PORT INFORMATION

FOR

FAUJI OIL TERMINAL, PORT MOHAMMAD BIN QASIM

POSITION	**:**	**PORT QASIM ENTRANCE:** **PHITTI CREEK FAIRWAY BUOY 24°47'03"N; 67°17'13"E**
CHARTS	**:**	**a) BA 1284** **b) PAK-20**
TIDE TABLES	**:**	**PHB - 2, PAKISTAN TIDE TABLES**
LOCAL TIME	**:**	**GMT +5 hrs.**

FOREWORD

This booklet is intended to acquaint Masters, Owners, Agents and Charters of tanker s calling at the FOTCO Terminal, Port Qasim with the general conditions, acceptance criteria, facilities and regulations in force at the terminal.

The terminal is operated by the FAUJI OIL TERMINAL COMPANY under the regulations of Port Mouhammed Bin Qasim Authority. The terminal is certified for ISO Standards for Quality, Safety and Environmental Management and all its procedures are fully followed and enforced.

Every efforts has been made to ensure that all information give in this booklet is accurate at the date of issue but it is not guaranteed or intended in any way to replace other official publications. The company does not accept any responsibility for any errors, omissions, or for the consequences of using it for any purpose whatsoever. Masters owners, agents and charters are of course free to ask for clarification on any items of terminal operation.

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1. GENERAL

1.1 The Terminal

FOTCO terminal (QP-1) is located in Kadiro Creek in Port Qasim, marked on CHART NO. BA 1284 & PAK 20. Tide table applicable is PHB-2 & local time is GMT+ 5hrs. The berth consists of a Loading Platform, 4 mooring & 2 breasting dolphins. The layout design conforms to OCIMF guidelines. Depth alongside is 12.8 m C.D. The loading platform is equipped with 3 x 16" dia Loading Arms, a Service Crane, a Gangway and Potable Water Supply connection.

1.2 Pollution Caution

The terminal is located in a sensitive marine environment, it is imperative that escape of any kind of oils and pollutants are absolutely prevented. Offender will be subjected to heavy penalties and fines. AT FOTCO A DROP IS CONSIDERED A SPILL.

1.3 Acceptance Criteria

The criteria indicated here are for the Terminal, Port Qasim Authority issue Notices to Mariners periodically. The latest issue of these must be checked for draught and other relevant restrictions.

Tankers between 25 and 75 KDWT, with length overall of between 180 and 245 meters and 41 meters of Beam (Max), with a maximum arrival displacement of 95,000 tones can safely be accommodated at the terminal provided they comply with the following minimum requirements:

Status

i. Tankers with SBT / PL upto 25 years of age.

ii. Tankers must be classed with the classification society, which must be a member of IACS.

iii. Tankers must comply with IMO Condition Assessment Scheme.

iv. Tankers must comply and be certified for requirements of ISPS Code.

1.3.1 Moorings

Forward	:	(3) 4 winchmounted wire/high modulus polyethylene (HMPE) ropes
Maindeck fwd	:	2 winchmounted wire/high modulus polyethylene (HMPE) ropes
Maindeck aft	:	2 winchmounted wire/high modulus polyethylene (HMPE) ropes
Aft	:	(3) 4 winchmounted wire/high modulus polyethylene (HMPE) ropes

Figures in bracket are for tankers of less than 50 KDWT.

Note:

(i) Tankers not equipped with self stowing winches cannot be safely accommodated at the terminal.

(b) Mixed moorings i.e. synthetic ropes and wire ropes in the same service are not acceptable.

(c) Winches and brakes must be in good operating condition.

(d) Moorings wires/ropes must be of adequate dimensions and in good conditions.

(e) The suitability of tanker for adequate mooring arrangements will be evaluated after examining the terminal's acceptance criteria questionnaire duly completed by the Master of nominated vessel prior to arrival for delivery at FOTCO. (Please see appendix "L").

(f) The copies of terminal acceptance criteria questionnaire are available with OMC's, PQA, Suppliers and Agents concerned. Copies of the same can be provided on request.

(g) The terminal reserve the right to decline acceptance of any vessel which is its opinion is not in conformance to the acceptance criteria or unsafe to accommodate.

1.3.2 Manifold Connections

Three 16 inch (400 mm), 150 psi ANSI flanges, ready at the manifold comply with OCIMF standards. (All the presentation flanges shall be kept vertical and have plain (flat faces) for Oil tankers manifolds and associated equipment). (See Appendices "E" and "F").

1.3.3 Ballast

Able to discharge cargo and take ballast simultaneously, without risk of pollution of the sea or cargo contamination with water.

1.3.4 Heating Coils

Equipment with cargo heating facilities able to keep HFO temperature upto minimum 40^{O}C or as instructed by the terminal.

1.4 Services

The FOTCO Terminal is located in a restricted area, 35 Km from Karachi. There is limited access via a 4 Km long trestle.

Only authorized personnel on official business are allowed access to the terminal.

Potable water is available on the jetty. Slop unloading facility is also available on the jetty. No other services are available at the terminal.

No bunkers or lubes

No medical facilities, however in emergencies exceptions may be made for humanitarian reasons

The Agent may arrange necessary services via boat from Karachi, however permission must be obtained from Port Qasim Authority and the Terminal for any delivery to the vessel.

2. PRIOR ARRIVAL

2.1 Arrival Advice

Following information will be provided by all vessels calling at FOTCO before arrival at the anchorage.

AAA Vessel name, previous name (if any), call sign and flag.

BBB Master's name and nationality

DDD SDWT, light and full load displacement tonnage

EEE Last loading port and intermediate ports

FFF Next loading port and intermediate ports

GGG Number of crew and nationality

HHH Grade, temperature and quantity of cargo on arrival, cargo to be discharged at the FOTCO Terminal and maximum discharge rate per manifold.

JJJ Whether previous cargo or any cargo on board had high H_2S contents and H_2S concentration in tank vapour spaces.

KKK Depth moulded and indication of max. freeboard/draught while alongside the berth.

LLL Fire arms & Ammunition on board.

MMM Confirmation that the vessel is able to discharge cargo and ballast simultaneously.

NNN Arrival draught and arrival displacement.

OOO Any leaks which would cause pollution or affect loading.

PPP Pratique Granted : Place/Date. If any sickness on board or clean bill of health.

All vessels calling at the FOTCO Terminal for the first time must include the following additional information.

SSS Length overall and bow to center of manifold distance Width at Beam.

TTT Confirmation that 3 x 16" psi ANSI flanges are available at port manifold and manifold arrangements comply with "OCIMF" standards (all the presentation flanges shall be kept vertical and have plain (flat faces).

UUU Confirmation that combination of gangway and pilot ladder will be ready on arrival. Only pilot ladder is required if freeboard is less that 15 feet.

VVV Whether vessel is diesel or steam turbine powered.

XXX Number and type of moorings on selfstowing winches with indication of chock locations in relation to manifold center line.

ETA to be confirmed 72, 48 and 24 hours prior to arrival or if change of more than one (1) hour within the last 24 hour period.

2.2 VHF - Communications

Port Qasim Port Control keeps 24 hrs watch on channel 16, and working channel is Channel 10.

The FOTCO terminal keeps 24 hrs watch on

channel. Communications language is English.

2.3 Arrival Procedure

Master should endeavour to establish VHF contact with Port Qasim Port Control when within range. Instructions will then be given for further approach and berthing schedule.

2.4 Preparations

Prior to arrival, vessels should prepare the following:

2.4.1 Pilot Ladder

A combination pilot ladder with 2 side ropes and ship's accommodation gangway, complying with SOLAS recommendations, should be safety and securely rigged and so arranged that personnel can first use the pilot ladder until part way up the vessel's side, and then transfer to the

accommodation ladder. Vessels with less than 15 feet freeboard need only to rig the pilot ladder with 2 side ropes. Air operated pilot hoists are not acceptable. A light heaving line and canvas bag should be ready to take onboard the pilot's equipment.

During the hours of darkness, it is necessary that the pilot ladder and adjacent deck area is adequately illuminated. Responsible personnel are to be in attendance, when the pilot boards and leaves.

2.4.2 Mooring Equipment

Winches and mooring lines ready as indicated under 1.2.1 Acceptance Criteria Moorings.

2.4.3 Derrick

Derrick to be rigged, swung inboard and secured.

2.4.4 Manifold

The manifold ready with at least two adjacent 16 inch ANSI 150 connections prepared for the connection to loading arms with hydraulic couplings.

2.5 Documents

The terminal requires a copy of following documents, before cargo discharging can commence:

Bill of Lading
Certificate of Quantity
Certificate of Quality
Vessel Particulars/Data
Sheet Ullage Report Load
Port Ullage Report
Ship Crew list copy

3. FACILITIES AND OPERATIONS

3.1 Terminal Facilities

The berth is located parallel to the Kadiro Creek dredged channel. The berth fender line is 160 meters from the channel centerline.

Three 16 inch dia hardarms with hydraulic claw couplings can be connected to the tanker manifold. The arms are fitted with Limit Alarms and Emergency Shut Down/Breakaway features. HFO is transferred via these arms into a 36 inch pipeline leading to PSO's distribution system manifold connection some 4 Km away. HSD to PSO & PAPCO Storage and Crude to PSO Storage.

The mooring facilities consists of 6 pairs of 100 tonnes SWL quick release hooks with capstans, located on four mooring and two breasting dolphins. The mooring dolphins for head/stern and breast lines are off-set 32 meters from the fenders line. (see Appendix "H").

The terminal is designed to accommodate suitable tankers with either side alongside, however, in view of PQA constraints the tankers will be normally berthed port side alongside.

3.2 Notice of Readiness

Tankers calling at the FOTCO terminal are to be in all aspects ready to commence discharging within 2 hours of all made fast time at FOTCO Jetty.

3.3 Berthing and Mooring

A mooring plan will be developed and issued by the Terminal on acceptance of a vessel. Compliance to the mooring plan is mandatory to the acceptance.

Berthing and unberthing will take place during daylight hours only. Deep draught tankers will ideally approach on the high daylight tide and berth at slack water or beginning ebb.

Prior to berthing, the pilot will discuss with the Master the planned berthing and mooring operations and make sure that the tanker is fully manoeuvrable and ready in all respects.

Normally two tugs will be made fast on the tanker's starboard shoulder and quarter. Heaving lines, ropes and messenger lines to be ready for use at these locations.

After confirmation that mooring crew, mooring boat and facilities are ready, the pilot will, assisted by the tugs, manoeuvre the tanker alongside, approaching the berth at a slight angle, gradually reducing speed and angle, ideally positioning the tanker dead over the ground, parallel to the berth a short distance off the fenders face line.

The sequence of making fast the mooring lines will be decided by the pilot, taking into account the tanker's size, equipment, position relative to the berth and the tidal conditions. Most common sequence is, however:

1. Headline
2. Spring line aft
3. Sternline
4. Spring line forward
5. Breast line forward
6. Breast line aft.

The tanker will be spotted, i.e. positioned with the manifold centerline lined up exactly in line with the midpoint between the two hardarms when alongside and headlines, sternlines and spring lines are made fast.

The centreline between the two manifold connections on the tanker must be clearly indicated and the terminal representative will coordinate the spotting with the pilot. Only when the tanker is alongside, correctly positioned in relation to the hardarms with all lines secure to the satisfaction of Pilot, Master and Terminal Representative will it be accepted as securely moored. (see Appx. J&K for typical mooring arrangements).

3.4 Shore Gangway

As soon as the tanker is safely moored a shore gangway will be placed on the Main deck, forward of the aft superstructure if possible. A responsible officer and crew must assist in correctly positioning the gangway.

If deck spacing or obstructions preclude the use of the shore gangway the tanker must rig its own or the accommodation ladder.

Pakistan Government Officials, Surveyors, Agents and Terminal Representatives will then board the tanker for clearance, safety inspection, cargo measurements and discharge planning etc.

3.5 Connection of Hardarms

The three 16 inch hardarms will be connected to the tanker's manifold flanges by terminal representative. A responsible officer and crew must be present and assist if required.

It is a joint Tanker/Terminal responsibility to ensure that the connection is tight and that no under stresses are placed on the manifold or arms.

3.6 Hard Arm Envelope

Reference is made to ISGOTT article 6.7.1 to 6.7.8 pages 48 and 49 in the 4th Edition 1995.

The working envelop of the hard arms at the terminal i.e. the limits within which they are designed to operate safely are basically 3 meters forward, 3 meters aft,

3 meters off the berth in the horizontal plan and 17 meters vertically, if manifold spacing and flange-rail distance are according to OCIMF standards.

(See Appendix "G") for envelope details.

3.7 Transfer Operation

3.7.1 Transfer Plan

Prior to commencement of discharging, an agreed oil transfer plan must be established and understood by both parties. This will include start-up, maximum bulk and stripping rates and emergency stop procedures.

When the tanker is ready, the responsible officer will advise the terminal control room by VHF. The terminal control will:

1. Confirm with the cargo receiving storage that the receiving facilities are ready with valves open.

2. Confirm with the terminal transfer supervisor that he system is ready.

3. Then request the tanker to start pumping.

When it is confirmed that there is no significant rise in pressure on the transfer lines, the Cargo will be discharged at a bulk rate previously agreed upon.

The discharging operations will be controlled by VHF radio communications between the terminal control room and the tanker control room.

In case of communications breakdown:

Stop pumping and advise terminal by other means

Tankers are required to maintain an efficient deck watch during cargo transfer operations, with procedures established for prompt stoppage in case of overflow or other emergency.

3.7.2 Maximum Transfer Rate

The maximum pumping rate through the loading arms is 6500 m^3/hr and the maximum pressure is 150 psig.

Tankers are encouraged to pump at maximum rate and pressure with due regard to safety to expedite turn-around time.

4. SAFETY, FIRE AND POLLUTION

4.1 General

4.1.1 Ship/Shore Safety Check List

A Ship/Shore Safety and Pollution check List is used at the terminal and all operations closely follow recommendations contained in the International Safety Guide for Oil Tankers and Terminals (ISGOTT).

4.1.2 Deck Watch and Mooring Management

The terminal is located in a tidal area with a maximum difference of 4.3 meters and an average difference of 2.5 meters between high and low water. Currents exceeding 2.5 knots occur. The edge of the dredged channel is less than 80 meters from the fender face. Ships navigating the channel at more than slow speed can cause tankers moored alongside to move outside the envelops of the hard arms. The hardarm envelope is limited, particularly in the horizontal plane. It is, therefore, of extreme importance that moorings are adjusted at regular intervals, in coordination with the terminal representative and that an effective deck watch, with a responsible officer-in-charge, is kept at all times.

4.1.3 Engines Stand-by

The tanker's engine should be kept on stand-by at all times for immediate evacuation of berth, in case of an emergency.

4.1.4 VHF Communications

VHF communications should be maintained at all times. Pumping must be stopped if contact with terminal control is lost.

4.2 Fire

In the event of fire on board:

Immediately stop pumping, advise the Terminal Control Room and prepare to disconnect the loading arms and evacuate the berth. Tug assistance will be available from the PQA.

In case of VHF communications failure sound 10 short blasts on the ship's whistle.

The terminal is equipped with two remotely controlled fire water/foam monitors located 40 meters on each side of the berth centre line and 20 meters above

platform level. The master may request use of these if considered suitable.

4.3 Pollution

4.3.1 Caution

The terminal is located in an environment which is extremely sensitive to pollution. The Stroud tidal currents will distribute any pollutant over a large area and clean-up of the mangroves is difficult.

It is therefore imperative that escape of oil of any kind is prevented.

Master, Owner and Agent are subject to prosecution and penalties if any oil is discharged or escapes into the sea.

Master, Owner and Agent will be held liable for all cleanup costs and third party claims.

4.3.2 Ballast

The most common source of minor pollution is from the sea chest when the ballast operation is started on tankers not fitted with a segregated ballast system.

Reference is made to OCIMF's "Prevention of Oil Spillage's Through Cargo Pump room Sea Valves". The recommendations in the publication must be closely followed:

4.3.3 Oil Spills

Should an overflow, manifold leak or hard-arm leak occur:

Immediately stop pumps, notify terminal control, retain oil on board, clean-up and recover.

Should oil escape into the sea:

Immediately notify the terminal control, stop all cargo operations and attempt to limit the outflow. The Port Qasim Authority will be notified and take over control of the oil spill control and abatement operation.

6.3.4 Garbage Disposal

Dumping of garbage, of whatever kind, is strictly forbidden.