

FACSIMILE COMMUNICATION FORM



Port of Fujairah

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ميناء الفجيرة

ص.ب : ٧٨٧ - الفجيرة
 الإمارات العربية المتحدة
 فاكس : ٩-٢٢٢٨٨١١ (الإدارة)
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 ٩-٢٢٢٨٣١٢ (الهندسة)
 ٩-٢٢٢٨٠٢٢ (بحرية)

To:	All Agents / Bunkering Companies / De-Sloping Companies / National Transport Authority / Federal Environment Agency / Hydrographic Office-UK		
Attn:	General Manager / Operations Manager		
From:	Capt. Tamer Masoud – Harbour Master		
Facsimile No.:	City:	Country:	Fujairah U.A.E
Ref. No.	MD/FAX/11/0315	Date:	19 May 2011
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Notice To Mariner No. 147

**SUBJECT : PORT OF FUJAIRAH & VHFL TERMINAL
 BERTH CONSTRUCTION & DESIGN CRITERIA**

I ABBREVIATION

M.Q : Main Quay
 OT1 : Oil Terminal 1
 OT2 : Oil Terminal 2
 SBB : South Break-water Berths
 7MQ : 7 Meter Quay
 CD : Chart Datum
 PD : Port Datum

Port Datum = Admiralty Chart Datum - 0.1 metre

II LIMITATIONS & TIDE INFORMATION

- 1- Height of M.Q, SBB, OT1 & OT2 (Berths 4,5, 6&7) above Sea Level (CD) : 4.75 metres
- 2- Height of 7 MQ Quay : 4.00 metres
- 3- Height of Lowest Low Water above CD : +0.10 metres.
- 4- Height of Highest Astronomical tide above CD : + 2.8 metres.
- 5- Maximum Vessel Length Overall at M.Q & SBB : 300 metres
- 6- Maximum Vessel Dead Weight : 100,000 Tons
- 7- Maximum Vessel Breadth : 50 metres
- 8- Port Basin water depth : -15 metres (CD)
- 9- Port Basin water depth at OT2 : -18 meters (CD)

- 10- Berthing / Unberthing possible round the clock at all port Berths except non-propelled craft (berthing in day light).
11. If a vessel plans to berth / unberth with a draught more than the prescribed, prior approval from Harbour Master according to hourly tidal elevation to have 15% for berthing and 10% for unberthing of vessel's draught under the ship's keel is required.

III MAIN QUAY

1. General

1.1 Main Quay Length

- Total length of Main Quay is 1,374 metres which is divided into 6 berths as described below.

1.2 Bollards

- Total number of bollards at Main Quay is 57.
- The capacities of bollards 1, 17 and from 35 up to 57 are 100 Tons, all other bollards are 50 Tons.
- The Capacity of bollard at South of berth No. 1 (sand bollard) is 75 Tons.

1.3 Fenders

- FENTEK Cone Fender - Model SCN 1050
- Front panel (2.15 x 3.85) metres and 1.48 metres away from the Quay Face.

1.4 Freshwater

Freshwater available.

2. Berth No. 1 (Metre Mark 000-170)

- Water depth alongside Quay : -11.0 (CD)
- Berth length (between bollards Nos. 1 & 8) : 170 metres
- Maximum arrival draught : 9.5 metres
- Maximum sailing draught : 10.0 metres

3. Berth No.2 (Metre Mark 170-370)

- Water depth alongside Quay : -12 metres (CD)
- Berth length (between bollards Nos. 8 & 17) : 200 metres
- Maximum arrival draught : 11.0 metres
- Maximum sailing draught : 11.5 metres

4. **Berth No. 3 (Metre Mark 370 – 570)**

- Water depth alongside Quay : -12 metres (CD)
- Berth length (between bollards Nos. 17 & 27) : 200 metres
- Maximum arrival draught : 11.0 metres
- Maximum sailing draught : 11.5 metres

5. **Berth No. 4 (Metre Mark 570 – 755)**

- Water depth alongside Quay : - 12 metres (CD)
- Berth length (between bollards Nos. 27 & 35) : 185 metres
- Maximum arrival draught : 11.0 metres
- Maximum sailing draught : 11.5 metres

6. **Berth No. 5 (Metre Mark 755 –1055)**

- Water depth alongside Quay : -15 metres (CD)
- Berth length (between bollards Nos. 35 & 46) : 300 metres
- Maximum arrival draught : 13 metres
- Maximum sailing draught : 13.5 metres

7. **Berth No. 6 (Metre Mark 1055 – 1374)**

- Water depth alongside Quay : - 15 metres (CD)
- Berth length (between bollards Nos. 46 & 57) : 319 metres
- Maximum arrival draught : 13 metres
- Maximum sailing draught : 13.5 metres.

IV SOUTH BREAKWATER BERTHS (SBB)

1. **General**

- 1.1 Maximum arrival draught : 13.5 meter for round the clock operation.
- 1.2 Maximum sailing draught : 14.0 meter for round the clock operation.
- 1.3 Water depth alongside berths 1, 2 & 3 is 15 metres (CD)

1.4 **Bollards**

Total Numbers : 55

Spacing between Bollards at berths 1, 2 & 3 : 20 metres

The Capacities of bollards 1 to 49 are 100 Tons, Bollards 50 to 55 are 30 Tons.

1.5 **Fenders (Maritime International –MCN 1100 (G3.5))**

- Cone Fender.
- Front panel (2.15 x 3.85) metres and 1.48 metres away from the Quay Face.

1.6 **Freshwater**

Freshwater available.

2. **Berth No. 1 (SBB1)**

- Berth length (between bollards nos. 1 & 17) : 300 metres

3. **Berth No. 2 (SBB2)**

- Berth length (between bollards nos. 17 & 32) : 280 metres

4 **Berth No. 3 (SBB3)**

- Berth length (between bollards nos. 34 & 49) : 280 metres.

5. **Berth No. 4 (SBB4)**

- Water depth alongside Quay up to meter mark 40 : - 12 metres (CD)
- Water depth alongside Quay from meter mark
40 to 70 : - 8 metres (CD)
- Berth length (between bollards nos. 49 & 53) : 70 metres
- Bollard capacity : 30 Tons.

6. **Berth No. 5 (SBB5)**

- Water depth alongside Quay : - 6 metres (CD)
- Berth length (between bollards nos. 53 & 55) : 50 metres

Contd..5/-

V PORT OF FUJAIRAH OIL TERMINALS

1. General Information Oil Terminal 1

1	Total quay length	840 metres
2	Height of quay above sea level*	4.75 metres
3	Water depth at approaches*	15 metres
4	Water depth alongside*	15 metres
5	Height of Lowest Low Water*	0.10 metres
6	Height of Highest Astronomical Tide*	2.80 metres
7	Extreme Highest Water*	3.14 metres
8	Maximum length overall	250 metres
9	Minimum length overall	75 metres
10	Maximum arrival draft**	13.5 mtrs round the clock
11	Maximum sailing draft**	14.0 mtrs round the clock
12	Maximum displacement	120,000 tons
13	Maximum DWT	100,000 tons
14	Minimum DWT	5000 tons

Contd..6/-

1.1 General Information OT2

Oil Terminal - 2 all Berths no.4, 5, 6 & 7 are equipped with LASER DOCKING SYSTEM (LDS). It monitors and records the vessel approach and departure data and displays approach speed and angle on large digital display mounted at each berth

1	Total quay length	1490 metres
2	Height of quay above sea level*	4.75 metres
3	Water depth at approaches*	20 metres
4	Water depth alongside*	18 metres
5	Height of Lowest Low Water*	0.10 metres
6	Height of Highest Astronomical Tide*	2.80 metres
7	Extreme Highest Water*	3.14 metres
8	Maximum length overall	330 metres at Berth 4
		300 meters at Berth 5,6&7
9	Minimum length overall	75 metres
10	Maximum arrival draft	16.5 mtrs round the clock
11	Maximum Sailing draft	17 mtrs round the clock
12	Maximum displacement	200,000 tons
13	Maximum DWT	300,000 tons at Berth 4
		180,000 tons at Berth 5,6&7

2 Berth Construction and Design Criteria.

2.1 Oil Terminal-1

Berth	BERTH CRITERIA			MARINE LOADING ARMS			FENDERS		Q.R.H.
	Length x Depth (Meters)	Max. LOA x Max. Draft (Meters)	Max. Displacement (Tons)	No. x Size Type of Cargo	Maximum Height from Jetty Top (Meters)	Operating Envelope (Degrees each side)	No. of Fenders at each Berth	Distance between Fenders (Meters)	No. x SWL
OT1-B1	240 X 15	180 X 13.5 (MLA 12 & 13 only)	55,000	2 X 12" (1 Black & 1 White)	12.65	18	15	18.0	8 X 60
	240 X 15	160 X 13.5 (MLA 14 & 15 only)	45,000	2 X 12" (1 Black & 1 White)	12.65	18	15	18.0	8 X 60
	240 X 15	145 X 13.5 (MLA 16 only)	30,000	1 X 8" (For Lube Oil only)	10.45	24	15	18.0	8 X 60
OT1-B2W	150 x 15	130 x 13.5	25,000	2 X 12" (1 Black & 1 White)	12.65	18	8	18.0	5 X 60
OT1-B2	300 x 15	250 x 13.5	120,000	4 X 16" (2 Black & 2 White)	15.15	18	17	18.0	10 X 60
OT1-B2E	150 x 15	130 x 13.5	25,000	2 X 12" (1 Black & 1 White)	12.65	18	8	18.0	5 X 60
OT1-B3W	150 x 15	130 x 13.5	25,000	2 X 12" (1 Black & 1 White)	12.65	18	8	18.0	5 X 60
OT1-B3	300 x 15	250 x 13.5	120,000	4 X 16" (2 Black & 2 White)	15.15	18	17	18.0	10 X 60
OT1-B3E	150 x 15	130 x 13.5	25,000	2 X 12" (1 Black & 1 White)	12.65	18	8	18.0	5 X 60

* Distance between MLA Flanges centre 4.00 Metres.

Contd..8/-

2.2 Berth Construction and Design Criteria Oil Terminal 2

Berth	BERTH CRITERIA			MARINE LOADING ARMS			FENDERS		Q.R.H.
	Length x Depth (Meters)	Max. LOA x Max. Draft (Meters)	Max. Displacement (Tons)	No. x Size Type of Cargo	Maximum Height from Jetty Top (Meters)	Operating Envelope (Degrees each side)	No. of Fenders at each Berth	Distance between Fenders (Meters)	No. x SWL
OT2-B4N	225 X 18	180 X 16.5	55,000	2 X 12" (1 Black & 1 White)	10.45	24	15	8.5	17 Nos. 12xD750 KN 2XT1000 KN 3XQ1000 KN
OT2-B4	450 X 18	330 X 16.5	230,000	4 X 16" (2 Black & 2 White)	20.50	23	30	17.0	
OT2-B4S	225 X 18	180 X 16.5	55,000	2 X 12" (1 Black & 1 White)	10.45	24	15	8.5	
OT2-B5E	175 X 18	140 X 16.5	40,000	2 X 12" (1 Black & 1 White)	10.45	24	11	8.5	16 Nos. 12xD750 KN 2XT1000 KN 2XQ1000 KN
OT2-B5	350 X 18	300 X 16.5	207,000	4 X 16" (2 Black & 2 White)	16.50	22	22	17.0	
OT2-B5W	175 X 18	140 X 16.5	40,000	2 X 12" (1 Black & 1 White)	10.45	24	11	8.5	
OT2-B6E	175 X 18	140 X 16.5	40,000	2 X 12" (1 Black & 1 White)	10.45	24	11	8.5	16 Nos. 12xD750 KN 2XT1000 KN 2XQ1000 KN
OT2-B6	350 X 18	300 X 16.5	207,000	4 X 16" (2 Black & 2 White)	16.50	22	22	17.0	
OT2-B6W	175 X 18	140 X 16.5	40,000	2 X 12" (1 Black & 1 White)	10.45	24	11	8.5	
OT2-B7E	175 X 18	140 X 16.5	40,000	2 X 12" (1 Black & 1 White)	10.45	24	11	8.5	16 Nos. 12xD750 KN 2XT1000 KN 2XQ1000 KN
OT2-B7	350 X 18	300 X 16.5	207,000	4 X 16" (2 Black & 2 White)	16.50	22	22	17.0	
OT2-B7W	175 X 18	140 X 16.5	40,000	2 X 12" (1 Black & 1 White)	10.45	24	11	8.5	

* Distance between MLA Flanges centre to centre 4.00 Metres.

Contd..9/-

2. General Description.

	Oil Terminal 1	Oil Terminal 2
MLA Flange Type	ANSI 150 lbs RF	ANSI B 16.5
MLA Manufacturer	EMCO WHEATON	KANON
Q.R.H Manufacturer	STRAINSTALL	MARIMATECH
Fender Type	SUPER CONE FENDER SCN1050	SUPER CONE FENDER- Sumitomo Rubber Group HOM- 1300(X150)
Fender Front Panel Dimension (in Millimeters)	3550 X 2000	4600 x 2200

VI- VOPAK HORIZON FUJAIRAH LIMITED TERMINAL

BERTH CONSTRUCTION & DESIGN CRITERIA

1. VHFL - Berth No. 1 & 2

Berthing Restrictions	Berth No. 1	Berth No. 2
Water depth approaches @ CD	17.0 Metres	12.0 Metres
Water depth alongside @ CD	18.0 Metres	14.0 Metres
Maximum Arrival draft @ CD	14.8 Metres	11.2 Metres
Maximum Sailing draft @ CD	15.5 Metres	11.9 Metres
Minimum DWT	5,000 Tonnes	3,000 Tonnes
Maximum Displacement	150,000 Tonnes	60,000 Tonnes
Max / Min LOA	295.0 / 74.0 Metres	200.0 / 74.0 Metres
Max / Min Manifold height above CD	23.0 / 1.0 Metres	23.0 / 1.0 Metres
Max / Min Gangway Height above CD	22.3 / 0.9 Metres	22.3 / 0.9 Metres
Berth height above CD	9.6 Metres	9.6 Metres
Minimum Freeboard	0.3 Metres	0.3 Metres

VHFL - Berth 1 & 2 - Loading Arms

Description		Size	Maximum Operating Envelope	Distance Between MLAs
Berth1	MLA 401	16''	15° in both direction	3 m
	MLA 402	16''	15° in both direction	3 m
	MLA 403	12''	12° right / 24° left	3 m
	MLA 404	12''	13° right / 17° left	3 m
	MLA 405	12''	15° in both direction	3 m
Berth 2	MLA 501	12''	12° right / 24° left	3 m
	MLA 502	12''	13° right / 17° left	3 m
	MLA 503	12''	15° in both direction	3 m
	MLA 504	12''	12° right / 24° left	3 m
	MLA 505	12''	15° in both direction	3 m

VHFL- Berth 1 & 2 - Mooring Facility

Mooring Dolphin		No. Of QRH on each dolphin	No. Of hooks per unit	Capacity of hook per dolphin
Berth1	MD 11	1	3	75 tonnes
	MD 12	1	2	100 tonnes
	MD13	1	2	100 tonnes
	MD14	1	3	75 tonnes
Berth 2	MD 21	1	2	50 tonnes
	MD22	1	2	50 tonnes
	MD 23	1	2	50 tonnes
	MD24	1	2	50 tonnes
Breasting Dolphin				
Berth1	BD 11	1	2	75 tonnes
	BD 12	1	2	75 tonnes
Berth 2	BD 21	1	2	40 tonnes
	BD22	1	2	40 tonnes
Loading Platform				
Berth1	LP (South)	1	2	75 tonnes
	LP (North)	1	2	75 tonnes
Berth 2	LP (South)	-	-	-
	LP (North)	-	-	-

VHFL- Berth 1 & 2 - Fenders

Description	Berth No. 1	Berth No.2
Number of fenders per berth	6	4
Fender Type (Outer dolphins)	Dockguard DGC 2000H	Dockguard DGC 2000H
Fender Type (Loading Platform)	Dockguard DGC 2000H (Platform outer)	Dockguard DGC 2000H
	Trellex (Platform inner)	
<u>Energy Absorption of the fenders</u>		
Outer dolphins	169 Ton-m	117 Ton-m
Loading Platform	86 Ton-m (Platform outer)	64 Ton-m
	29 Ton-m (Platform inner)	
<u>Distance between Fenders</u>		
Outer dolphins	100 m	72 m
Loading platform	48 m (Platform outer)	29.38 m
	18m (Platform inner)	
<u>Front panel dimensions</u>		
Outer dolphins	3600 W x 7100 L (mm)	3600 W x 5530 L (mm)
Loading Platform	3600 W x 5530 L (mm) (Platform Outer)	3600 W x 5530 (mm)

2. VHFL - Berth No. 3 & 4

Berthing Restrictions	Berth No. 3	Berth No. 4
Water depth approaches @ CD	13.3 Metres	10.7 Metres
Water depth alongside @ CD	12.3 Metres	11.9 Metres
Maximum Arrival draft @ CD	10.5 Metres	8.0 Metres
Maximum Sailing draft @ CD	11.0 Metres	8.5 Metres
Minimum DWT	2,000 Tonnes	2,000 Tonnes
Maximum DWT	15,000 Tonnes	15,000 Tonnes
Max LOA	140.0 Metres	140.0 Metres
Berth height above CD	6.1 Metres	6.1 Metres
Minimum Freeboard	0.3 Metres	0.3 Metres

VHFL - Berth 3 & 4 - Loading Arms

Description		Size	Maximum Operating Envelope	Distance Between MLAs
Berth3	MLA 31	8"	20° right / 23° left	3 m
	MLA 32	8"	22° right / 21° left	3 m
Berth 4	MLA 41	8"	20° right / 23° left	3 m
	MLA 42	8"	22° right / 21° left	3 m

VHFL - Berth 3 & 4 - Fenders

Description	Berth No. 3	Berth No.4
Number of fenders per berth	4	4
Fender Type (Outer dolphins)	Shibata CSS-1150H (F0)	Shibata CSS-1150H (F0)
Fender Type (Inner dolphins)	Shibata CSS-1150H (F4)	Shibata CSS-1150H (F4)
<u>Energy Absorption of the fenders</u>		
Outer dolphins	50.2 Ton.m	50.2 Ton.m
Inner dolphins	23.8 Ton-m	23.8 Ton-m
<u>Distance between Fenders</u>		
Outer dolphins	60 m	60 m
Inner dolphins	20 m	20 m
<u>Front panel dimensions</u>		
Outer dolphins	2200 W x 2700 L (mm)	2200 W x 2700 L (mm)
Inner dolphins	1700 W x 3500 L (mm)	1700 W x 3500 L (mm)

3. VHFL - Berth No. 5 & 6

Berth Criteria

Berthing Restrictions	Berth No. 5	Berth No. 6
Maximum DWT	110,000 Tonnes	110,000 Tonnes
Minimum DWT	5,000 Tonnes	5,000 Tonnes
Maximum Displacement	130,000 Tonnes	130,000 Tonnes
Minimum Displacement	6,900 Tonnes	6,900 Tonnes
Maximum LOA	250 Metres	200 Metres
Minimum LOA	74 Metres	74 Metres
Maximum Arrival Draft	12 Metres	10 Metres
Maximum Sailing Draft	13 Metres	11 Metres
Alongside Depth	- 14.9 Metres CD	-13.7 Metres CD
Maximum Freeboard	12.60 Metres	12.60 Metres
Minimum Freeboard	1.8 Metres	1.8 Metres
Maximum Gangway ship deck level	21.50 Metres CD	21.50 Metres CD
Minimum Gangway Ship deck level	2.00 Metres CD	2.00 Metres CD
Maximum Manifold Height	23.5 Metres CD	23.5 Metres CD
Minimum Manifold Height	2.00 Metres CD	2.00 Metres CD
Berth Height	9.60 Metres CD	9.60 Metres CD
Dolphin Height	8.00 Metres CD	8.00 Metres CD

VHFL - Berth No. 5 & 6 - Loading Arms

Description	Berth No. 5	Berth No.6
No & Size	3 x 16"	3 x 16"
Distance between MLA 51 & 52	3.75 m	3.75 m
Distance between MLA 52 & 53	3.75 m	3.75 m
Maximum operating envelope	23 ⁰ in both direction	23 ⁰ in both direction

VHFL - Berth No. 5 & 6 - Mooring Facilities

Description	Berth No. 5	Berth No.6
<u>Mooring Dolphin</u>		
No. of Q.R.H on each dolphin	1 for each berth	1 for each berth
No. Hooks per unit	3	3
Capacity of Hooks per dolphin	80 Tonnes	80 Tonnes
<u>Breasting Dolphins</u>		
No. of Q.R.H on each dolphin	1	1
No. Hooks per unit	2	2
Capacity of Hooks per dolphin	80 Tonnes	80 Tonnes
<u>Loading Platform</u>		
No. Of quick release hooks on platform	1 on each corner at the berthing line	1 on each corner at the berthing line
Number of hooks per unit	2	2
Capacity of the hooks per dolphin	40 Tonnes	40 Tonnes

VHFL - Berth No. 5 & 6 - Fenders

Description	Berth No. 5	Berth No.6
Number of fenders per berth	6	6
Fender Type (Outer dolphins)	Shibata CSS2250 H	Shibata CSS2250 H
Fender Type (Inner dolphins)	Shibata CSS1600 H	Shibata CSS1600 H
Fender Type (Loading Platform)	Shibata CSS 1250 H + fenderpile	Shibata CSS 1250 H + fenderpile
<u>Energy Absorption of the fenders</u>		
Outer dolphins	334 Ton.m	334 Ton.m
Inner dolphins	120 ton.m	120 ton.m
Loading Platform	65 ton.m	65 ton.m
<u>Distance between Fenders</u>		
Outer dolphins	88 m	88 m
Inner dolphins	54 m	54 m
Loading platform	23.5 m	23.5 m
<u>Front panel dimensions</u>		
Outer dolphins	3500 W x 8000 L (mm)	3500 W x 8000 L (mm)
Inner dolphins	2200 W x 8000 L (mm)	2200 W x 8000 L (mm)
Loading Platform	2000 W x 9000 L (mm)	2000 W x 9000 L (mm)

4. VHFL - Single Point Mooring (SPM)

Water depth approaches @ CD	28.0 Metres
Water depth alongside @ CD	26.0 Metres
Maximum Draft	21.5 Metres
Minimum DWT	40,000 MT
Maximum DWT	175,000 MT
Max LOA	300.0 Metres
Manifold Crane SWL	10.0 Tonnes for DWT 40,000 to 60,000 MT 15.0 Tonnes for DWT 60,000 MT & above
Bow chain stopper Type	AKD Tongue
Bow chain stopper size	54.0 mm or 76.0 mm
Bow chain Stopper SWL	100 or 200 Tonnes as per size of Stopper
Cargo Tank atmosphere	Inerted / Less than 8% Oxygen
Maximum trim	3.0 Metres & Propeller submerged at all times

VII 7 METER QUAY**1 GENERAL INFORMATION**

Water depth alongside Quay	:	- 7 Metres (CD)
Quay Length	:	250 Metres
Number of Bollards	:	17
Capacity of Bollards	:	30 Tons
Distance between Bollards	:	15 Metres

VIII FLOATING JETTY**1 GENERAL INFORMATION**

Number of floating pontoons connected in sequence	:	3
Total Length	:	250 Metre
Water depth at first Pontoon	:	- 10 metres (CD)
Water depth at second and third Pontoon	:	-15 metres (CD)
Capacity of each Pontoon	:	70 Tons

Thanks & Regards,

Capt. Tamer Masoud
HARBOUR MASTER

cc : General Manager – PoF
Dr. Salem Khalil - D.I&E
All Department Managers – PoF
FOTT Operations Manager - PoF
Safety & Security Officer - PoF
Control Tower.
Vopak Horizon Fujairah Ltd.
Oil Terminal Users.