and/or stern thruster(s) are fitted.
- 3. LOA>350m, at least one tug \geq 5000HP.
- 4. LOA>350m & D>14.0m, at least two tugs \geq 5000HP.

Location: KC 11 Kwai Chung berth 11

(Declared Depth at berth 15.5m)

010 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1. 2 if D>8m. Ro-Ro vessel 2 tugs if adverse weather	011 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1. 2 if no anchor down. Ro-Ro vessel 2 tugs if adverse weather
020 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 230m Max 45.0 15.5m + tide – 10% UKC 24 hrs	021 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 230m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2
030 Draft: Time: Tugs:	Berthing LOA: Max 270m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	031 Draft: Time: Tugs:	Unberthing LOA: Max 270m Max 45.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted.
Remarks:	Stern in 3 tugs	Remarks:	
040 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 300m Max 15.0 15.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted. Stern in 3 tugs. GT >90000, LOA: Max 340m refers.	041 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 300m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted. GT >90000, LOA: Max 340m refers.
050 Draft: Time: Tugs:	Berthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	051 Draft: Time: Tugs:	Unberthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted. D>12.5m, 3, 1 if bow & stern

General Remarks:

Remarks: Starboard side to

- 1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.
- 2. LOA>270m berthing stern in, each tug 3600 HP min. In case 3 tugs are used, min. total 10800 HP. Min. 2 tugs if bow and/or stern thruster(s) are fitted.

thrusters fitted.

Remarks:

Location: KC12 Kwai Chung berth 12

2 if bow & stern thrusters fitted.

bow thruster.

D>12.5m, 4 incl 1 GI escort if no

(Declared Depth at berth 15.5m)

010 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1. 2 if D>8m. Ro-Ro vessel 2 tugs if adverse weather.	011 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1, 2 if no anchor down. Ro-Ro vessel 2 tugs if adverse weather.
020 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 230m Max 15.0 15.5m + tide – 10% UKC 24 hrs	021 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 230m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2
030 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 270m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted. Stern in 3 tugs	031 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 270m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted.
040 Draft: Time: Tugs:	Berthing LOA: Max 300m Max 15.0 15.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted. Stern in 3 tugs. GT >90000, LOA: Max 340m refers.	041 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 300m Max 15.0 15.5m + tide – 10% UKC 24 hr 2, 1 if bow & stern thrusters fitted. GT >90000, LOA: Max 340m refers.
050 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted. Starboard side to	051 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted. D>12.5m, 3, 1 if bow & stern thrusters fitted.
060 Draft: Time:	Berthing LOA: Max 370m Max 15.0 15.5m + tide – 10% UKC 24 hrs D>14.0m, D&N LW+1 to LW+3 & HW-2 to HW+1	061 Draft: Time:	Unberthing LOA: Max 370m Max 15.0 15.5m + tide – 10% UKC 24 hrs D>14.0m, D&N LW+1 to HW+2
Tugs:	3 incl 1 GI escort if no bow thruster.	Tugs:	3, 2 if bow & stern thrusters fitted.

D>14.0m, 4

Remarks: Starboard side to Remarks:

General Remarks:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.

- 2. LOA>270m berthing stern in, each tug 3600 HP min. In case 3 tugs are used, min. total 10800 HP. Min. 2 tugs if bow and/or stern thruster(s) are fitted.
- 3. LOA>350m, at least one tug \geq 5000HP.
- 4. LOA>350m & D>14.0m, at least two tugs \geq 5000HP.
- 5. LOA>360m berthing, quay cranes at berth KC10W(150m eastward from berth KC9/10 corner) and berth KC13 are required to be boom up.
- 6. Subject to actual berthing position, boom up of additional quay cranes may be required if deemed necessary.

ON TRIAL

Location: KC13-14 Kwai Chung berth 13-14

(Declared Depth at berth 15.5m)

010	Berthing	LOA: Max 130m	011	Unberthing	LOA: Max 130m
Draft:	Max 15.0 15	5.5m + tide – 10% UKC	Draft:	Max 15.0 15.5	m + tide - 10% UKC
FET.4	0.4.1		PER A	0.4.1	

Time: 24 hrs Time: 24 hrs

1, 2 if D>8m. 1, 2 if no anchor down. Tugs: Tugs:

Remarks: Ro-Ro vessel 2 tugs if adverse **Remarks:** Ro-Ro vessel 2 tugs if adverse

> weather weather

020 **Berthing** LOA: Max 230m 021 Unberthing LOA: Max 230m **Draft:** $Max \frac{15.0}{15.5}m + tide - 10\% UKC$ **Draft:** $Max \frac{15.0}{15.5}m + tide - 10\% UKC$

Time: 24 hrs Time: 24 hrs Tugs: 2 Tugs: 2 **Remarks: Remarks:**

030 Berthing LOA: Max 270m 031 Unberthing LOA: Max 270m **Draft:** $Max \frac{15.0}{15.5}m + tide - 10\% UKC$ **Draft:** $Max \frac{15.0}{15.5}m + tide - 10\% UKC$

Time: 24 hrs Time: 24 hrs

Tugs: 2 incl 1 GI escort if no bow thruster. Tugs: 2, 1 if bow & stern thrusters fitted.

1 if bow & stern thrusters fitted.

Remarks: Stern in 3 tugs Remarks:

040 LOA: Max 300m 041 Unberthing **Berthing** LOA: Max 300m **Draft:** $Max \frac{15.0}{15.5}m + tide - 10\% UKC$ **Draft:** $Max \frac{15.0}{15.5}m + tide - 10\% UKC$ 24 hrs

Time: 24 hrs Time:

Tugs: 3 incl 1 GI escort if no bow thruster. Tugs: 2, 1 if bow & stern thrusters fitted. 1 if bow & stern thrusters fitted.

Remarks: Stern in 3 tugs **Remarks:** GT >90000, LOA: Max 340m

GT >90000, LOA: Max 340m refers. refers.

Berthing LOA: Max 340m 051 Unberthing LOA: Max 340m

050 **Draft:** $Max \frac{15.0}{15.5}m + tide - 10\% UKC$ **Draft:** $Max \frac{15.0}{15.5}m + tide - 10\% UKC$

Time: 24 hrs Time: 24 hrs

3 incl 1 GI escort if no bow thruster. Tugs: **Tugs:** 2, 1 if bow & stern thrusters fitted. 1 if bow & stern thrusters fitted.

D>12.5m, 3, 1 if bow & stern

thrusters fitted.

Remarks: Stern in 3 tugs **Remarks:** Berthing Guidelines Proposed May 2022

ON TRIAL

Location: KC13-14 Kwai Chung berth 13-14

(Declared Depth at berth 15.5m)

 060
 Berthing
 LOA: Max 370m
 061
 Unberthing
 LOA: Max 370m

 Draft:
 Max 15.0 15.5m + tide - 10% UKC
 Draft:
 Max 15.0 15.5m + tide - 10% UKC

Time: 24 hrs **Time:** 24 hrs

D>12.5m, D&N LW+1 to HW+2.

D>14.0m, D&N LW+1 to HW+2

Tugs: 3 incl 1 GI escort if no bow thruster. **Tugs:** 3, 2 if bow & stern thrusters fitted.

2 if bow & stern thrusters fitted. D>14.0m, 4 D>12.5m, 4 incl 1 GI escort if no

bow thruster.

Remarks: Starboard side to Remarks:

070 **Berthing** LOA: Max 400m 071 **Unberthing** LOA: Max 400m **Draft:** Max 15.0 15.5m + tide – 10% UKC **Draft:** Max 15.0 15.5m + tide – 10% UKC

Time: D&N LW+1 to HW+2. Time: D&N LW+1 to HW+2

Tugs: 4 incl 1 GI escort if no bow thruster. **Tugs:** 4 **Remarks:** Starboard side to **Remarks:**

General Remarks:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.

- 2. LOA>270m berthing stern in, each tug 3600 HP min. In case 3 tugs are used, min total 10800 HP. Min 2 tugs if bow and/or stern thruster(s) are fitted.
- 3. LOA>350m, at least one tug \geq 5000HP.
- 4. LOA>350m & D>14.0m, at least two tugs \geq 5000HP.
- 5. LOA>370m & D>14.0m, at least one tug \geq 6000HP & one tug \geq 5000HP.
- 6. LOA>390m berthing KC13, quay cranes at berth KC10W(100m eastward from berth KC9/10 corner) and berth KC14 are required to be boom up.
- 7. Subject to actual berthing position, boom up of additional quay cranes may be required if deemed necessary.

Remarks: Port side to

refers.

GT >130000, LOA: Max 370m

Location: KC15 Kwai Chung berth 15

(Declared Depth at berth 15.5m)

010 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1, 2 if D>8m.	011 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1, 2 if no anchor down.
020 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 183m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2 Port side to if LOA>200m	021 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 183m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2
030 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 230m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2 Port side to	031 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 230m Max 15.0 15.5m + tide – 10% UKC 24 hrs
040 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 270m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted. Port side to	041 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 270m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted.
050 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted. Port side to.	051 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted.
060 Draft: Time: Tugs:	Berthing LOA: Max 360m Max 15.5m + tide – 10% UKC 24 hrs 3 Incl 1 GI escort if no bow thruster. 2 if bow & stern thrusters fitted. D>13.0m, 4 incl 1 GI escort if no bow thruster.	061 Draft: Time: Tugs:	Unberthing LOA: Max 360m Max 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted. D>13.0m, 3, 2 if bow & stern thrusters fitted.
D 1	The state of the s	TO 1	CT 120000 T O A N. 270

Remarks: GT >130000, LOA: Max 370m

refers.

 060 070
 Berthing
 LOA: Max 370m
 061 071
 Unberthing
 LOA: Max 370m

 Draft:
 Max 15.0 15.5m + tide - 10% UKC
 Draft:
 Max 15.0 15.5m + tide - 10% UKC

Time: 24 hrs **Time:** 24 hrs

D>14.0m, D&N LW+1 to LW+3 &

D>14.0m, D&N LW+1 to LW+3 &

HW-1 to HW+2

Tugs: 3 Incl 1 GI escort if no bow thruster. **Tugs:** 23, 42 if bow & stern thrusters

2 if bow & stern thrusters fitted. fitted.

D>13.0m, 4 incl 1 GI escort if no D>13.0m, 3, 2 if bow & stern

thrusters fitted. D>14.0m, 4

Remarks: Port side to Remarks:

General Remarks:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.

- 2. Berthing: Swing around minimum 2 tugs.
- 3. LOA>350m, at least one tug \geq 5000HP.

HW-1 to HW+2

bow thruster.

4. LOA>350m & D>14.0m, at least two tugs ≥5000HP.

ON TRIAL

Location: KC16-19 Kwai Chung berth 16-19

D>14.0m, D&N LW+1 to LW+3 &

HW-1 to HW+1

(Declared Depth at berth 15.5 m)

010 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1, 2 if D>8m.	011 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 130m Max 15.0 15.5m + tide – 10% UKC 24 hrs 1, 2 if no anchor down.	
020 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 230m Max 15.0 15.5m + tide – 10% UKC 24 hr.	021 Draft: Time: Tugs: Remarks:	Unberthing LOA: Max 230m Max 15.0 15.5m + tide – 10% UKC 24 hrs	
030 Draft: Time: Tugs:	Berthing LOA: Max 270m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	031 Draft: Time: Tugs:	Unberthing LOA: Max 270m Max 45.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted.	
Remarks:		Remarks:		
040 Draft: Time: Tugs:	Berthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	041 Draft: Time: Tugs:	Unberthing LOA: Max 340m Max 15.0 15.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted.	
Remarks:	TH bow & stell thrusters fitted.	Remarks:	:	
050 Draft: Time:	Berthing LOA: Max 360m Max 15.5m + tide – 10% UKC 24 hrs D>14.0m, D&N LW+1 to LW+3 & HW-1 to HW+1	051 Draft: Time:	Unberthing LOA: Max 360m Max 15.5m + tide – 10% UKC 24 hrs	
Tugs:	3 incl 1 GI escort if no bow thruster. 2 if bow & stern thrusters fitted. D>13.0m, 4 incl 1 GI escort if no bow thruster.	Tugs:	2, 1 if bow & stern thrusters fitted. D>13.0m, 3, 2 if bow & stern thrusters fitted. D>14.0m, 4	
Remarks:	GT >130000, LOA: Max 370m refers.	Remarks:	GT >130000, LOA: Max 370m refers.	
050 060 Draft: Time:	Berthing LOA: Max 370m Max 15.0 15.5m + tide – 10% UKC 24 hrs	051 061 Draft: Time:	Unberthing LOA: Max 370m Max 15.0 15.5m + tide – 10% UKC 24 hrs	

D>14.0m, D&N LW+1 to LW+3 &

HW-1 to HW+1

Tugs: 3 incl 1 GI escort if no bow thruster.

2 if bow & stern thrusters fitted. D>13.0m, 4 incl 1 GI escort if no

bow thruster.

Tugs: 2, 1 if bow & stern thrusters fitted.

D>13.0m or Port side to, 3, 2 if bow

& stern thrusters fitted.

D>14.0m, 4

Remarks:

Draft:

060 070 **Berthing** LOA: Max 400m Max 15.0 15.5m + tide – 10% UKC

Time:

D>14.0m, D&N LW+1 to LW+3 &

HW-1 to HW+1

4 incl 1 GI escort if no bow thruster. **Tugs:**

Remarks:

061 071 Unberthing LOA: Max 400m **Draft:** $Max \frac{15.0}{15.5}m + tide - 10\% UKC$

Time: 24 hrs

D>14.0m, D&N LW+1 to LW+3 &

HW-1 to HW+1

Tugs:

Remarks:

Remarks:

General Remarks:

Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.

2. Berthing: LOA >130m swing around &/or Wedge-in minimum 2 tugs.

3. LOA>350m, at least one tug \geq 5000HP.

LOA>350m & D>14.0m, at least two tugs \geq 5000HP. 4.

5. LOA>370m & D>14.0m, at least one tug \geq 6000HP & one tug \geq 5000HP.

ON TRIAL

Location: KC16 17-19 Kwai Chung berth 16 17-19

(Declared Depth at berth $\frac{15.5}{16.5}$ $\frac{16.5}{16.5}$ m)

010	Berthing LOA: Max 130m	011	Unberthing LOA: Max 130m	
Draft: Time: Tugs: Remarks:	Max 15.0 16.5m + tide – 10% UKC 24 hrs 1, 2 if D>8m.	Draft: Time: Tugs: Remarks:	Max 15.0 16.5m + tide – 10% UKC 24 hrs 1, 2 if no anchor down.	
020 Draft: Time: Tugs: Remarks:	Berthing LOA: Max 230m Max 15.0 16.5m + tide – 10% UKC 24 hr.	021 Draft: Time: Tugs: Remarks	Unberthing LOA: Max 230m Max 45.0 16.5m + tide – 10% UKC 24 hrs 2	
030 Draft: Time: Tugs:	Berthing LOA: Max 270m Max 45.0 16.5m + tide – 10% UKC 24 hrs 2 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	031 Draft: Time: Tugs:	Unberthing LOA: Max 270m Max 45.0 16.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted.	
Remarks:		Remarks:		
040 Draft: Time: Tugs:	Berthing LOA: Max 340m Max 45.0 16.5m + tide – 10% UKC 24 hrs 3 incl 1 GI escort if no bow thruster. 1 if bow & stern thrusters fitted.	041 Draft: Time: Tugs:	Unberthing LOA: Max 340m Max 45.0 16.5m + tide – 10% UKC 24 hrs 2, 1 if bow & stern thrusters fitted.	
Remarks:		Remarks:		
050 Draft: Time:	Berthing LOA: Max 360m Max 16.5m + tide – 10% UKC 24 hrs D>14.0m, D&N LW+1 to LW+3 & HW-1 to HW+1	051 Draft: Time:	Unberthing LOA: Max 360m Max 16.5m + tide – 10% UKC 24 hrs	
Tugs:	3 incl 1 GI escort if no bow thruster. 2 if bow & stern thrusters fitted. D>13.0m, 4 incl 1 GI escort if no bow thruster.	Tugs:	2, 1 if bow & stern thrusters fitted. D>13.0m, 3, 2 if bow & stern thrusters fitted. D>14.0m, 4	
Remarks:	GT >130000, LOA: Max 370m refers.	Remarks	: GT >130000, LOA: Max 370m refers.	
050 060 Draft: Time:	Berthing LOA: Max 370m Max 15.0 16.5m + tide – 10% UKC 24 hrs D>14.0m, D&N LW+1 to LW+3 & HW-1 to HW+1	051 061 Draft: Time:	Unberthing LOA: Max 370m Max 15.0 16.5m + tide – 10% UKC 24 hrs D>14.0m, D&N LW+1 to LW+3 & HW-1 to HW+1	

Tugs: 3 incl 1 GI escort if no bow thruster.

2 if bow & stern thrusters fitted. D>13.0m, 4 incl 1 GI escort if no

bow thruster.

Tugs: 2, 1 if bow & stern thrusters fitted.

D>13.0m or Port side to, 3, 2 if bow

& stern thrusters fitted.

D>14.0m, 4

Remarks: Remarks:

 060 070
 Berthing
 LOA: Max 400m
 061 071
 Unberthing
 LOA: Max 400m

 Draft:
 Max 15.0 16.5m + tide - 10% UKC
 Draft:
 Max 15.0 16.5m + tide - 10% UKC

Time: 24 hrs **Time:** 24 hrs

D>14.0m, D&N LW+1 to LW+3 & D>14.0m, D&N LW+1 to LW+3 &

HW-1 to HW+1

Tugs: 4 incl 1 GI escort if no bow thruster. **Tugs:** 4

Remarks: Remarks:

General Remarks:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.

- 2. Berthing: LOA >130m swing around &/or Wedge-in minimum 2 tugs.
- 3. LOA>350m, at least one tug \geq 5000HP.

HW-1 to HW+1

- 4. LOA>350m & D>14.0m, at least two tugs ≥5000HP.
- 5. LOA>370m & D>14.0m, at least one tug \geq 6000HP & one tug \geq 5000HP.

Location: KC20 Kwai Chung berth 20

(Declared Depth at Berth 15.5 m)

 010
 Berthing
 LOA: Max 130m
 011
 Unberthing
 LOA: Max 130m

 Draft:
 Max 15.0 15.5m + tide - 10% UKC
 Draft:
 Max 15.0 15.5m + tide - 10% UKC

Time: 24 hrs **Time:** 24 hrs

Tugs: 1, if D > 8m 2 **Tugs:** 1, if no anchor down 2

Remarks: Remarks:

020 **Berthing** LOA: Max 230m 021 **Unberthing** LOA: Max 230m **Draft:** Max 15.0 15.5m + tide - 10% UKC **Draft:** Max 15.0 15.5m + tide - 10% UKC

 Time:
 24 hrs
 Time:
 24 hrs

 Tugs:
 2
 Tugs:
 2

 Remarks:
 .
 Remarks:

030 **Berthing** LOA: Max 270m 031 **Unberthing** LOA: Max 270m **Draft:** Max 15.0 15.5m + tide - 10% UKC **Draft:** Max 15.0 15.5m + tide - 10% UKC

Time: 24 hrs **Time:** 24 hr

Tugs: 2 incl 1 GI escort if no bow thruster. **Tugs:** 2, 1 if bow & stern thrusters fitted.

1 if bow & stern thrusters fitted.

Remarks: Remarks:

040 **Berthing** LOA: Max 310m 041 **Unberthing** LOA: Max 310m **Draft:** Max 15.0 15.5m + tide – 10% UKC **Draft:** Max 15.0 15.5m + tide – 10% UKC

Time: 24 hrs Time: 24 hrs

Tugs: 3 incl 1 GI escort if no bow thruster. **Tugs:** 2, 1 if bow & stern thrusters fitted.

1 if bow & stern thrusters fitted.

Remarks: Remarks:

General Remarks:

- 1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.
- 2. Berthing: LOA >130m swing around &/or Wedge-in minimum 2 tugs.

Brief Summary on Proposed Amendments of Berthing Guidelines For Kwai Tsing Container Terminals

1. Background

- 1.1 Port of Hong Kong is one of the major shipping hubs both globally and in the Asia-Pacific region. The calling of containerships, in particular mega or even giant containerships having an overall length of 360 metres and a moulded breadth of 55 metres or even more, are frequent in nowadays.
- 1.2 However, as most ports in the world are having limitations on their depth of waters, length of these giants therefore did not extend much but rather their breadth, and monsters of having similar length but wider breadth has gradually become common. This has largely increased their Gross Tonnage (GT). Because of their effective windage area, breadth and draft, the handling of these ships would be different in particular in terms of their pilotage requirements.
- 1.3 In the meantime, to cope with the deep draft of the mega containerships, depth of water of the Kwai Tsing Container Basin has completed its dredging operation in 2021, and the depth of water for berths in the Basin has now reached between 14.0m and 16.5m.

2. Major changes and their effects on ship movement

- 2.1 To reflect the above-mentioned changes, for clarification as well as guidance purposes, the Berthing Guidelines for the Hong Kong Port is recommended for changes as follows:
- a) Chapter 3 Berthing Remarks

(Para. 4, "Declared Depths at Kwai Chung Berths")

Updates are made to the "Depth at berth" and the "Max. Sailing or Arrival Draft at KC Basin".

b) Chapter 4 – Guidelines on Tug Requirements

(Para. 2, "Grades of Tug")

Grade I tugs are to include tugs of at least 6,000 HP and/or 78 BP, to handle giant containerships of more than 370m length and draft of more than 14m.

c) Chapter 12 - Berthing guidelines: by location code

(Those pages on "Kwai Chung Berths 1 - 20")

Deeper draft is allowed where appropriate, and more powerful and number of tugs is recommended to be used, including the relaxation of tidal windows.

2.2 The above updates provide a clear guidance for the containership masters and agents, especially those mega ones, for their ships berthing/unberthing operations in the Kwai Tsing Container Basin, including recommendations on the allowable tidal window and the use of tugs.

3. Rationale and considerations for the proposed changes

- 3.1 As suggested in Paragraph 1 above, GT of the giant containerships having their breadth extended without changing its length, are substantially increased. For an instance, a 300m containership in the past were generally in the range of 50,000 60,000 GT, but now it would reach 95,000 GT, of which certain such giants are of more than 130,000 GT.
- 3.2 In nowadays, merely extending one metre length of a 399m LOA giant containership but 2.5m of its breadth, will substantially increase its GT and container carrying capacity in thousands of Tons and TEUs. Given the extra-large size of such vessels and sluggish handling, for navigation safety, effective and efficient maneouvring and berthing operations, relevant amendments is recommended to be made in the Berthing Guidelines.
- 3.3 It would also be useful, as well as playing a leading role, to introduce GT into the Berthing Guidelines to reflect a ship's actual tonnage, in particular the heavy weight giant ship, to alert both port users of the Hong Kong Port and the pilots providing pilotage service to these ships.

3.4 Table showing the relationships between ship's LOA, breadth and GT

Ship name	LOA	Breadth	GT
CMA CGM	299.2m	40m	73,779 Ton
MAUPASSANT			
CMA CGM CARL	299.9m	49m	95,256 Ton
ANTONIE			
Difference	+0.7m	+ 9.0m	+ 21,477 Ton
CMA CGM NEVADA	366.0m	48.23	140, 259 Ton
CMA CGM	365.5m	51.2m	154,169 Ton
LAPEROUSE			
Difference	+ 0.5m	+ 2.97m	+ 13,910 Ton
CMA CGM JACQUES	399.9m	61.3m	236,583 Ton
SAADE			
MSC VIVIANA	399.98m	58.6m	187,587 Ton
Difference	+0.08m	-2.7m	-48,996 Ton